THE UNIVERSITY OF KANSAS
Institute for Public Policy and Business Research
School of Business
Department of Economics
RESEARCH PAPERS

KANSAS STATE PARKS:
A Marketing and Valuation Study

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prepared for
The Kansas Department of Wildlife and Parks.

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Report No. 239

November 1997

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EXECUTIVE SUMMARY

The Kansas State Park System is predominately used and paid for by Kansans. At least 80% of the visitors are Kansans and the percentage could be as high as 90%. More than 35% of the households in Kansas visited a state park in 1996. In FY1996, the State General Fund provided $3.2 million for the state park system and user fees provided the remaining $2.4 million of the budget. At this price, Kansans think the park system is a bargain. In fact, Kansans are willing to forgo more than (maybe, much more than) $75.4 million in tax rebates to preserve the state park system. The users of the state parks have few complaints about the major facilities. The suggestions of all Kansans, visitors, and non visitors for improving the state parks fall primarily into the category of "keep doing what your doing, but do it better if possible," and "tell us about the parks and about the changes in parks." These results are based on a survey of 2,000 households in Kansas.

The corollary to this strong support, few major complaints and few suggestions for major changes, is most Kansans do not want a lot of changes in the park system. A majority of Kansans would be willing to have their taxes increased to marginally improve state parks. However, aggressive suggestions, such as the introduction of modern lodging into the parks, would have the support of slightly more than 45% of Kansans and would be opposed by about the same number of Kansans. Even more adventurous ideas, such as the construction of convention facilities at state parks, are opposed by a sizable majority of Kansans.

One overriding question ties this report together: What do Kansans want to do with their state park system? The reader can imagine many different answers to this question ranging from scrap the state park system and let private developers try to do something with it, to let's turn Kansas into a state-sponsored Disneyland. These are extreme possibilities which raise important questions:

(1) Do Kansans want a state park system? Do they think the parks are worth the tax money that goes to support them? Would they be willing to pay more to improve the parks?

(2) What type of state park system do Kansans want? Do they want a more "natural" and primitive type of park, or do they want a more commercialized type of park?

(3) Specifically, how would Kansans change the park system if they could do so?

This report systematically answers these questions. The first part of the report assess the credibility of the household survey. The second part estimates the value of the state park system to Kansans. The third part describes the state park system Kansans want and what they want changed

about the current state parks. The last part of the report has conclusions and recommendations for the Department of Wildlife and Parks. Following the report are ten appendices that provide more data and analysis.

Conclusions

(1) Kansans Overwhelmingly like the Current State Park System.

(2) Kansans Do Not Want Massive Changes in the State Park System.

(3) Increasing Taxes (Or Users Fees) for Park Improvements Will Face Opposition.

(4) Kansans Do Not Know Much about the State Parks; However, They Want to Know More.

A Recommendation

We recommend the Department of Wildlife and Parks develop a long- term plan of what they want the park system to be like in a couple of decades. Although the word vision has been overused to the point of either being almost meaningless or trite, in the case of the state parks, this is exactly what is needed. If the department does have such a plan, then they need to tell Kansans what it is and begin building support for it. The state parks have an enormous reservoir of support among the people of Kansas, the department should use it.

We would not suggest that we know the state park system better than the Department of Wildlife and Parks. The inspiration along with the details for a state park vision needs to come from the Department of Wildlife and Parks working with the interested constituents. We do have two suggestions: *(1) Advertise and (2) Differentiate the state parks in the minds of Kansans.*

(1) Advertise

The marketing advice that our research suggests is quite simple: the Department of Wildlife and Parks has a product that people like, so tell them about it. The state parks do not need a Madison Avenue approach that tries to trick people into using a product they ordinarily would not use. In addition, Kansas residents might be resentful of money being spent in what could appear to be a wasteful campaign. Instead, the state parks need to be presented to the whole population of Kansas as a product these people would like to use. What is needed is creative and effective distribution of information, not advertising sleight of hand.

The household survey indicates that if the Department of Wildlife and Parks needs more

money to maintain the park system as it is, then the people of Kansas would support additional tax revenue for that purpose if they know about the need. The survey also indicates that Kansans would pay for increased activities at state parks; such as, activities for children, educational activities, entertainment, and special events. If the state parks are improved in this manner, then an additional expenditure must be added — a public information program to alert Kansans of the new and improved state parks so they can use them.

(2) ***Differentiate the state parks in the minds of Kansans.***

Use the advertising to make clear what is unique or special about each park. Encourage each of the parks to have events and entertainment that fits both the park's particular advantages and the visitors it has. People responding to our household survey specifically mentioned annual events at Tuttle Creek and other parks as strong reasons to attend the parks.

If the Department of Wildlife and Parks decides to alter one or more of the state parks with additional development and commercialization to attract tourists, then the implication from our research is that this should be done primarily, if not wholly, with private money, and prior to any development, a strong educational campaign will be necessary.

INTRODUCTION

The Kansas State Park System is predominately used and paid for by Kansans. At least 80% of the visitors are Kansans and the percentage could be as high as 90%. More than 35% of the households in Kansas visited a state park in 1996. In FY1996, the State General Fund provided $3.2 million for the state park system and user fees provided the remaining $2.4 million of the budget. At this price, Kansans think the park system is a bargain. In fact, Kansans are willing to forgo more than (maybe, much more than) $75.4 million in tax rebates to preserve the state park system. The users of the state parks have few complaints about the major facilities. The suggestions of all Kansans, visitors, and non visitors for improving the state parks fall primarily into the category of "keep doing what your doing, but do it better if possible," and "tell us about the parks and about the changes in parks."

The corollary to this strong support, few major complaints and few suggestions for major changes in the state parks, is most Kansans do not want a lot of changes in the park system. A majority of Kansans would be willing to have their taxes increased to marginally improve state parks. However, aggressive suggestions, such as the introduction of modern lodging into the parks, would have the support of slightly more than 45% of Kansans and would be opposed by about the same number of Kansans. Even more adventurous ideas, such as the construction of convention facilities at state parks, are opposed by a sizable majority of Kansans.

Our recommendation for the state parks is simple: the Department of Wildlife and Parks should, if they have not already, develop a plan (or vision) for the state parks over the next couple of decades. Of equal importance, this plan needs to be presented to the people of Kansas. The reservoir of support for the state park system among Kansans is solid. This support should be channeled into helping establish the priorities for the state park system and into providing the political support for the necessary increased state funding for a state park plan. The Department of Wildlife and Parks is better equipped to develop a long-term plan for the parks than we are; however, from our surveys and conversations with Kansans, we would suggest two elements for the plan:

(1) Have more activities, entertainment, and events at the state parks, and

(2) Differentiate the state parks in people's minds. Highlight the best and most unique aspects of each park. Use these aspects to define the park for its customers.

The Organization of the Report

This report has four basic parts. The first part of the report assess the credibility of the household survey. The second part estimates the value of the state park system to Kansans. The third part describes the state park system Kansans want and what they want changed about the current state parks. The last part of the report has conclusions and recommendations for the Department of Wildlife and Parks. Following the report are ten appendices that provide more data and analysis.

One overriding question ties this report together: What do Kansans want to do with their state park system? The reader can imagine many different answers to this question ranging from scrap the state park system and let private developers try to do something with it, to let's turn Kansas into a state-sponsored Disneyland. These are extreme possibilities which raise important questions:

(1) Do Kansans want a state park system? Do they think the parks are worth the tax money that goes to support them? Would they be willing to pay more to improve the parks?

(2) What type of state park system do Kansans want? Do they want a more "natural" and primitive type of park, or do they want a more commercialized type of park?

(3) Specifically, how would Kansans change the park system if they could do so?

The answers to these three groups of questions provide a description of Kansans's image of what they want their state park system to be. The first group of questions is investigated in the second part of the report, "The Value of the Kansas State Park System of Kansans." The last two sets of questions are investigated in the third part of the report, "Marketing the State Parks."

We will now briefly outline the first three parts of the report.

Part I: *Assessment of the Household Survey*

We wanted to know what Kansans, users and non-users, thought of the state parks. The most effective method for obtaining this information is with a random household survey of Kansans. Our survey of 2,000 Kansas households was designed around four issues: what do Kansans think about the state park system, how much do they value the state parks, how much are they willing to pay for improvements in the state parks, and how do they prefer to pay for these improvements. Questions about two additional types of information were also included in the survey — demographic and

marketing information.

Initially the demographic information is used to establish the representativeness of the survey sample and to suggest potential bias in the survey results. This is followed by a three part discussion of the section of the survey instrument which elicits the respondents value of the state park system. First, the specific purpose of the valuation section of the survey instrument is clarified. Second, the method used to estimate the value of the state parks is described. Third, the order and structure of the questions used in this portion of the survey instrument is explained.

Part II: ***The Value of the Kansas State Park***

We estimated the value Kansans place on the state parks system by designing a survey instrument around four basic questions.

(1) How many Kansans want a state park system?

(2) What value do Kansans place on preserving the current park system?

(3) How much are Kansans willing to pay for improvements in the park system? and

(4) How would Kansans prefer to pay for improvements?

Each question is the basis of a separate section of the second part of the report.

Part III: ***Marketing the State Parks***

The foundation of the marketing analysis is data from the same household survey that was used to estimate the value of the park system. Two additional sources of marketing information we used were an on-site survey done at five different state parks and an informal survey of several economic development experts who work near state parks. Using the results of these surveys, we discuss four topics.

(1) How users of the state parks rate the existing facilities,

(2) What people do or expect to do when they go to a state park,

(3) The reasons people give for not visiting state parks, and

(4) Suggestions from three different groups for improvements in the state parks.

PART I

ASSESSMENT OF THE HOUSEHOLD SURVEY

The primary users of the Kansas state parks are Kansans. The primary sources of revenue for Kansas state parks are Kansans, either through taxes or user fees. These two facts suggest that Kansans's view of the state park system is the most important evaluation of the parks. The Kansans who visit state parks value the state parks because they are willing to pay the users fees to get into the parks and use the facilities, and because they are willing to pay the expenses, transportation, etc., that are necessary to get to the parks. However, not all Kansans visit a state park each year — in 1996 not even a majority of Kansans visited a Kansas state park. Even though a majority of Kansans do not visit a state park, could they still place a value on preserving the state park system? We can certainly think of reasons that non-users might still want the state park system to exist.

Both users and non-users of the state parks need to be asked about the park system in order to assess the full value Kansans place on the park system. The most effective method of estimating this full value is by a random household survey of Kansans. We designed a survey instrument for estimating the value of the state park system around four basic questions:

(1) How many Kansans want a state park system?

(2) What value do Kansans place on preserving the current park system?

(3) How much are Kansans willing to pay for improvements in the park system? and

(4) How would Kansans prefer to pay for improvements?

In addition, the household survey asked questions that provided demographic and marketing information. The marketing information will be discussed in the marketing portion of this report. The demographic information has several uses, two of which are to establish the representativeness of the survey sample and to suggest potential sources of bias in the survey results. A copy of the survey instrument is provided in Appendix A.

We assess the credibility of the household survey results by evaluating the demographic data from the survey responses. This is followed by a more detailed discussion of the purpose of the valuation section of the survey instrument. The contingent valuation method, the method used to estimate the value of the state parks, is then described. Finally, the structure of the valuation section of the survey instrument is outlined.

The Representativeness of the Survey Sample

We have used a comparison of the demographic information generated by the survey with other reliable sources of similar information to evaluate the credibility of our survey. The survey asked four basic demographic questions of each respondent: county residence, gender, age group, and income group. Location, gender, and age data are easier to evaluate than income data for two reasons: (1) the response rate for location, gender, and age questions was high, better than 99% in all cases, and (2) good data for comparison are available from the U.S. Bureau of the Census. We will begin by looking at the survey data on county of residence, age structure, and gender of the respondents. Then we will examine the income data from the survey for bias and explain some of the problems in evaluating this data.

Location of the Respondents

The survey sample contains responses from 101 of the 105 counties in Kansas. The four counties not represented in the survey were Gove, Graham, Hodgeman, and Stanton Counties. Each of these counties has about 0.1% of Kansas's population. Appendix B has a comparison between Bureau of the Census estimates of Kansas county population on July 1, 1995 and the number of survey responses from each county. Some counties are over represented, such as Barton County (1.1% of Kansas population and 1.7% of the survey responses), and some counties are under represented, such as Leavenworth County (2.7% of Kansas population and 1.4% of the survey responses). The only systematic bias that we have detected; however, is the over representation of non-metropolitan counties, like Barton County, and the under representation of metropolitan counties like Leavenworth County, Johnson County, and Sedgwick County (see Table 1). The bias is minimal and does not affect the qualitative results of the survey.

TABLE 1
COMPARISON OF POPULATION AND SURVEY RESPONSE RATES

Metropolitan Statistical Areas (MSA) in Kansas	1995 Population	Percentage of Total	Survey Responses	Percentage of Total
Kansas Side of the Kansas City MSA	649,390	25.3	463	23.2
Lawrence MSA	88,206	3.4	108	5.4
Topeka MSA	165,062	6.4	128	6.4
Wichita MSA	453,363	17.7	304	15.2
Total MSA	1,356,021	52.9	1,003	50.2
Total Non-MSA	1,209,307	47.1	997	49.9
Kansas	2,565,328		2,000	

Age Structure of the Respondents

The survey sample is slightly older than the Kansas population in 1995. Table 2 has a comparison of the survey sample with the Bureau of the Census's estimate of the Kansas age structure on July 1, 1995. The survey respondents were asked which of four age categories they belonged to: 18 to 25 years of age, 26 to 40 years of age, 41 to 60 years of age, and over 60 years of age. The survey sample under represents those people 18 to 25 and 26 to 40 while those 41 to 60 are nearly perfectly represented and those over 60 are over represented. The most misrepresented age group is the over 60 category; however, this over representation does not significantly bias the survey results.

TABLE 2
COMPARISON OF THE AGE STRUCTURE OF THE KANSAS POPULATION AND THE SURVEY RESPONDENTS

	18 to 25 years old	26 to 40 years old	41 to 60 years old	over 60 years old	Total
Kansas Population	15.5%	32.4%	31.2%	20.9%	100.0%
Survey Respondents	14.8%	29.8%	31.3%	24.1%	100.0%

Gender of the Respondents

One of the most difficult biases to avoid in a telephone survey is the over sampling of women. Our experience has been that unless costly and time-consuming techniques are used, such as pre-calling, sending a letter, and then engaging in the telephone interview, the usual percentage of men to women in a telephone survey is between 39%-42% men to 61%-58% women. This survey also over sampled women. Table 3 has a comparison of the men to women in our survey with the Bureau of the Census estimates for the number of men to women in Kansas on July 1, 1995. Over sampling women does not generate a problem in evaluation the responses to all questions in the survey. For many questions there is no discernable difference between the responses of men and women.

TABLE 3
COMPARISON OF THE GENDER DISTRIBUTION OF THE KANSAS POPULATION AND THE SURVEY RESPONDENTS

	Men	Women	Total
Number of persons 18 or older (as of July 1, 1995)	905,737	966,830	1,872,567
Percentage of Total Population (18 or older)	48.4%	51.6%	100.0%
Number of Survey Respondents (18 remained unidentified)	808	1174	1982
Percentage of Total Survey Respondents (ignoring 18 unidentified)	40.8%	59.2%	100.0%

The Income Distribution of the Respondents

In this section we will ignore the income response for three reasons: (1) only 83.3% answered the income question, (2) two obvious factors affect the income distribution of the survey sample and little can be done about these factors, and (3) good data for a comparison with the survey sample

does not exist. First, an 83.3% response rate leaves 16.7% of the respondents who refused to answer the question. Since we do not know the income distribution of the non-respondents, we do not know how the income distribution of those who responded compares to the income distribution of the total survey sample. Second, by their very nature, telephone surveys exclude two groups of people: people without telephones and people who answered with a cellular phone. About 2% of Kansas households do not have a telephone at any one time for several reasons such as moving from one residence to another or simply not being able to afford a phone. People with cellular phones are rarely interested in paying for the air time to answer a survey. One would expect the exclusion of these two groups of people would leave the survey sample with fewer people at the extremes of the income distribution scale than the state's income distribution scale. However, suspecting this bias and somehow quantifying it so the survey sample can be adjusted for this bias are two different matters. Third, the best household income distribution data is from the 1990 census and is for 1989, eight years removed from the time of the survey. Since 1992 Kansas has had steady personal per capita income growth and slight, but steady inflation. Both of these factors make comparison of 1997 income data with 1989 income data futile.[1]

Purpose of the Valuation Section of the Survey

A large number of Kansas residents annually visit various state parks. Because these people must pay to enter the park as well as paying for some means of transportation to get to the park, one can be assured that the state park system has value to these residents. The more difficult question is do those people who did not visit a state park in 1996 — 63.2% of all households in our telephone survey had not visited a state park in the past year — still place some value on maintaining the state park system?

One can imagine several reasons that some people who have not use the park system might still want to maintain or even improve the park system. These people might not have used the park system in the past year, but they want the opportunity to be able to use it in the future either for themselves or for family and friends. Non-users might think that if the park system is improved, then

[1]The income data available from the survey does indicate that as income increases, support for the park system also increases. We do not know if this relationship, however, would hold if we had more responses from the wealthiest income group.

they will use it in the future. Some people who do not use the park system, and have no future plans to use the park system, simply feel that Kansas should have a park system whether they use it or not. Additionally, some business persons might not use a local state park, but they see an advantage to their particular business in having the state park maintained. For whatever reason, the possibility exits that the use of state parks by Kansans does not fully exhaust the value of state parks to Kansans.

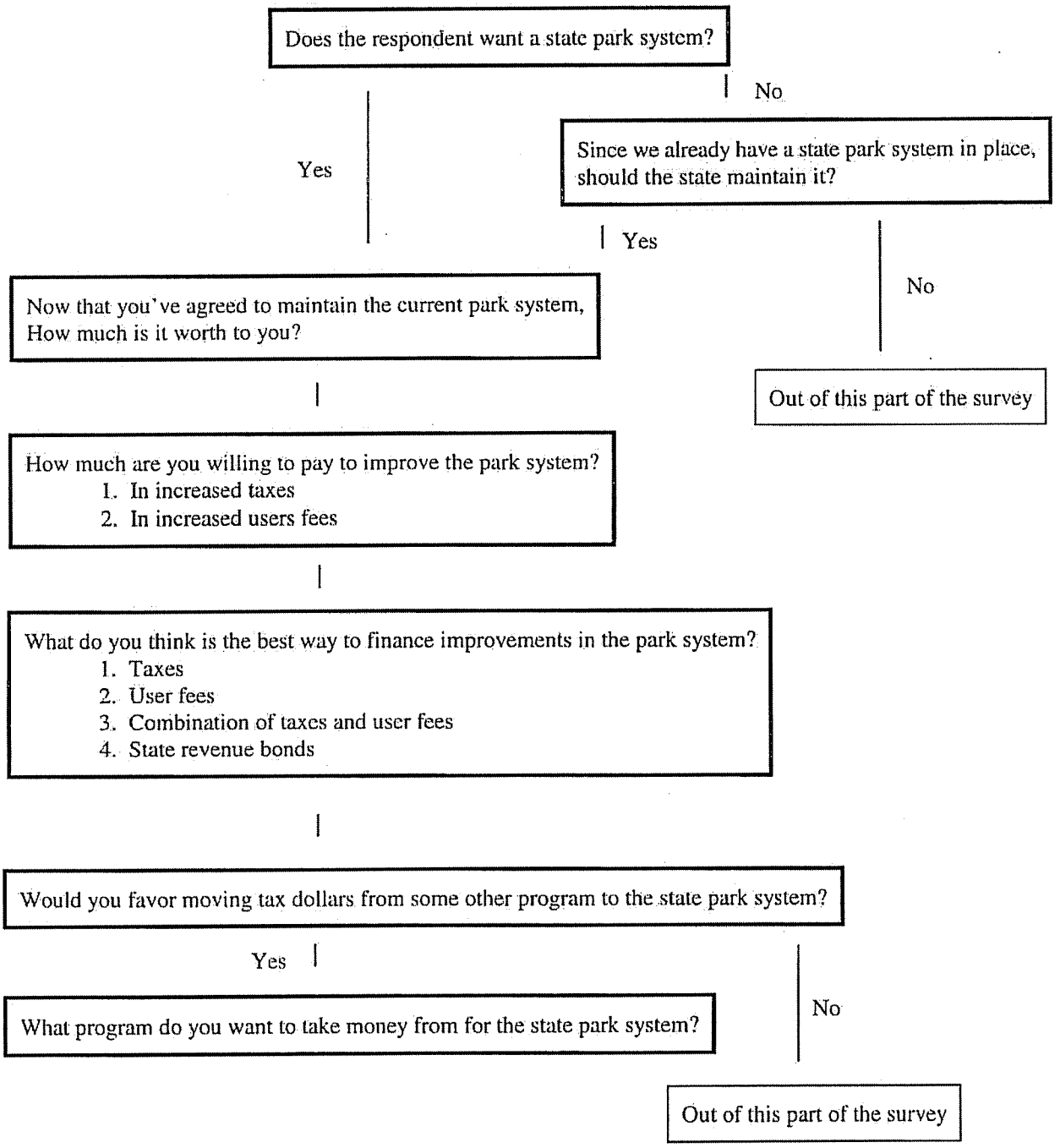
The purpose of the valuation section of the household telephone survey is to estimate the value of the state park system to Kansans — both to users and non-users of the state parks. The contingent valuation (CV) method is the approach we have chose to make this estimation. This method captures the full value of the park system to Kansans, both the active use value that Kansans who use the parks have of the parks, and also the passive use value that some Kansans who do not use the state parks also have of the parks. In addition, the value to some persons who use state parks may well exceed the active use value for them — they might get some value for themselves having the state parks available to family members. Appendix C discusses the contingent valuation method in more detail.

Structure of the Valuation Section of the Survey

We wanted three categories of information from the valuation section of the survey: a demand curve for the existence of the park system, a demand curve for improvements in the park system, and people's preferences for the different assortments of possible means of financing improvements in the park system.

We decided to approach the problem of eliciting the desired information in stages. Figure 1 is a flow chart of our plan to elicit the desired information from the respondents. We first wanted to weed out those respondents who thought the state government should not provide a park system. These people were skipped to the next section of the survey. The remaining respondents were asked how much they would pay to keep the current park system. Then we asked them how much they would pay to improve the park system. Finally, we asked them what they thought was the best means of paying for improvements in the park system. The individual questions used in this part of the survey instrument and the reasoning behind the generation of these questions is presented in Appendix D.

FIGURE 1
VALUATION SECTION OF THE HOUSEHOLD TELEPHONE SURVEY



PART II

THE VALUE OF THE STATE PARKS TO KANSANS

Now we come to the heart of this part of the report — the actual valuation of the state parks. We will proceed by answering the following four questions. Each question will be a separate section.

(1) How many Kansans want a state park system?

(2) What value do Kansans place on preserving the current park system?

(3) How much are Kansans willing to pay for improvements in the park system? and

(4) How would Kansans prefer to pay for improvements?

A more detailed analysis of the value of the state park system is provided in Appendix E.

Question 1: *How many Kansans Want a State Park System?*

The first two questions of the valuation section of the survey ask respondents whether they wanted a state park system. More than 85%system (1,708 out of 2,000) answered "yes" to the first question, "Do you think the Kansas state government should provide a state park system?" The 292 respondents who did not answer "yes" were then asked: "Since Kansas does have a state park system, should the state continue to financially support the existing park system?" Of the 292 respondents asked this question, 198 answered "yes." Thus, only 94 respondents were eliminated from the remainder of the valuation part of the survey. Combining the answers from the first two question, 1,906 out of 2,000 thought that the state should continue to financially support the existing park system. This magnitude of support for a public program — better than 95% — is amazing. However, in a sense, this was a free answer. The next question probed the depth of this support by putting a price on that support.

Question 2: *The Value of the State Park System to Kansans?*

The first valuation question tested their support by offering the respondents a choice between (1) keeping the current park system and (2) eliminating the park system and receiving a tax rebate. Two aspects of this question are important. First, the respondents were given a specific choice. We

used "tax rebate" because the term *taxes* tends to focus people's attention. In addition, at the time that the survey was run, March 1997, reducing taxes was in the news and we thought this gave the phrase "tax rebate" more impact. We wanted the respondents aware that (1) keeping the park system meant they would have less money to spend, and (2) eliminating the park system meant they would have more money to spend.

Second, we did not give people a choice on the size of a rebate. Giving people a menu of payment choices tends to bias the results. Instead, prior to the beginning of the survey, we randomly separated the randomly chosen phone numbers into five groups. For this question, we gave one group of respondents the choice of a $5 tax rebate, one group the choice of $10 tax rebate, one group a choice of $20 tax rebate, one group a choice of a $50 tax rebate, and one group a choice of a $100 tax rebate. Thus, we created five sub-samples of 400 respondents. Because of the preliminary screen provided by the first two questions, the sub-samples have a different number of respondents answering the valuation questions. Table 4 contains the respondents answers to this question. Appendix F has these answers broken down by county.

TABLE 4
VALUATION OF THE CURRENT PARK SYSTEM

Choices Given Respondents	Responses by Sub-Sample				
	$5	**$10**	**$20**	**$50**	**$100**
Preserve the Park System	331 82.8%	328 82.0%	329 82.3%	331 82.8%	308 77.0%
Reduce Taxes	30 7.5%	36 9.0%	38 9.5%	39 9.8%	52 13.0%
Don't Know	18 4.5%	19 4.8%	19 4.8%	14 3.5%	14 3.5%
Skipped from Valuation Section	21 5.3%	17 4.3%	14 3.5%	16 4.0%	26 6.5%

The level of support does not change much as the tax rebate increased from $5 to $100. Our *a priori* assumption was that we would find somewhere between 200 and 250 people who would prefer the park system to a $5 tax rebate. When the tax rebate reached $100, we expected 25 to 50 people would choose the park system over the rebate. Our underestimation of the support for the park system has important implications for creating a demand curve for the park system.

Demand Curve for the State Park System

The division of the survey sample into five sub-samples, with each sub-sample asked a different tax rebate value, provided data for estimating a demand curve: the tax rebates act as prices and the number of people answering "yes" act as quantity demanded. Figure 2 is an illustration of the estimated demand curve.[1] The graph has tax rebate on the vertical axis (price) and the number of persons who answered "yes" on the horizontal axis (quantity). Those people who refused to answer the question or said they did not know if they wanted to preserve the park system were assumed to answer "no." The area under the demand curve represents the amount of money the respondents would accept for the state park system. Put another way, the area under the demand curve represents the gross value to the survey's respondents of the state park system.

Since we want the net value of the park system to Kansans, the annual expenditure from the state's General Fund must be subtracted from the gross value of the park system. In FY1997 the Department of Wildlife and Parks received $3.2 million from the General Fund. The Bureau of the Census estimates Kansas has about 971,000 households.[2] Dividing $3.2 million evenly among the 971,000 Kansas households results in each household paying slightly less than $3.30 for the current park system. In Figures 2 (and even more clearly in Figure 3 which is an enlargement of the lower right-hand portion of Figure 2), the average cost of $3.30 per household is represented by the horizontal line, slightly above the horizontal axis, running from the vertical axis to the demand curve. Everything above that line and below the demand curve is net value to Kansans.

Our failure to anticipate the magnitude of Kansans support for the park system creates a problem. In Figure 2, the area under the demand curve and above the average cost curve is divided into three parts: Areas A, B, and C. All three areas represent part of the net value to Kansans of the park system. Unfortunately, the data points from our survey are not spread out over the whole demand curve. As a result, we are confident of the sizes of Areas A and B, but we lack the same confidence about the size of Area C. For a detailed discussion of this problem see Appendix. E.

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[1]Ordinary least squares was used to estimate the demand curve..

[2]In 1990, Kansas had about 945,000 households. By 1995 this had increased to 971,000 households. If this trend continued, since July 1, 1995 Kansas has added about 10,000 households. Thus, 971,000 is probably an underestimation of the number of households in Kansas at the time of the survey (March 1997).

FIGURE 2
Choice Between the Park System and a Tax Rebate

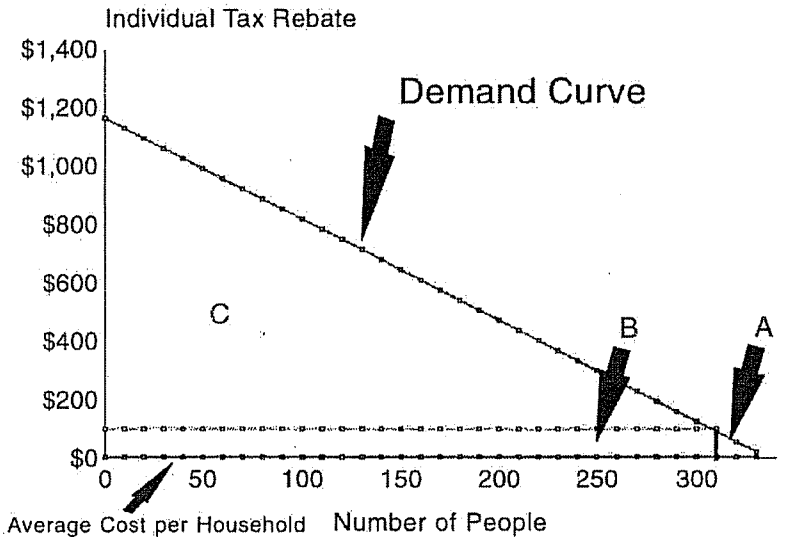
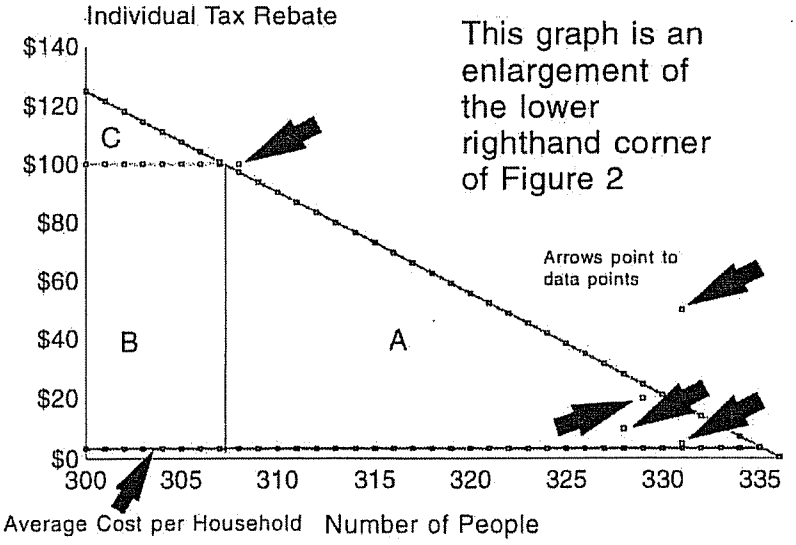


FIGURE 3
Choice Between the Park System and a Tax Rebate



Calculating an Estimated Value for the State Park System

The actual calculation of the net benefit simply requires calculating the areas of triangles A and C and rectangle B. The results are provided in Table 5 below.

TABLE 5
CALCULATING THE VALUE OF THE STATE PARK SYSTEM

	Value for the Survey Respondents	Value for all Kansas Households
Area A	$1,350	$3.3 million
Area B	$29,707	$72.1 million
Area C	$163,420	$396.7 million

From the above table we can confidently say that the net value of the state park system to Kansans is at least $75.4 million. This amount dwarfs the $3.2 million that Kansans pay each year in taxes for the park system. The estimate of $75.4 million is an underestimation (probably a gross underestimation) of the value of the state park system to Kansans because Area C is excluded. We think it is reasonable to suppose that Area C has some (probably large) positive value, but we are not confident that we have estimated that value accurately.

The Differences Between Visitors and Non-Visitors of the State Parks

The contingent valuation method captures the value of the state park system to both users and non-users of the state parks. In the survey, the respondents were asked whether they had visited a state park in the past year — 34.5% (689) had, 63.2% (1,264) had not, and 2.4% (47) did not know. Table 6 has the percentage of visitors, non-visitors, and people who did not know if they visited a state park or not that chose preserving the state park system over taking a tax rebate. Those who had visited a state park in the past year were more likely to choose the state parks system over the tax rebate, but not by much. For all sub-samples, at least 75% of the respondents who were non-users wanted to preserve the park system.

TABLE 6
HOW VISITORS AND NON-VISITORS VALUED THE PARK SYSTEM

Have you visited a state park in the past year?	Chose to Preserve the Park System and Reject the Tax Rebate				
	$5	$10	$20	$50	$100
Visitors	87.8%	85.7%	89.6%	83.3%	79.6%
Non-Visitors	78.7%	81.0%	78.4%	82.9%	75.3%
Do Not Know	91.3%	55.6%	85.7%	50.0%	100.0%

Potential Bias

We identified from the demographic information two major biases in the survey sample — over sampling of women and over sampling of people over 60 years of age. In the case of gender, for all but one sub-sample (the $10 rebate sub-sample) men wanted to preserve the park system more than women. The over sampling of women resulted in a further underestimation of the value of the park system.

The youngest age group and the oldest age group were the least supportive of preserving the park system. The youngest age group is slightly under represented and the oldest age group is the most over represented. The two age groups in the middle are 63.6% of the Kansas population over 18 years of age and also are the strongest supporters of the park system. Again, the age bias in the sample causes an additional underestimation of the value of the park system.

Question 3: ***The Demand for Improvements in the Park System***

Next we asked the respondents if they would like to improve the park system. Again, we wanted to make sure that respondents knew that these improvements would cost them money. The next two questions in the valuation section of the survey asked if the respondents would be willing to pay for improvements in the park system. The first question provided a choice between (1) improving the park system and increasing taxes or (2) leaving the park system as it is. The responses to this question are presented in Table 7. Appendix G has the responses broken down by county. The second question is similar except the choice is between (1) increasing fees to finance renovations or (2) leaving the park system as it is. The responses to this question are in Table 8.

TABLE 7

CURRENT PARK SYSTEM OR IMPROVEMENTS AND INCREASED TAXES

CHOICES GIVEN RESPONDENTS	RESPONSES BY SUB-SAMPLE				
	$5	$10	$20	$50	$100
Improve Parks and Increase Taxes	220 55.0%	209 52.3%	179 44.8%	136 34.0%	102 25.5%
Leave Parks as They Are Now	130 32.5%	136 34.0%	176 44.0%	210 52.5%	233 58.3%
Don't Know	29 7.3%	38 9.5%	31 7.8%	38 9.5%	39 9.8%

TABLE 8

CURRENT PARK SYSTEM OR IMPROVEMENTS AND INCREASED USER FEES

CHOICES GIVEN RESPONDENTS	RESPONSES BY SUB-SAMPLE				
	25%	33⅓%	50%	100%	150%
Improve Parks and Increase User Fees	174 43.5%	188 47.0%	155 38.8%	103 25.8%	98 24.5%
Leave Parks as They Are Now	156 39.0%	154 38.5%	181 45.3%	223 55.8%	209 52.3%
Don't Know	49 12.3%	41 10.3%	50 12.5%	58 14.5%	67 16.8%

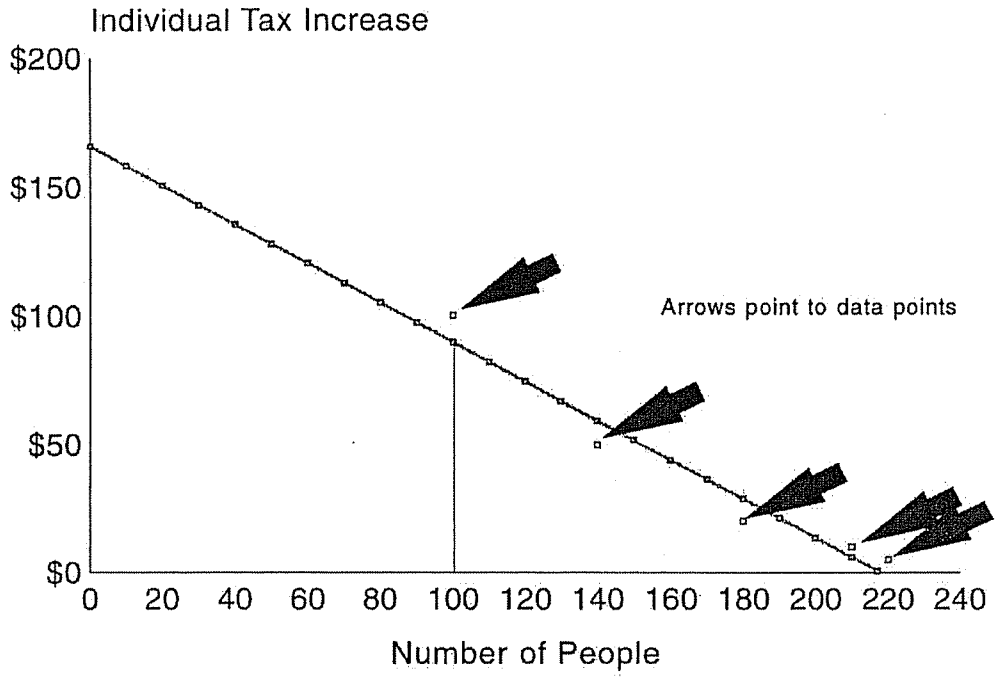
Respondents were less favorably disposed improving the state park system than to preserving it. Still, more than 50% of the respondents were willing to pay either an additional $5 or $10 in taxes for improvements. Increasing the user fees was less popular and the results for the sub-samples were more erratic.[3]

Demand Curve for Improvements and Renovations

The data from Table 7 were used to estimate a demand curve for park improvements and increased taxes. Figure 4 illustrates this demand curve. All of the data points are to the right of the

[3]The respondent were not told what the improvements or renovations they were being asked to pay for would be. The reason for this vagueness and the problems it creates are addressed in Appendices D and E.

FIGURE 4
Demand for Improved Parks and Increased Taxes



vertical line in the middle of the graph which creates a problem similar to the estimated of the demand curve for the value of the state park system. We have more confidence in our estimated demand curve where there are data points than we do where there are none. We have not estimated a demand curve for renovations and increased fees because there is some inconsistency with the data.. This problem is discussed further in Appendix E.

Question 4: ***How would Kansans prefer to pay for improvements?***

The last three questions in this section of the survey asked respondents how they thought park improvements should be financed. We introduced these questions by giving some facts about how the state park system is paid for now: General Fund —$3.2 million and user fees — $2.4 million. We explained that the General Fund commitment had declined about 20% in real terms in the past 10 years, and that the $3.2 million in General Fund commitment was less than one percent of the total state budget. We asked what they thought was the best means to finance improvements. We gave them four possibilities: (1) Taxes, (2) User fees, (3) Combination of Taxes and User fees, and (4) State Revenue Bonds. We had a scripted explanation of each of these means of financing that

could be given to the respondents if they asked for an explanation.

The most popular choice of financing improvements was the combined use of taxes and user fees: 929 out of 1906 respondents made this choice (48.7%) The next most popular response was user fees with 473 respondents (24.8%) choosing this option. State revenue bonds, chosen by 171 respondents (9.0%), and taxes alone, 91 respondents (4,8%), got little support. Another 242 respondents (12.7%) answered that they did not know the best means of paying for improvements.

We then asked if the respondents would favor moving money from some other state program or agency to the park system to finance improvements: 877 said "yes" (46.0%), 586 said "no" (37.%), and 443 (23.2%) did not know what they preferred. This was a "free" question for the respondents — they did not have to say where they would get the money. To firm up the interpretation of this question, we followed it with another question for those who favored redistribution. We asked them to name the program they would take the money from. In addition, we did not allow the answer "eliminate waste and fraud." More than 85% of the respondents said they did not know which program should have money taken from it for the park system. This confirmed our suspicion that the previous question was a "free" question. Combining the responses of those who did not know where to get the money for redistribution (751) with the persons who did not want to redistribute funds (586) is probably a good estimate of the opposition to redistributing funds to the park system.

PART III

MARKETING THE STATE PARKS

The foundation of the marketing analysis is the same household survey that was used to estimate the value of the park system. Two additional sources of marketing information are an on-site survey conducted at five different state parks, and an informal survey of several economic development experts who work near state parks. Although these last two surveys are less scientifically accurate than the household survey, they do provide important information. The on-site survey provides data on how users rate the facilities at the state parks, suggestive information about the activities people engage in at state parks, and suggestions for improving state parks. The survey of economic development experts provides a business oriented perspective on how the state parks should be improved.

We used the information listed above to investigate four specific topics:

(1) *How users of the state parks rate the existing facilities,*
(2) *What people do or expect to do when they go to a state park,*
(3) *The reasons people give for not visiting state parks, and*
(4) *Suggestions from three different groups for improvements in the state parks.*

Before addressing these four topics, we will briefly consider the validity of the data from the on-site survey. The survey had 1352 respondents from five state parks and was run from August 27, 1996 to early December 1996. Some of these respondents used the parks for the traditional summer activities and other respondents, from the fall and early winter period, used the parks for activities such as hunting. The survey had in-state (87.2%) and out-of-state (12.8%) visitors with two visitors from outside the United States. One major holiday was captured by the survey (Labor Day). Although we do not know how representative the survey is of state park visitors, the mix of respondents is varied enough to make the responses more than interesting. However, we do recognize three major problems with the survey: it was run during a short period of time, it did not include the most active summer months, and it over sampled men. We think that the survey is more representative of park visitors in some areas of questioning; for example, evaluation of the facilities, than it is in other areas of questioning; for example, activities participated in while visiting the state park. Appendix H has a copy of the on-site survey and Appendix I has a detailed evaluation of it.

How users of the state parks rate the existing facilities

The primary source of visitor evaluation of state park facilities is the on-site survey. We do not think that the major problems with the on-site survey sample raise problems with the survey results about visitor evaluation. If the same park employees are running the park year round, then the maintenance and upkeep will probably be relatively consistent year round. The facilities themselves will probably also remain the same year round. The major problem with the results is that the survey only took place at five parks, and it is hard to justify the argument that these five parks are representative of all the other parks without corroborative evidence which we do not have.

The respondents were asked to rate each of 13 facilities in the state park where they were staying. The rating system was good, adequate, bad, and no opinion. Table 9 has the results. The most compelling numbers are the small percentage of persons that rate any facility bad. The other interesting reaction is the large number (95.9%) who have no opinion about the cabins at the state parks. This result could mean a number of things; for example, it could mean that when people go to the state parks they do not care about the cabins, or it could mean that so few people have used the cabins that most people know nothing about them. The 54 people that did have an opinion about the cabins is too small a sample to provide much information about visitor response to cabins.

Activities Engaged in at a State Park

Both the household survey and the on-site survey asked the respondents what activities they engaged in at the state parks. Because the household survey sample contained both visitors and non-visitors to the state parks, the question was framed slightly differently for the visitors and the non-visitors. Those who had visited a state park in the past year were asked, "I will ask you about the primary activities you do when you visit a state park. Please answer with how many days a year you do these things." The respondents were then given a list of possible activities. The activities are listed in Table 10 along with the number of visitors that engaged in these activities. The most popular activities are sightseeing / relaxing and picnicking / socializing. The next most popular activities are fishing, camping, wildlife viewing and photography, boating, canoeing and jet skiing, and hiking.

TABLE 9
RATING OF STATE PARK FACILITIES

HOW WOULD YOU RATE THE FACILITIES IN THE PARK ON A GOOD/ADEQUATE/BAD SCALE?				
FACILITY	**Good**	**Adequate**	**Bad**	**No Opinion**
Beaches	27.2%	9.9%	3.8%	59.0%
Boating	38.0%	7.6%	0.9%	53.5%
Marina, Docks, Ramps	41.1%	8.2%	0.8%	44.9%
Trails	27.1%	4.3%	1.2%	67.4%
Camp Pads	47.6%	11.3%	1.0%	40.2%
Landscaping	61.2%	12.1%	1.5%	25.1%
Utility Service	37.0%	7.8%	0.7%	54.4%
Picnic Facilities	45.4%	8.6%	0.4%	45.6%
Cabins	3.1%	0.6%	0.4%	95.9%
Concession Services	20.4%	6.5%	1.6%	71.4%
Parking	78.8%	12.4%	0.8%	8.0%
Roads &Vehicle Access	81.6%	11.3%	0.7%	6.4%
Restrooms & Showers	65.8%	11.7%	3.0%	19.5%

For the non visitors and the people who did not know if they had or had not visited a state park, the question was changed slightly to: "I will ask you about the primary activities you might do when you visit a state park." These responses are summarized in Table 10. The only two activities that non visitors are more inclined toward than visitors are horseback riding and bicycling. Visitors and non visitors have similar tastes, its just that non visitors are less inclined to act.

For the on-site survey, respondents were asked what activities they participated in while they were at the state park, and which of these activities were the primary reasons for this trip to the state park. Respondents were allowed to give no more than two primary reasons for their trip to the state park. Camping (34.7%) and fishing (26.9%) were the most popular primary activities. Among the other actives, only sightseeing and relaxing (13.8%) and picnicking and socializing (12.8%) were

TABLE 10
PRIMARY ACTIVITIES FOR VISITORS AND NON VISITORS OF STATE PARKS FROM THE HOUSEHOLD SURVEY

ACTIVITIES RESPONDENTS (MIGHT) DO IN STATE PARKS	WHETHER RESPONDENT VISITED A STATE PARK OR NOT IN 1996					
	Visitors (Total 689)		Non Visitors (Total 1264)		Don't Know (Total 47)	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Camping	374	54.3	434	34.3	15	31.9
Hiking	301	43.7	401	31.7	24	51.1
Horseback Riding	72	10.5	171	13.5	9	19.1
Hunting	156	22.6	231	18.3	7	14.9
Wildlife Viewing & Photography	318	46.2	453	35.8	25	53.2
Fishing	450	65.3	554	43.8	18	38.3
Sightseeing & Relaxing	555	80.6	837	66.2	33	70.2
Boating & Canoeing & Jet Skiing	329	47.8	364	28.8	17	36.2
Picnicking & Socializing	536	77.8	811	64.2	32	68.1
Bicycling	114	16.5	254	20.1	14	29.8

mentioned by more than 10% of the respondents. For out-of-state visitors, the most important activity by far was camping: 58.4% of all out-of-state visitors listed camping as their primary reason to visit the state park. Their next most popular activity was fishing (19.1%).

The on-site survey also asked respondents if visiting the state park was the main purpose for their trip. The Kansas residents said "yes" 73.8% of the time while the out-of-state visitors said "yes" only 34.1% of the time. The percentage for out-of-state visitors drops to 32.0% for the late August-early September period.

Reasons for not Visiting a State Park

Those people In the household survey who had not visited a state park or did not know if they had visited a state park in the past year were asked if they knew Kansas had a state parks. Only 12 respondents said they did not know Kansas had state parks.

Next non-visitors were asked: "What are the main reasons you did not visit a state park in 1996?" This question was skipped by the 12 respondents who did not know Kansas had a state park system and by the 689 respondents who had visited a state park in the past year, leaving 1299 respondents to answer the question. The most frequent reasons for not visiting the state parks were "lack of time" (354), "not interested" (266), and "too far away" (108). Almost 50 people preferred to go to out-of-state to parks. Other interesting answers were "lacked information about state parks" (8), "did not think of state parks"(18), and "unaware of state parks" (15). These responses suggest that more than the 12 people who said they were unaware of the state parks were, in fact, unaware of the state parks. Few people, less than 10, said something negative about the state parks as a reason for not visiting the parks.

Improvement of the State Park System

We asked suggested improvements of the state parks from three groups: participants in the household survey, participants in the on-site survey, and economic development specialists working near a state park. We will begin with analysis of the results from the household survey, the most detailed information, and then add the information gained from the other two surveys.

Modern Lodging and Convention Facilities

The household survey respondents were asked: "What additional opportunities do you think should be available at the park that you would be likely to use?", and then were asked to evaluate two possible changes: modern lodging and convention facilities. Of the 1,906 persons left to answer the question, 893 (46.8%) favored adding modern lodging, 867 (45.5%) opposed adding modern lodging, and 146 (7.7%) were uncertain. The difference 46.8% and 45.5% is within the margin of error of $\mp 1.55\%$ — we cannot confidently say that more Kansans support than oppose the introduction of modern lodging in the park system. Comparing the responses of visitors and non-visitors shows that more visitors opposed adding modern lodging (51.0%) than favored it (43.9%) while more non-visitors favored adding modern lodging (48.1%) than opposed it (43.2%).

The respondents were much more definite about adding convention facilities: 563 (29.7%) favored it, 1160 (61.1%) opposed it, and 174 (9.2%) were undecided. This time when a comparison

is made between visitors and non-visitors, the results are similar: visitors opposed adding convention facilities 65.4% to 26.8% while non-visitors opposed it 58.9% to 31.5%.[1]

Other Improvements in the Park System

After specifically asking about modern lodging and convention facilities, the respondents were then asked, "Is there anything else the State Parks could do that would make it more likely for you to visit?" An open-ended question such as this has the advantage of not putting words into the mouth of respondents. This freedom allows respondents to sometimes come up with creative suggestions, however, the analysis faces a trade-off between not putting words in the mouth of the respondent and difficulty in quantifying the answers. Any quantification usually results in shortening and standardizing the open-ended answers, thus making the aggregate results more meaningful and, at the same time, reducing the informational content of the answers.

Table 11 contains a summary of the additional suggestions for the state parks. Only those suggestions mention at least 10 times are listed. A total of 674 people answered this question: 278 (41.2%) were visitors in the past year, 382 (56.7%) were non-visitors, and 14 (2.1%) did not know if they visited or not. Since respondents were allowed multiple answers, we had 863 answers from 674 people. The last column on the right is the total number of answers for that particular suggestion divided by the total number of people who answered the question (674). The resulting number appears in percentage form.

Probably the most surprising answer was also the most popular answer — advertise.[2] Even more interesting is that more than 80% of those who said "advertise" were non-visitors. Clearly a number of people want to know more about the state parks and want to be reminded of their existence. The second observation about these answers is that a number of them are simply a matter

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[1]The respondents to the on-site survey were also asked about modern lodging and convention facilities. Their responses were much more negative. Only 6.1% thought that the state parks should have modern lodging (93.9% opposed modern lodging) and only 1.4% thought the state parks should have convention facilities (98.6% opposed convention facilities). We think that the responses from the household survey are more representative of how all Kansans think on these issues. See Appendix J for a discussion of the on-site survey.

[2]We did not have 116 people say "advertise." This was our standardization of answers such as "tell us about the parks," "let people know what is going on at the parks," etc., however, a large number of people did say "advertise."

TABLE 11
SUMMARY OF OPEN-ENDED SUGGESTIONS FOR STATE PARKS

Is there anything else the State Parks could do that would make it more likely for you to visit?	Did you visit any of the Kansas State Parks in 1996?				
	Yes	No	Don't Know	Total	Percent
Access and Roads (more & better)	8	11	0	19	2.8
Access for Disabled	5	9	0	14	2.1
Activities, Entertainment, Events	27	37	3	67	9.9
Advertise	21	91	4	116	17.2
Better Law Enforcement	17	30	1	48	7.1
Camping Facilities	8	6	0	14	2.1
Facilities (new or upgraded)	10	20	0	30	4.5
Fees (no, lower, special, etc.)	28	19	0	47	7.0
Fishing (better)	17	11	0	28	4.2
Food Service (more)	3	7	0	10	1.5
Historic and Scenic Sites and Programs	4	12	0	16	2.4
Hookups (more and better)	5	7	0	12	1.8
Horse Facilities and Horseback Riding	5	5	0	10	1.5
Keep the Parks Clean	24	19	0	43	6.4
Lodging and Cabins	13	13	0	26	3.9
Parks (more and larger)	6	13	0	19	2.8
Playground and Picnic Areas	9	8	2	19	2.8
Rental (boats, jet skis, equipment)	10	2	2	14	2.1
Restrooms (better, cleaner, more)	37	29	2	68	10.1
Showers (better and more)	6	9	0	15	2.2
Trails (better, cleaner, more)	17	9	1	27	4.0
Upkeep (better)	17	25	1	43	6.4

of respondents asking the park system to do what it is doing now, except do it better. For example, respondents wanted more, better, cleaner restrooms; better law enforcement; cleaner parks; and better maintenance. Some people said "keep the parks clean like you do now" and "the showers are good, just need more."

The most popular suggestions are not radical departures from the past operation of the park system. As Table 11 indicates people want more activities, entertainment, and events. They also want some of these activities aimed at special groups such as children and senior citizens. Respondents want more educational activities, including historical and scenic programs and tours. Other

suggestions were improved access for people with disabilities — wheelchair access was specifically mentioned several times. Also along these lines, 19 people said they wanted more or larger parks and five people proposed parks in specific areas: western and southwestern Kansas and southeastern Kansas. Not many people wanted luxury facilities or motels and hotels (5), but 26 specifically mentioned more lodging and cabins. Finally, only three people suggested that Wildlife and Parks should use their fund better.[3]

Our final observation about the suggestions has to do with the 47 people who wanted park fees either lowered, reduced, or reduced for special groups such as the elderly. One reason for this small number asking for lower fees might be because earlier in the survey we asked about the fee increase that began January 1, 1996. First, the respondents were asked if their usage of the state parks was affected by the increased fees. Of the 1,953 people who said either they had or had not visited a state park, 9.5% said it had affected their usage while 87.1% said it had not affected their usage, and 3.4% were uncertain. The increase in fees did not seem to have much affect on many people. Broken down by those who visited and did not visit a state park in 1996, 17.0% of those who visited a state park said the fee increase affected their usage while only 5.5% of those who had not visit a state park said it affected their usage. For those who said the fee increase had affected their usage of the state parks, the survey followed up by asking if the fee increase had increased or decreased their usage. The reason that the fee increase might have increased usage is that it removed some of the summer congestion, particularly for those who wanted to use camp sites. As it turned out, 6.5% said that the fee increase had increased their usage while 93.5% said it had decreased usage. Of the 1,264 persons from the household survey who said they had not visited a state park in 1996, only 64 (5.1%) said that the fee increase caused them to reduce their usage of the state parks.

Interpretation of the Household Survey Results

Although the results of the household survey may appear to be straightforward, these results

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[3]Only 231 of 1,352 respondents to the on-site survey suggested improvements in the state parks. The most popular suggestions, offered by almost 15 people, were for more hookups and more trees. The other suggestions by at least 10 different respondents was more fish in the lakes, a fish cleaning station, and ice machines. Because the respondents had just been asked about modern lodging and convention facilities, no one suggested either of these possibilities. However, a couple of people suggested cabins and one person wanted a Wal-Mart in the state park. See Appendix J for more information.

contain certain ambiguities. The section of the household survey where most of the marketing questions were asked followed the section of the valuation section of the survey. The valuation section ended with five questions about financing improvements in the park system, including questions about specific increases in taxes and specific increases in park fees to pay for the improvements. However, the options for improvements in the park system in the marketing section — modern lodging and convention facilities — were presented without any specific means of financing. This raises the question, if the respondents thought that the state would have to pay for these improvements, how did the respondents think the state would finance the improvements? If a specific method of financing had been mentioned with the suggested improvement, would these respondents have been more or less favorably inclined to support the improvements? If, on the other hand, the respondents thought that these improvements were free, then how might they have voted if they knew they would have to pay for the improvements? A close analysis of the responses to the two specific suggestions for improvements, in the context of the preceding questions about tax and fee increases, leaves us with the suspicion that a majority of Kansans will pay for some improvements in the park system. Adding modern lodging is one of the improvements that many Kansans are willing to support. The results from the open-ended question confirm this suspicion to some extent — the only real improvement with significant support was improved lodging and cabins.

Suggestions from Economic Development Specialists

During informal interviews with the promise of anonymity, economic development specialists were asked about the role of the state parks in economic development. Two basic roles emerged from the discussions — the state park as a provider of amenities and the development and commercialization of the state parks.

The State Parks as Providers of Amenities

Several of the specialists felt that the state parks did not play much of a role in attracting firms to the area, and probably could not play much of a role. They pointed out that the people who actually make the choice to locate a new branch of an existing business in an area are generally not the people who move to that area. As such, the people making the location choice have only bottom

line concerns: local amenities are a secondary concern. After the choice is made for the new location, the people that are moved to the new area are the people who are concerned with local amenities. There are exceptions. This past year a person from outside of Kansas was thinking of moving a business to a city in Kansas near a state park. The people involved in showing this person the local area found out this person liked to fish and took him fishing at the nearby state park. Thus, the amenities the state parks provide can sometimes come into play in the making of business location decisions, but the experience of the experts indicates that this is the exception rather than the rule.

The Development and Commercialization of State Parks

Most of the economic development specialists had suggestions on how to better exploit the state parks for tourism. For example, historical sites located in state parks might have more visitors if the brochures of the Kansas Historical Society and the Department of Wildlife and Parks were more coordinated. Another example is the popular special events that several state parks have. Local boosters think that with additional statewide publicity these events would draw even more visitors.

The most interesting and perplexing of the suggestions by the economic development specialists is the suggestion that some of the state parks change their general purpose and become more entrepreneurial. In particular, Clinton Lake Park and El Dorado Park were mentioned as parks where some of the state park should be changed into a resort with hotels, restaurants, and convention facilities. With these new facilities at the state park, the local area would be a more attractive tourist attraction, and as a result, generate more revenue for businesses in the area.

The perplexing aspect of this suggestion, aside from the concerns of people who would like to prevent further commercialization of the state park and keep them "natural," is generating the money for the development. If business people thought that a resort in Kansas would be profitable, then the obvious question is why have these same business people not built one by now? The lack of business activity suggests that some form of subsidization would be required to get the development off the ground; such as, providing the land on the state park for free or at a subsidized lease rate. Others have suggested that the state government venture into commercialization on its own and make a state park a resort. All of these alternatives raise interesting questions: How fair would it be to subsidize a resort in a state park to the local business person who would compete with the state park? Do the residents of Kansas want to pay for a resort on a state park? We are skeptical.

CONCLUSIONS AND A RECOMMENDATION

The purpose of this report is to answer one question: What do Kansans want to do with their state park system? Our research indicates the following answers to that question.

(1) Kansans Overwhelmingly like the Current State Park System.

- More than 95% of our survey respondents thought Kansas should have a state park system.
- Kansans are willing to forego more than $76.0 million in tax rebates to maintain the park system. This is a very conservative estimate. The estimate could be closer to $400 million.
- Both users and non-users of the state parks place a high value on preserving the park system.
- The visitors survey indicated very little criticism of existing facilities.

(2) Kansans Do Not Want Massive Changes in the State Park System.

- Our household survey indicates strong support for maintaining the present park system. If the Department of Wildlife and Parks thinks it needs some additional funding to keep the parks as they are, our survey indicates there should be sufficient popular support for funding.
- If the Department of Wildlife and Parks tries to improve the parks by adding modern lodging and making other similar types of changes, we would expect strong support but opposition if tax dollars are used.
- If the department wants to commercialize and develop the state parks by adding something like convention facilities, the department should expect strong opposition if this development is done with state dollars.

(3) Increasing Taxes (Or Users Fees) for Park Improvements Will Face Opposition.

- A majority of households were willing to have their taxes increased by $5 or $10 dollars to improve the parks; however, a significant portion of the survey respondents opposed these small tax cuts. Larger tax increases were significantly less popular.
- If the state parks are going to be improved, Kansans would prefer using a combination of taxes and user fees.

(4) Kansans Do Not Know Much about the State Parks; However, They Want to Know More.

- Some of the suggestions for additional facilities at the state parks already exist. For example, some state parks already have cabins, boat docks, etc.

- Although initial only 12 out of 2000 respondents to the household survey admitted that they did not know Kansas had a state park system, answers to other questions indicate that many more respondents did not know about the state parks or the events held there.

- The most popular suggestion from the household survey for improvements in the state parks that would entice people to visit more was the suggestion that the state parks advertise.

A Recommendation

We recommend the Department of Wildlife and Parks develop a long- term plan of what they want the park system to be like in a couple of decades. Although the word vision has been overused to the point of either being almost meaningless or trite, in the case of the state parks, this is exactly what is needed. If the department does have such a plan, then they need to tell Kansans what it is and begin building support for it. The state parks have an enormous reservoir of support among the people of Kansas, the department should use it.

We would not suggest that we know the state park system better than the Department of Wildlife and Parks. The inspiration along with the details for a state park vision needs to come from the Department of Wildlife and Parks working with the interested constituents. We do have two suggestions: (1) advertise and (2) differentiate the state parks in the minds of Kansans.

(1) Advertise

The marketing advice that our research suggests is quite simple: the Department of Wildlife and Parks has a product that people like, so tell them about it. The state parks do not need a Madison Avenue approach that tries to trick people into using a product they ordinarily would not use. In addition, Kansas residents might be resentful of money being spent in what could appear to be a wasteful campaign. Instead, the state parks need to be presented to the whole population of Kansas as a product these people would like to use. The department is successful with its outreach programs to its constituents such as people who fish, hunt, camp, etc. One possible means of getting more information out to the public might be to aggressively expand the outreach programs to people who are now non-constituents. For example, an aggressive campaign of providing information to grade schools should increase interest in the state parks. What is needed is creative and effective distribution of information, not advertising sleight of hand.

The household survey indicates that if the Department of Wildlife and Parks needs more money to maintain the park system as it is, then the people of Kansas would support additional tax

revenue for that purpose if they know about the need. The survey also indicates that Kansans would pay for increased activities at state parks; such as, activities for children, educational activities, entertainment, and special events. If the state parks are improved in this manner, then an additional expenditure must be added — a public information program to alert Kansans of the new and improved state parks so they can use them.

(2) Differentiate the State Parks

Use the advertising to make clear what is unique or special about each park. Encourage each of the parks to have events and entertainment that fits both the park's particular advantages and the visitors it has. People responding to our household survey specifically mentioned annual events at Tuttle Creek and other parks as strong reasons to attend the parks. It is also clear from "people in the know" that not all of the state parks have the same high quality of fishing. Our visitors survey indicated that the fishing at Glen Elder attracts people not from just Kansas, but from surrounding states, particularly Nebraska.

If the Department of Wildlife and Parks decides to alter one or more of the state parks with additional development and commercialization to attract tourists, then the implication from our research is that this should be done primarily, if not wholly, with private money. Turning a state park into a resort is not a high priority in the minds of Kansans. The household survey indicated that less than 30% favored adding convention facilities at state parks. Any type of major commercialization will probably need to be done primarily with private money, and prior to any development, a strong educational campaign will be necessary.

APPENDIX A
THE SURVEY INSTRUMENT FOR THE TELEPHONE SURVEY

This appendix contains the survey instrument that was the used for the telephone survey. First is an outline of the subjects covered, then the survey instrument itself.

OUTLINE

HOUSEHOLD TELEPHONE SURVEY

INTRODUCTION

Instructions: Surveyors are to read everything in bold. Notes written in italic, such as this, are not to be read, but are designed to help surveyors perform the survey by giving them some idea why the particular questions are being asked.

Hello, my name is _____ and I am calling from the University of Kansas.

Q0. Are you 18 years of age or older?

1)	Yes	(Go to Q1a)
2)	No	(If not, is there someone there who is?)

We are conducting a survey pertaining to the Kansas State Park System. All responses are confidential and you may discontinue the survey at any time. If you have any questions about this survey, you may call us at 913-864-3701 and ask for Chuck Krider. Do you have a few minutes to answer some questions?

MARKETING

This section is designed to provide general information about what park consumers want and how they have responded to the recent price increases. The information we receive from these questions will be used to supplement the information we received from the on-site surveys. We are assuming that the on-site surveys will give better information about the specific parks and the specific services that were used in the park.

Q1a. Did you visit any of the Kansas State Parks in 1996?

1)	Yes	(Go to Q2a)
2)	No	(Go to Q1c)
3)	Don't Know	(Continue)

Q1b. Are you aware that Kansas has a state park system?

1) Yes
2) No (Go to Q4)

Q1c. What are main reasons you did not visit a state park in 1996?
(Don't cue, record all that person mentions.)

___ It's too far away to travel (Go to Q3a)
___ It's too expensive (Go to Q3a)
___ Inadequate facilities (Go to Q3a)
___ I'm not interested (Go to Q3a)
___ The weather is too bad (Go to Q3a)
___ I went last year (Go to Q3a)
___ Other (explain)_____ (Go to Q3a)

Q2a. How many days did you used the state park system in 1996? _____

Q2b. How did your attendance at state parks changed in 1996?

1) Increased Usage
2) Decreased Usage
3) No change
4) Don't Know

Q3a. On January 1, 1996, fees to use the Kansas State Parks were raised. Has the increase in prices for parks facilities affected your usage?

1) Yes
2) No (Go to Q4)
3) Don't Know (Go to Q4)

Q3b. Did the change in fees increase (because of greater availability of park facilities by reducing others usage) **or decrease** (because of increased price of facilities) **your usage of the state parks?**

1) Increase
2) Decrease

Q4. I will ask you about the primary activities you (might) do when you visit a state park. Please answer with how many days a year you do these things.

a) Camping _____
b) Hiking _____
c) Horseback Riding _____
d) Hunting _____
e) Wildlife Viewing / Photography _____
f) Fishing _____
g) Sightseeing / Relaxation _____
h) Boating/ Canoeing/Jet Skiing _____
I) Picnic / Socialize _____
j) Bicycling _____
k) Special Event _____ **event** _____
l) Other _____ **name it** _____

CONTINGENT VALUATION

The Kansas Department of Wildlife and Parks runs 23 state parks located across the state. Currently, the state park system is paid for by a combination of state tax revenue and user fees.

Questions Q5a, Q5b, and Q5c are designed to determine two attitudes: 1) does the respondent want Kansas to have a state park system, and 2) how much are they willing to pay to maintain the park system.

Q5a. Do you think the Kansas state government should provide a state park system?

1) Yes (Skip to Q5c)
2) No
3) Don't Know
4) Refuse

Q5b. Since Kansas does have a state park system, should the state continue to financially support the existing park system.

1) Yes
2) No (Go to 9a)
3) Don't Know (Go to 9a)
4) Refused (Go to 9a)

For Q5c and Q5d the survey sample will be split into 5 groups of 400 households each. One group will be asked whether they would be willing to have their taxes increased $5, a second group of 400 will be asked if they would be willing to have their taxes increased $10, and so on for $20, $50, and $100. Q5e will have the same menue approach, except the different choices will be percentage increases in user's fees. By doing this we avoid the problem of giving an individual a multiple choice question (and biasing the answer) and we will still get a statistical estimate of the demand curve for state park services.

Q5c. If you had a choice between

1) keeping the current park system, or

2) eliminating the park system by reducing your taxes $5, $10, $20, $50, or $100, which would you choose?

1) Preserve the Park System
2) Reduce Taxes
3) Don't Know

Q5d. If you had a choice between

1) improving the current park system by increasing your taxes $5, $10, $20, $50, or $100, or

2) keeping the current park system as it is with no improvement of park facilites, which would you choose?

1) Improving parks and increasing taxes
2) Leave parks as they are and no increase in taxes
3) Don't Know

Q5e. Would you be willing to pay an additional 25%, 33⅓, 50%, 100%, or 150% in users' fees to finance renovations in the park system? For example, the annual vehicle permit was $30 and with the 25%, 33⅓, 50%, 100%, or 150% increase it would be $38, $40, $45, $60, or $75.

1) Yes
2) No
3) Don't Know

The Kansas Department of Wildlife and Parks portion of the state's general fund is much less than 1%. Adjusting for inflation, in 1986 $4.0 million of the Department of Wildlife and Parks's budget came from the state general fund and $2.6 million came from user fees. By 1996 the state general fund provided $3.2 million, about 20% less than in 1986, and users fees provided $2.4 million.

Q5f. What do you think is the best way to finance improvements in the state park system?

1) Taxes
2) User fees
3) Combination of Taxes and User fees
4) State Revenue Bonds
5) Don't Know

Q5g. Would you favor redistributing tax dollars in the current budget from some other program to the state park system?

1) Favor redistributing
2) No (Go to Q7)
3) Don't Know (Go to Q7)

Q5h. What program would you want to take money from for the state park system? (Do not allow the answer eliminate waste and fraud.) _____

Q6. Do you think the state parks should be improved?

1) Yes
2) No
3) Don't Know

Q7. What additional opportunities do you think should be available at the park that you would be likely to use? Such as: ***(Cue these.)***

a) modern lodging
1) Yes
2) No
3) Don't Know

b) convention facilities
1) Yes
2) No
3) Don't Know

Q8. Is there anything else the State Parks could do that would make it more likely for you to visit? _____

DEMOGRAPHICS

Before I finish, I have a few background questions I would like to ask.

Q9a. In what county do you live? _____

Q9b. What is your age group?

1. **18-25____**
2. **26-40____**
3. **41-60____**
4. **over 60_____**

Q9c. Are you female or male? (fill in from sound of voice, if possible)

1) Female
2) Male
3) Don't Know

Q10. And finally, which best describes your gross annual household income? _____

1. **Under 25, 000**
2. **25,000-50,000**
3. **50,000-75,000**
4. **75,000-100,000**
5. **over 100,000**

This Concludes the Survey. Thank You Very Much.
Do You Have Any Questions for Us?
Have a Good Evening.

APPENDIX B
COMPARISON OF KANSAS COUNTY POPULATION AND SURVEY RESPONSES

County	1995 Population Estimate	Percentage of Kansas Population	Number of Responses	Percentage of All Responses
Allen	14,739	0.6	15	0.8
Anderson	8,000	0.3	6	0.3
Atchison	16,258	0.6	12	0.6
Barber	5,603	0.2	6	0.3
Barton	28,614	1.1	33	1.7
Bourbon	15,013	0.6	11	0.6
Brown	11,075	0.4	10	0.5
Butler	57,746	2.3	32	1.6
Chase	2,885	0.1	1	0.1
Chautauqua	4,439	0.2	5	0.3
Cherokee	22,437	0.9	16	0.8
Cheyenne	3,230	0.1	1	0.1
Clark	2,379	0.1	2	0.1
Clay	9,317	0.4	12	0.6
Cloud	10,488	0.4	10	0.5
Coffey	8,691	0.3	3	0.2
Comanche	2,099	0.1	2	0.1
Cowley	37,107	1.4	26	1.3
Crawford	36,488	1.4	26	1.3
Decatur	3,547	0.1	4	0.2
Dickinson	19,911	0.8	15	0.8
Doniphan	7,608	0.3	13	0.7
Douglas	88,206	3.4	108	5.4
Edwards	3,564	0.1	8	0.4
Elk	3,356	0.1	1	0.1
Ellis	26,145	1.0	21	1.1
Ellsworth	6,445	0.3	7	0.4
Finney	34,913	1.4	26	1.3
Ford	28,909	1.1	17	0.9
Franklin	23,164	0.9	20	1
Geary	29,638	1.2	31	1.6

County	1995 Population Estimate	Percentage of Kansas Population	Number of Responses	Percentage of All Responses
Gove	3,091	0.1	Missing	
Graham	3,336	0.1	Missing	
Grant	7,837	0.3	9	0.5
Gray	5,367	0.2	3	0.2
Greeley	1,834	0.1	1	0.1
Greenwood	8,032	0.3	13	0.7
Hamilton	2,343	0.1	2	0.1
Harper	6,651	0.3	5	0.3
Harvey	31,145	1.2	28	1.4
Haskell	4,027	0.2	6	0.3
Hodgeman	2,268	0.1	Missing	
Jackson	11,809	0.5	9	0.5
Jefferson	17,133	0.7	11	0.6
Jewell	3,952	0.2	7	0.4
Johnson	401,054	15.6	306	15.3
Kearny	4,182	0.2	10	0.5
Kingman	8,566	0.3	3	0.2
Kiowa	3,605	0.1	7	0.4
Labette	22,862	0.9	16	0.8
Lane	2,275	0.1	4	0.2
Leavenworth	69,323	2.7	28	1.4
Lincoln	3,431	0.1	1	0.1
Linn	8,698	0.3	6	0.3
Logan	3,178	0.1	4	0.2
Lyon	34,650	1.4	25	1.3
McPherson	27,267	1.1	12	0.6
Marion	12,961	0.5	7	0.4
Marshall	11,261	0.4	26	1.3
Meade	4,355	0.2	8	0.4
Miami	25,187	1.0	18	0.9
Mitchell	7,092	0.3	3	0.2
Montgomery	37,694	1.5	45	2.3
Morris	6,327	0.2	7	0.4
Mort/on	3,303	0.1	7	0.4

County	1995 Population Estimate	Percentage of Kansas Population	Number of Responses	Percentage of All Responses
Nemaha	10,443	0.4	4	0.2
Neosho	16,994	0.7	9	0.5
Ness	3,752	0.1	2	0.1
Norton	5,735	0.2	7	0.4
Osage	16,729	0.7	16	0.8
Osborne	4,696	0.2	5	0.3
Ottawa	5,749	0.2	2	0.1
Pawnee	7,615	0.3	11	0.6
Phillips	6,270	0.2	9	0.5
Pottawatomie	17,548	0.7	17	0.9
Pratt	9,696	0.4	8	0.4
Rawlins	3,234	0.1	3	0.2
Reno	63,263	2.5	51	2.6
Republic	6,215	0.2	6	0.3
Rice	10,086	0.4	4	0.2
Riley	69,784	2.7	38	1.9
Rooks	5,884	0.2	7	0.4
Rush	3,541	0.1	2	0.1
Russell	7,701	0.3	6	0.3
Saline	51,831	2.0	48	2.4
Scott	5,074	0.2	1	0.1
Sedgwick	419,333	16.3	275	13.8
Seward	19,370	0.8	6	0.3
Shawnee	165,062	6.4	128	6.4
Sheridan	2,824	0.1	1	0.1
Sherman	6,706	0.3	3	0.2
Smith	4,782	0.2	6	0.3
Stafford	5,193	0.2	2	0.1
Stanton	2,331	0.1	Missing	
Stevens	5,257	0.2	5	0.3
Sumner	26,519	1.0	24	1.2
Thomas	8,331	0.3	7	0.4
Trego	3,449	0.1	7	0.4
Wabaunsee	6,603	0.3	7	0.4

County	1995 Population Estimate	Percentage of Kansas Population	Number of Responses	Percentage of All Responses
Wallace	1,798	0.1	3	0.2
Washington	6,833	0.3	4	0.2
Wichita	2,841	0.1	2	0.1
Wilson	10,321	0.4	11	0.6
Woodson	3,999	0.2	5	0.3
Wyandotte	153,826	6.0	111	5.6
Kansas	2,565,328		2000	

APPENDIX C
THE CONTINGENT VALUATION METHOD

One of the major problems in applied economics is estimating the value of non-traded goods and services. If one is interested in how much a potential user of a new good is willing to pay for the good, then marketing people have developed a number of methods for estimating the demand for these goods. However, if a good has public good aspects, and if in particular this good has existence or non-use value, such as the Grand Canyon, then one is left with two basic types of methods for estimating the value of the good: revealed preference methods and hypothetical methods.

The rest of this appendix is concerned with discussing one of the hypothetical methods used for estimating the value of non-traded goods with non-use values: the contingent valuation survey method. First, the concept of existence or non-use value described. Second, the role non-use value plays in complicating the problem of estimating the value of non-traded goods is outlined. Third, methods for measuring the value of non-traded goods are briefly sketched. Fourth, the contingent valuation method is examined. In particular, the contingent valuation method is described, the basic components of a contingent valuation survey instrument are enumerated, the two major criticisms of the contingent valuation method are discussed, and the recommendation of the expert panel convened by the National Oceanic and Atmospheric Administration (NOAA) for contingent valuation surveys is discussed.

Existence or Nonuse Value

John Krutialla, the father of existence value, suggested that some areas of nature might have unique attributes which make their survival valuable to people who do not ever experience these areas. The classic example is the Grand Canyon. From surveys and general experience, we know that there are a large number of people in the United State (and even more world wide) who will never visit the Grand Canyon, but who still place a value on its existence.[1]

It was soon recognized that not only unique, natural phenomenon had existence value, but some not so unique public goods had an existence value; such as, public parks. Individuals might a several different reasons they want a public good to exist even though they have not used it. For example, they think that they might want to use the good in the future, or they want the good available for their family and friends. One can think of other reasons why nonusers of a particular public good might want the good to continue existing. Nearly all economists accept the existence of nonuse values. The disagreements begin when people try to quantify these non-use values in dollar terms.

Non-Use Value and Public Goods

Dave Starrett uses the properties of excludability and rivalrousness to categorize goods as private goods or collective goods or some combination of the two.[2] Excludability requires that property rights for the good can be assigned so that the benefits (or costs) associated with the

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[1] "Conservation Reconsidered," ***American Economic Review***, 1967, pp. 787-796.

[2] ***Foundations of Public Economics***, Cambridge University Press, 1988, pp. 40-47.

commodity can be excluded from others by the owner of the good. The excludability of a good does not need to be costless, just that the cost of excluding others from the benefit is worth the cost. For example, using a fence makes sense in some areas while trying to control ocean fish seems foolish in most cases.

Rivalrousness means that excluding the benefits from people makes sense economically. This is best understood from examples of nonrivalrousness. The classic example is the radio broadcasts. Excluding additional listeners is not efficient since there is no additional cost to the producer of the broadcast if more people listen.

If a good is nonexcludable or excludable and nonrivalrous, then there are not assignments of property rights which can make the market efficiently allocate the good. We will use the example of the Grand Canyon to show how the non-use value of it creates efficiency problems for market allocation.

The Grand Canyon does have a nonrivalrous aspect to it — my going to the Grand Canyon and looking at it does not hurt or detract from someone else doing the same and costs the owner of the Grand Canyon next to nothing, expect for the problem of congestion. Use of the Grand Canyon can restricted with sufficient security, so use of the Grand Canyon is excludable. However, we must consider non-use value. Non-use value means that even though use is excludable, it does not restrict the benefits of the Grand Canyon. Thus, the Grand Canyon is a non-traded good whose use is nonrivalrous to some extent, and its benefits cannot be excluded from non-users. This is the fundamental problem an economist has in trying to place a dollar value on the benefits of the Grand Canyon.

Methods for Measuring Non-Traded Goods

Economists have two basic approaches of estimating the value of non-traded goods: revealed preference methods and hypothetical methods. The revealed preference approach was first developed by Paul Samuelson with the idea of estimating the underlying preferences that consumer behavior implied. The use of this approach has been greatly enlarged since Samuelson first proposed it. The travel cost method in recreational economics is an example of the use of revealed preference techniques to estimate the value of non-traded goods. Basically, this method uses people's travel expenditures, along with other relevant costs, to estimate the value of places people visit; such as a national park or a wilderness area. The reasoning is that people would not spend this money to get to the destination if they did not value the destination at least as much as the cost to get there and the cost to get in. However, a major problems with revealed preference methods is that they do not easily measure non-use value if they measure it at all.

Hypothetical methods of estimation techniques have more flexibility because they are not dependent upon "real world" behavior as their only source of data. Of the different hypothetical techniques available to the economist, the best for estimating the value of a public good with non-use value is the contingent value method. The last section of this appendix will discuss this method.

Contingent Valuation (CV)

Description of CV

The best method available to economists to estimate the benefits from a public good with

significant nonuse value is the contingent valuation method (CV). CV uses a survey to estimate the benefits of a project, program, or public good. Mitchell and Carson provide the following definition of the CV method:

> The CV method uses survey questions to elicit people's preferences for public goods by finding out what they are willing to pay (WTP) for specified improvements in them. The method is thus aimed at eliciting their WTP in dollar amounts. It circumvents the absence of markets for public goods by presenting consumers with hypothetical markets in which they have the opportunity to buy the good in question. The hypothetical market may be modeled after either a private goods' market or a political market. Because the elicited WTP values are contingent upon the particular hypothetical market described to the respondents, this approach came to be called the contingent valuation method.[3]

The Survey Instrument

For a CV survey to provide a good estimate of the value of some project or program, the survey instrument needs to include three components.[4]

(1) The respondent must be given enough information so they have a clear idea of what is to be evaluated. In most cases this means the survey instrument should contain an explanation of the project or program to be evaluated. In this particular case, it would be a description of the state park system and any improvements to this system that Kansas Department of Wildlife and Parks would make. The respondent needs to be made aware of what the status quo is and how the changes he/she is expected to evaluate would affect the status quo.

(2) Within the survey instrument, some method must be used to obtain a value or choice from the respondent. For example, the respondent might be asked how much he/she is willing to pay in additional tax dollars for a particular set of improvements to the park system, or the respondent might be asked if he/she would pay $5 or $10 more per year. Another possibility would be some form of referendum format, such as, "The Kansas state government is considering spending an additional $35 million on annual improvements to the state park system. If this were to pass, on average, your tax bill would increase $20 per year. How would you vote on this matter?"

(3) CV surveys request demographic and socioeconomic information of the respondents for the purpose of estimating a willingness-to-pay function with these categories of information as explanatory variables. CV survey instruments also usually have follow-up and redundancy questions to test the understanding of the respondent and the consistency of belief.

Criticisms of the CV Method

Not all economists accept the CV method as being a legitimate approach for estimating

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[3]***Using Surveys to Value Public Goods: The Contingent Valuation Method***, John Hopkins University Press, 1989: 2-3.

[4]The discussion of CV draws on the article by Paul R. Portney, "The Contingent Valuation Debate: Why Economists Should Care,." ***The Journal of Economic Perspectives***, 1994, pp. 3-17.

public good values.[5] Because the data is hypothetical, researchers usually have no way to compare the results to "real world" data. As a result, most of the criticisms of the CV method center on its results violate economic theory, and in practical use, it is easily misused and poorly implemented. The inconsistencies that have arisen between the results of CV surveys and economic theory are basically of two types: (1) the embedding problem and (2) the gap between willingness-to-pay (WTP) and willingness-to-accept (WTA).

The embedding problem is a case where consumers are willing to pay about the same for a small good and a large good that contains the small good. This result has been found in several different studies. For example, using split survey samples, research asked different groups of people from the same population about their WTP for protection to save 2,000, 20,000, and 200,000 species of migratory birds. The mean amount of dollars from these different groups was about the same. In other words, people were willing to pay about the same amount to save 2,000 species of birds and 200,000 species of birds. This conflicts with a basic result of consumer theory that consumers should be willing to pay more for more of a good.[6]

Researchers have found that if respondents are first asked for the value of the more inclusive item or more extensive damage, and then asked about a more specific item or specific damage until the respondent is finally asked about the item or the damage to be estimated, the result is a small value for the item in questions and consistency in the answers. This suggests that respondent's inconsistent answers might be because they do not understand the alternatives, and that researchers should be careful to contextualize alternatives for respondents.

The gap between WTP and WTA has been know for at least 20 years, and researchers responses to it have changed over the years. Initially, it was thought that, as in a market, WTP and WTA should converge. The failure to converge pointed to a flaw in the CV method. Then in 1991, Michael Hanemann offered the explanation that the failure to converge could be because the goods to not have close substitutes if the income elasticity is positive.[7] Hanemann's conjecture has been confirmed in some laboratory experiments where it was found that for some private goods with close substitutes, such as coffee mugs and candy bars, the WTP and WTA converged; however, "for a nonmarket good with no close substitutes (i.e., reduced health risk), the value measures diverge and persist, even with repeated market participation and full information on the nature of the good."[8]

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[5]J.A. Hausman, ed. ***Contingent Valuation: A Critical Assessment***: Amsterdam, North-Holland, 1993 has a number of papers critical of the CV method. However, one might be skeptical of the tone of some of these papers because they come from a conference sponsored by Exxon Company. After the Exxon Valdez oil spill, that company was hit by large estimated damages based on CV surveys. For a more balanced debate on the methodology see the symposium on the topic in ***Journal of Economic Perspectives***, vol 8, no. 4, 1994.

[6]William H. Desvousges, F. Reed Johnson, Richard W. Dunford, Kevin J. Boyle, Sara P. Hudson, and K. Nicole Wilson, "Measuring Natural Resource Damages with Contingent Valuation: Tests of Validity and Reliability," in ***Contingent Valuation: A Critical Assessment,*** J.A. Hausman, ed, pp. 91-159.

[7]"Willingness to Pay and Willingness to Accept: How Much Can They Differ?" ***American Economic Review***, 1991, pp. 635-647.

[8]Jason F. Shogren, Seung Y. Shin, Dermot J. Hayes, and James B. Kliebenstein, "Resolving Differences in Willingness to Pay and Willingness to Accept," ***American Economic Review***, 1994, pp. 254-270.

The other type of criticism leveled at the CV method is that it is easily misused and poorly implemented. Peter Diamond and Jerry Hausman have collected several obvious cases where poorly conceived survey instruments and poor implementation of survey techniques have lead to bizarre results.[9]

Other economists have argued that CV methods should not rejected because some practitioners have done poor jobs. In a resent discussion paper, authors Richard T. Carson, Nicholas E. Flores, and Norman F. Meade concluded that the contingent valuation approach, when properly done, is a valid method for estimating non-use value. "We believe the results of a survey question should not be given a direct economic interpretation unless the good to be valued is clearly explained, its delivery to the public made plausible, and a realistic expectation of payment created. A reliable CV [contingent valuation] survey is neither simple nor inexpensive to implement."[10]

The NOAA Panel Recommendation

In response to the Exxon Valdez spill incident (March 1989), Congress passed the Oil Pollution Act of 1990 which directed the Department of Commerce, acting through National Oceanic and Atmospheric Administration (NOAA), to write regulations governing damage assessment. In response, NOAA convened an expert panel with two Noble laureates in economics (Kenneth Arrow and Robert Solow) to investigate the contingent valuation method and to determine if it is reliable enough for natural resource damage assessments. The panels final report gave qualified support to the use of contingent valuation studies as "the starting point of a judicial process of damage assessment, including lost passive-use values."[11] However, they did provide some guidelines for future studies.[12]

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[9]Peter A. Diamond and Jerry A. Hausman, "On Contingent Valuation Measurement of Nonuse Values," in ***Contingent Valuation: A Critical Assessment***, J.A. Hausman, ed., pp. 3-38.

[10]***Contingent Valuation: Controversies and Evidence***, University of California, San Diego, Department of Economics Discussion Paper 96-36, November 1996, p. 35. For this reason, we have provided an extensive discussion of our survey instrument in Appendix D.

[11]***Federal Register***, vol 58, no. 10, p. 4601.

[12]For the guidelines see either the source sighted in the previous footnote or Paul R. Portney, "The Contingent Valuation Debate: Why Economists Should Care,." ***The Journal of Economic Perspectives***, 1994, p. 9 for a summary.

APPENDIX D
THE STRUCTURE OF THE VALUATION SECTION OF THE HOUSEHOLD SURVEY

We knew from previous surveys that a high percentage of Kansans were aware of the state parks. In this survey better than 99% of Kansans were aware of the state parks. This number might be high, but it does confirm our assumption that we did not initially need to provide much information to the respondents. The introduction to the valuation section was simply,

> ***The Kansas Department of Wildlife and Parks runs 23 state parks located across the state. Currently, the state park system is paid for by a combination of state tax revenue and user fees.***

If the respondent asked what a user fee was, we had a scripted answer prepared for the callers which said simply user fees were the different fees that the state charged for various uses of the park facilities.

The first two questions were aimed at eliminating from this part of the survey respondents who did not want Kansas to maintain a state park system. The questions were,

> ***Do you think the Kansas state government should provide a state park system?***
>
> ***Since Kansas does have a state park system, should the state continue to financially support the existing park system?***

If respondents answered yes to the first question, they skipped the second question. Any other response, no, don't know, or refused to answer, and the respondents were asked the second question. If they answered yes to the second question, they continued on with the valuation section of the survey. If they said no, don't know, or refused to answer, they skipped to the demographic questions at the end of the survey (94 out of 2000 fell into this category).

Those respondents who thought Kansas should have a park system were then asked the valuation questions. The first valuation question was designed to estimate the value of the park system for these people. We provided the respondents with a choice:

> ***If you had a choice between***
> ***1) keeping the current park system, or***
> ***2) eliminating the park system by reducing your taxes $5, $10, $20, $50, or $100, which would you choose?***

Three points are important about this question. This question is not a willingness-to-pay (WTP) question rather than is a willingness-to-accept (WTA) question. WTP questions are preferred to WTA, in part, because they tend to give smaller estimates of value. However, there are good reasons for believing that WTA should be higher than WTP. (For more discussion of this problem see Appendix C.) We could not develop a WTP question that made sense in this situation. For example, "Would you be willing to pay some amount of money to build a state park system if the one that exists now did not exist?" The fact the state park system exists now and there are no close substitutes for it, made it impossible for us to develop a reasonable WTP question.

Second, we gave the respondents a specific choice. We used the tax rebate in this choice because the term *taxes* tends to focus peoples attention on the fact that money is coming out of their pockets. In addition, at the time that the survey was run, March 1997, the state legislature was debating what type of tax cuts to give the citizens of Kansas. This story was one of the dominate stories about the legislative session. Put another way, reducing taxes was in the news and we thought this fact gave the phrase *tax rebate* more impact. We wanted the respondents aware that keeping the park system meant they would not have a certain amount of money to spend. Eliminating the park system meant they would have more money to spend.

Third, we did not give people a choice on the size of a rebate they could take. Giving people a menu of payment choices tends to bias the results. Instead, prior to the beginning of the survey, we separated the randomly chosen phone numbers into five groups. For this question and the next two questions, we gave one group of respondents the choice of a $5 tax rebate, one group the choice of $10 tax rebate, one group a choice of $20 tax rebate, one group a choice of a $50 tax rebate, and one group a choice of a $100 tax rebate. Because this grouping was also random, we had five sub-samples of respondents. When 400 respondents from a sub-sample had complete the survey, then surveying for that sub-sample was complete. Clearly, not all sub-samples will necessarily have the same percentage of their group answering the valuation questions. In fact, the number of respondents skipped to the demographic questions at the end of the survey ranged from 14 to 26 for the sub-samples.

Because the sample was divided into sub-samples of 400 with different tax rebate values, the answers to this question gave a type of demand curve: the different tax rebates provided price changes and the different number of people answering yes provided a quantity change.

The second valuation question provided respondents with another choice: either paying more taxes to improve the park system or keeping the park facilities the same with no increase in taxes. The question was,

If you had a choice between
1) improving the current park system by increasing your taxes $5, $10, $20, $50, or $100, or
2) keeping the current park system as it is with no improvement of park facilities, which would you choose?

The question is structured like the previous question with the substitution of *increasing your taxes* for *tax rebate* and the focus on improving the park system rather than maintaining the park system. Because the five sub-samples were created, a type of demand curve is created by the answers.

This question poses one problem of interpretation which will be dealt with later in greater detail. The heart of the problem is that the question is not specific enough. A natural response might be: "What improvements are you planning to make? Tell me what they are, and I will tell you whether I would be will to raise my taxes to pay for them." This problem was realized prior to the running of the survey and it caused much discussed with Kansas Department of Wildlife and Parks (KDWP) officials and the staff of IPPBR. The reason for the lack of an elaboration of specific projects is because the KDWP has a laundry list of projects they want money for that range from restoring maintenance that has been cut in the past few years due to lack of money to black topping camp sites to improving nature trails and adding less primitive cabins to some parks. Clearly, a question could not be framed which would incorporate the range of potential improvements and still

be understandable over the phone. For other practical reasons, we could not add a number of questions that could be understandable to cover the range of possible improvements. In essence, we were caught between the proverbial rock and a hard place. As the reader will see, this criticism is also appropriate for the next question.

The next question was aimed obtaining some demand information about respondents willingness-to-pay for park improvement with increased users fees. The question was,

> ***Would you be willing to pay an additional 25%, 33 ⅓, 50%, 100%, or 150% in users' fees to finance renovations in the park system? For example, the annual vehicle permit was $30 and with the 25%, 33 ⅓%, 50%, 100%, or 150% increase it would be $38, $40, $45, $60, or $75.***

This question is structured like the two previous with the exception that increases in users' fees are substituted for tax increases. Again, the survey sample was divided into five sub-samples. One group was asked about a 25% user fee increase, one group was asked about a 33⅓% user fee increase, one group was asked about a 50% user fee increase, etc.

This question is not specific enough. Financing renovations is more specific than financing improvements since improvements incorporate renovations and also holds out the possibility of adding facilities.

The remaining three questions were designed to determine financial structure that respondents thought was best for providing revenue for improvements. Before we asked to financial structure questions, we provided the respondents with some financial information about the Kansas Department of Wildlife and Parks.

> ***The Kansas Department of Wildlife and Parks portion of the state's general fund is much less than 1%. Adjusting for inflation, in 1986 $4.0 million of the Department of Wildlife and Parks's budget came from the state general fund and $2.6 million came from user fees. By 1996 the state general fund provided $3.2 million, about 20% less than in 1986, and users fees provided $2.4 million.***

After the respondents were given this information, they were then asked,

> ***What do you think is the best way to finance improvements in the state park system?***
> ***1) Taxes***
> ***2) User fees***
> ***3) Combination of Taxes and User fees***
> ***4) State Revenue Bonds***

Next, the respondents were asked about shifting state revenues from other departments to the state park system. The question was

> ***Would you favor redistributing tax dollars in the current budget from some other program to the state park system?***

If the respondents said they favored redistribution, then we asked an additional question,

What program would you want to take money from for the state park system?

The purpose of this follow up question was to investigate if the respondents had a program or department in mind whose budget should be cut to help the Department of Wildlife and Parks. It is easy to say shift the money around, but as politicians have indicated, it is hard to shift money away from a specific place. In addition, we did not accept the response eliminate waste and fraud. We felt that was an easy non-answer.

APPENDIX E
ANALYSIS OF THE VALUATION SECTION OF THE SURVEY

This appendix analyzes the responses to the valuation questions in the household survey. (Appendix D discusses the logic and structure of the questions in this section of the survey.) The questions will be discussed in the order in which they were asked. The valuation portion of the survey was labeled section 5, thus all of the questions are labeled Q5 followed by a letter to indicate sequence. (The first question is Q5a, the second is Q5b, etc.) This appendix, like the valuation section of the survey, is organized into four sections:

(1) How many Kansans want a state park system?
(2) What value do Kansans place on preserving the current park system?
(3) How much are Kansans willing to pay for improvements in the park system? And
(4) How would Kansans prefer to pay for improvements?

How many Kansans Want a State Park System?

The first two questions of the valuation section of the survey were designed to estimate who wanted to have a state park system and who did not. If people did not want a state park system, then we reasoned they would place very little value on the existing system, and asking them a series of questions about the park system would only irritate them. Since we wanted answers to the demographic questions at the end of the survey, we skipped those persons that did not think Kansas should have a state park system to the demographic questions. We also assumed they placed no value on the existing park system and would not pay for any improvements in the state parks.

The first valuation question asked the respondents if they thought the state should provide a state park system. The question and the frequencies for each of the answers follows.

Q5a. Do you think the Kansas state government should provide a state park system?

	ANSWERS TO QUESTION Q5a				
	Yes	**No**	**Don't Know**	**Refused**	**Total**
Number	1708	132	156	4	2000
Percentage	85.4%	6.6%	7.8%	0.2%	
Margin of error: ± 1.55%					

As the small table indicates, about 85% thought the state should have a park system. As was expected, those persons who thought Kansas should have a state park system tended to value the state park system more and be more inclined to support a tax increase for the purpose of making improvements in the state parks.

We thought that there might exist persons which did not think that Kansas should have a state park system or were unsure if it should, but when they were confronted with the fact Kansas did in fact have such a system, they would favor continued financial support for the park system. The 292 respondents who did answer yes to the previous question were then asked a follow-up question.

Q5b. Since Kansas does have a state park system, should the state continue to financially support the existing park system.

	ANSWERS TO QUESTION Q5b				
	Yes	**No**	**Don't Know**	**Refused**	**Total**
Number	198	46	42	6	292
Percentage	67.8%	15.8%	14.4%	2.1%	

Of the 2,000 people surveyed, only 96 did not think that Kansas should continue to financially support the park system. Put another way, continuation of a state park system has the support of about 95% of the households in Kansas.

The Value of the State Park System to Kansans

Survey Question and Frequencies of Responses

The next question tested this support of the park system by offering respondents a choice between (1) preserving the present park system, or (2) a tax rebate of various sizes and giving up the park system. Prior to starting the survey, we separated the randomly chosen phone numbers into five groups. For this question and the next two questions, we gave one group of respondents the choice of a $5 tax rebate, one group the choice of $10 tax rebate, one group a choice of $20 tax rebate, one group a choice of a $50 tax rebate, and one group a choice of a $100 tax rebate. Because this grouping was also random, we had five sub-samples of respondents. When 400 respondents from a sub-sample had complete the survey, then surveying for that sub-sample was complete..

Q5c. If you had a choice between
1) keeping the current park system, or
2) eliminating the park system by reducing your taxes $5, $10, $20, $50, or $100,
which would you choose?

	RESPONSES TO QUESTION Q5c				
	$5	**$10**	**$20**	**$50**	**$100**
Preserve the Park System	331 82.8%	328 82.0%	329 82.3%	331 82.8%	308 77.0%
Reduce Taxes	30 7.5%	36 9.0%	38 9.5%	39 9.8%	52 13.0%
Don't Know	18 4.5%	19 4.8%	19 4.8%	14 3.5%	14 3.5%
Missing	21 5.3%	17 4.3%	14 3.5%	16 4.0%	26 6.5%

The percentages in the table above are based on 400 respondents in each sub-sample. The persons listed as missing, which varied from 14 to 26 for the sub-samples, were the persons who did not want to financially support the state park system. The level of support does not change much as the tax rebate increased from $5 to $100. Our *a priori* assumption was that we would find somewhere between 200 and 250 people who would prefer the park system to a $5 tax rebate, and when the tax rebate reached $100 we might find 25 to 50 people at the most who would choose the park system over the rebate. Our underestimation of the support for the park system has important implications in our estimation of the demand curve for the park system and our estimation of the value Kansans place on the park system.

We want to emphasize two points about the question we used. First, the respondents were given a specific choice. We used the tax rebate in this choice because the term *taxes* tends to focus peoples attention on the fact that money is coming out of their pockets. In addition, at the time that the survey was run, March 1997, the state legislature was debating what type of tax cuts to give the citizens of Kansas. Reducing taxes was in the news and we thought this fact gave the phrase *tax rebate* more impact. We wanted the respondents aware that keeping the park system meant they would not have a certain amount of money to spend. Eliminating the park system meant they would have more money to spend.

Second, we did not give people a choice on the size of a rebate they could take. Giving people a menu of payment choices tends to bias the results. Instead, we gave the respondents a take it or leave it choice: either the respondent would get a $5 tax rebate or they could preserve the park system. The respondents were not asked what the lowest tax rebate they would take in order to give up the park system.

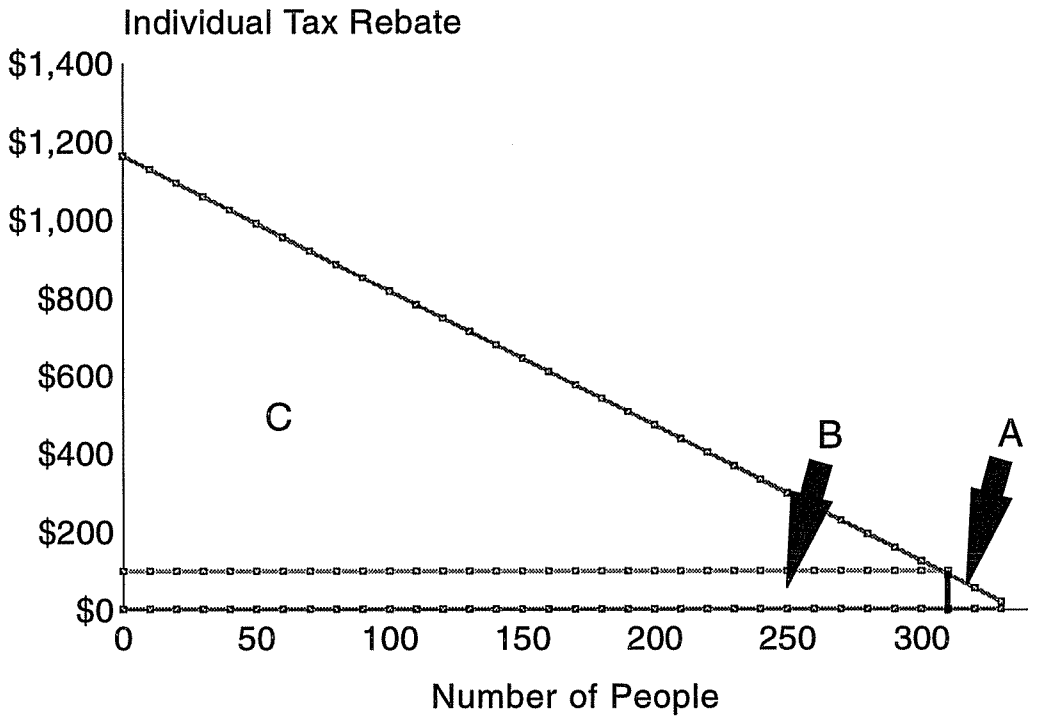
The Differences Between Visitors and Non-Visitors of the State Parks

One of the reasons we chose to use the contingent valuation method for estimating the value of the state park system to Kansans is because this method captures the value that non-users of the state parks might place on the park system. Our first question in the survey was whether the respondent had visited a state park in the past year. The response was 34.5% (689) had visited a state park, 63.2% (1,264) had not visited a state park, and 2.4% (47) did not know if they had or had not visited a state park. The table below shows the cross tabulation between whether a respondent had visited a state park in the past year and the question of whether the respondents would prefer a tax rebate or preserving the state park system.

Have you visited a state park in the past year?	**PRESERVE THE PARK SYSTEM**				
	$5	$10	$20	$50	$100
Yes	87.8%	85.7%	89.6%	83.3%	79.6%
No	78.7%	81.0%	78.4%	82.9%	75.3%
Do Not Know	91.3%	55.6%	85.7%	50.0%	100.0%

Those who had visited a state park in the past year were more supportive of the state park system, but not by much. This table indicates that it is not only the recent visitors of a state park who want to preserve the park system, but also those who have not visited the state parks recently.

FIGURE 1
Choice Between the Park System and a Tax Rebate



Demand Curve for the State Park System

The responses to Q5c provide the data for a type of demand curve for the state park system. Figure 1 (same as Figure 2 in the text) is an estimation of this demand curve based on the five data points from the five sub-samples. The estimation was made using ordinary least squares. The demand curve is plotted on the graph with tax rebate on the vertical axis (price) and the number of persons who wanted to preserve the park system on the horizontal axis (quantity). The area under the demand curve represents the amount of money the respondents would accept for the state park system. Put another way, the area under the demand curve represents the value to the survey's respondents of the state park system.

Unfortunately, we failed to fully appreciate the level of support that Kansans had for the state park system. As a result, the data points from the five sub-samples are not spread over the whole demand curve. Notice the small triangle with an arrow pointing to it labeling it A that is located in the far lower, right-hand corner of the graph. The five data points all lie to the right of the horizontal line which creates area A. We are confident that area A plus area B is representative of the value Kansans place on the state park system. We are uncertain about either the shape or size of area C.

Figure 2 (same as Figure 3 in text) provides a better view of the problem by enlarging the lower right-hand corner of the graph. The five arrows in the graph identify the data points from the sub-samples. Figure 3 clearly shows that none of these data points are left of area A. The fact that we have no data for the area C certainly calls into question what its real size and shape are. We will

first concentrate on estimating the value of areas A, B, and C for the whole Kansas household population, and then return to the problem of how to interpret area C.

An Underestimation of the Value of the State Park System

The Bureau of the Census estimates that as of July 1, 1995, Kansas had about 971,000 households. This was up from about 950,000 households in 1990. Using the figure 971,000 probably underestimates the number of households in Kansas at the time of the survey, but this bias will only result in an underestimation of the value of the state park system. We will use the 971,000 Kansas household figure to scale up our results for 400 households.

We want to estimate the net value to Kansans of the state park system. This means taking into account the taxes they already spend on the park system. In FY1997 the Department of Wildlife and Parks received $3.2 million from the state government's general fund. Dividing this evenly among the 971,000 households results in each household paying slightly less than $3.30 per household for the current park system. In terms of the figures, $3.30 is the line just above the x-axis in both Figures 1 and 2 — everything above that line and below the demand curve is net value to Kansans.

The actual calculation of the net benefit is relatively easy. Only the equation for the demand curve and the coordinates where tax rebate is equal to $3.30, $100, and what the tax rebate is equal to when the number of people is zero are required. The equation and coordinates are listed below.

$$\textit{tax rebate} = 1163.904 - 3.463 \times (\textit{number of people})$$

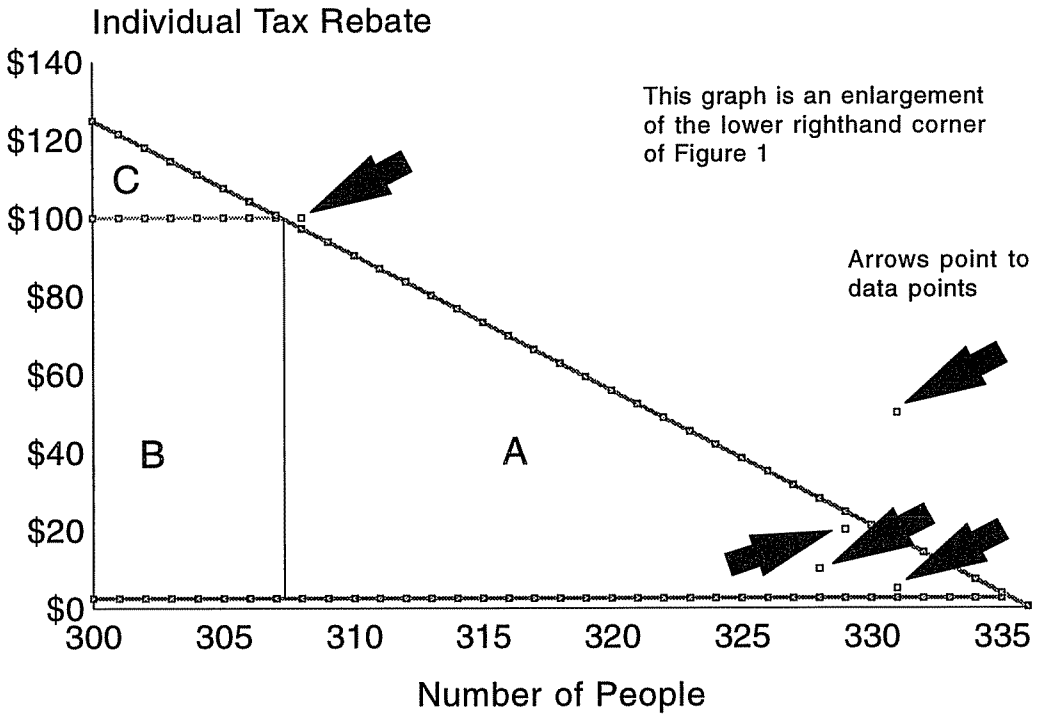
$$\begin{aligned} \textit{tax rebate} &= \$2.50 \quad \Rightarrow \textit{number of people} = 335.362 \\ \textit{tax rebate} &= \$100.00 \quad \Rightarrow \textit{number of people} = 307.208 \\ \textit{tax rebate} &= \$1{,}163.90 \quad \Rightarrow \textit{number of people} = 0 \end{aligned}$$

The formulas for the area of a triangle and a rectangle can then be used to calculate the values for areas A, B, and C. The results are provided in the small table below.

	Value for 400 Survey Respondents	**Value for all Kansas Households**
Area A	$1,372	$3.3 million
Area B	$29,952	$72.7 million
Area C	$163,420	$396.7 million

From the above table we can confidently say that at a minimum, Kansans net value to the state park system is $76.0 million. This amount dwarfs the $3.2 million that Kansans pay each year in taxes for the park system.

FIGURE 2
Choice Between the Park System and a Tax Rebate



The Problem of Area C

The estimate of $76.0 million is an underestimation (probably a gross underestimation) of the value of the state park system to Kansans. The reason for the underestimation is that the value of area C has not been included.

Area C creates a dilemma. It is difficult to believe that if 308 would refuse a $100 tax rebate to maintain the park system, that nobody would refuse a $110 tax rebate to maintain the park system. We think it is reasonable to suppose that area C has some positive value. However, our demand curve indicates that slightly more than 140 people (out of 400) would refuse a $500 tax rebate to keep the state park system. We are more than a little skeptical. Thus, the dilemma: we are confident that area C has some value but we are skeptical it is $396.7 million. Our conclusion is that $76.0 underestimates the value Kansans place on the state park system, but we lack data to even guess by how much.

Potential Bias as a Because of Sampling Bias

We had two major biases that we knew about from analyzing the demographic information in the survey — over sampling of women and over sampling of people over 60 years of age. The table below provides the percentage of the number of each gender which rejected the tax rebate and favored preserving the park system. In all but one case, men were more favorable to preserving the park system than women. Therefore, the over sampling of women results in a further underestimation of the value of the park system.

	PRESERVE THE PARK SYSTEM				
	$5	**$10**	**$20**	**$50**	**$100**
Women	80.2%	83.5%	80.6%	79.7%	73.5%
Men	86.1%	82.7%	84.7%	86.8%	82.0%

The same type of table for the age categories is provided below.

	PRESERVE THE PARK SYSTEM				
	$5	**$10**	**$20**	**$50**	**$100**
18 to 25 years old	75.7%	80.0%	85.1%	65.5%	74.2%
26 to 40 years old	85.5%	82.6%	90.6%	89.0%	82.3%
41 to 60 years old	86.7%	91.8%	82.0%	87.5%	76.5%
over 60 years old	78.2%	71.7%	71.4%	79.4%	71.8%

The youngest age group and the oldest age group were the least supportive of preserving the park system. The youngest age group is slightly under represented and the oldest age group is the most over represented. The two age groups in the middle are 63.6% of the Kansas population over 18 years of age and also are the strongest supporters of the park system. Again, the age bias in the sample cause a slight underestimation of the value of the park system.

The Demand for Improvements in the Park System

Survey Responses

The next two questions in the valuation section of the survey asked if the respondents would be willing to pay for improvements in the park system by either increased taxes (Q5d) or increased fees (Q5e). In both cases the five sub-samples were used to generate five data points. We will look at the responses before we tried to analyze the results. The first question provided a choice between improving the park system and increasing taxes and leaving the park system as it is. The second question is similar except the choice is between increasing fees to financing renovations and leaving the park system as it is. As was discussed in the previous section, a problem exists with these questions because the persons being surveyed were not told what the improvements or renovations would be. The exact questions are listed below and each question is followed by a table with the survey responses in it.

Q5d. If you had a choice between

1) improving the current park system by increasing your taxes $5, $10, $20, $50, or $100, or

2) keeping the current park system as it is with no improvement of park facilities, which would you choose?

	ANSWERS TO QUESTION Q5d				
	$5	**$10**	**$20**	**$50**	**$100**
Improve Parks and Increase Taxes	220 55.0%	209 52.3%	179 44.8%	136 34.0%	102 25.5%
Leave Parks as They Are Now	130 32.5%	136 34.0%	176 44.0%	210 52.5%	233 58.3%
Don't Know	29 7.3%	38 9.5%	31 7.8%	38 9.5%	39 9.8%

Q5e. Would you be willing to pay an additional 25%, 33⅓, 50%, 100%, or 150% in users' fees to finance renovations in the park system? For example, the annual vehicle permit was $30 and with the 25%, 33⅓, 50%, 100%, or 150% increase it would be $38, $40, $45, $60, or $75.

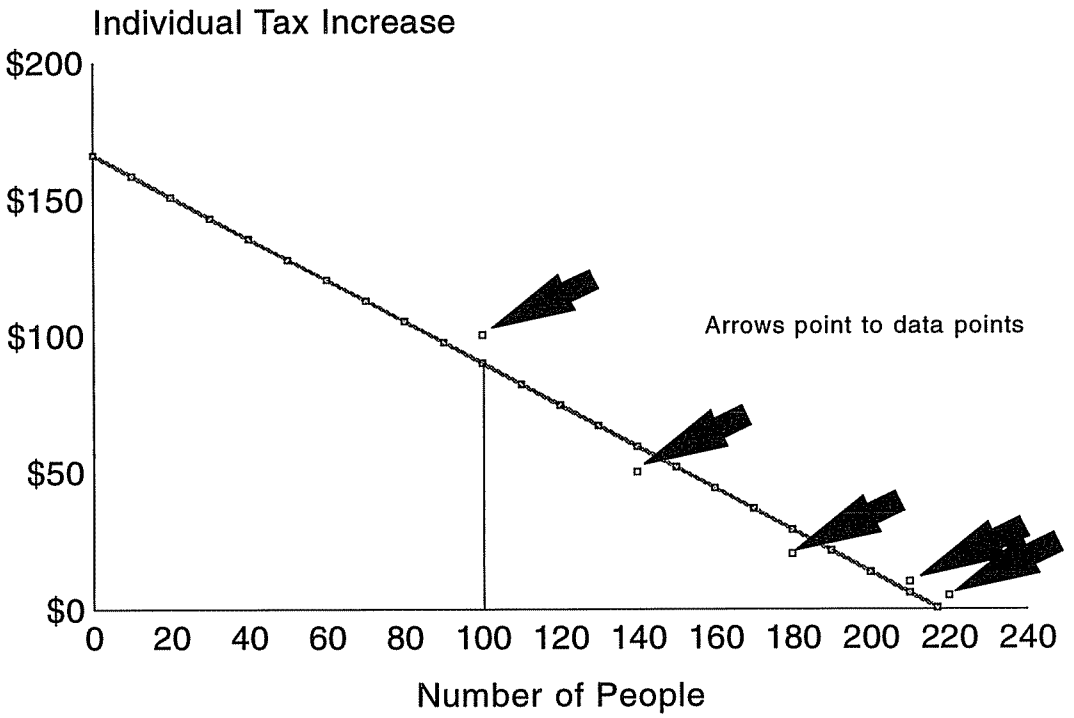
	ANSWERS TO QUESTION Q5e				
	25.0%	**33.3%**	**50.0%**	**100.0%**	**150.0%**
Yes	174 43.5%	188 47.0%	155 38.8%	103 25.8%	98 24.5%
No	156 39.0%	154 38.5%	181 45.3%	223 55.8%	209 52.3%
Don't Know	49 12.3%	41 10.3%	50 12.5%	58 14.5%	67 16.8%

The respondent's reaction to these two questions was significantly less favorable that to the question about maintaining the park system. However, more than 50% of the respondents were willing to pay either and additional $5 or $10 in taxes for improvements. One other note before we move on to discuss the demand curves these two sets of responses generated, it seems clear that the second sub-sample ($10 and 33.3%) were the most favorably inclined to support either improvements or renovation.

Demand Curve for Improvements and Renovations

Figure 3 uses the data from question Q5d to create a demand curve for park improvements and increased taxes. This demand curve was also created by applying ordinary least squares to the

FIGURE 3
Demand for Improved Parks and Increased Taxes



five data points from Q5d. The data points are identified by the arrows in the graph. All of the data points are to the right of the vertical line in the middle of the graph. As before, we have more confidence in our estimation of the demand curve to the right of the vertical line than to its left.

We have not estimated a demand curve for renovations and increased fees, the data from question Q5e, because the data points are somewhat strange, for example compare the responses of the sub-sample asked about a 25% increase in fees and the sub-sample asked about a 33⅓% increase in fees. Although we gave an example in the question of what effect the relevant fee increase would be like, it might be that enough of the respondents were confused by the question that their responses reflect confusion as much as preferences. This is always a potential problem when asking questions with percentages in them for a survey.

Optimal Financing of Improvements

The last three question in this section of the survey were aimed at determining how respondents thought park improvements should be financed. We introduced this part of the survey by giving some facts about how the state park system is paid for now (state general fund —$2.4 million and user fees — $2.6 million) and how small a percentage this was of the total state budget — less than 1%. The we asked the respondents what they thought was the best means to finance improvements and we told them four possibilities: 1) Taxes, 2) User fees, 3) Combination of Taxes and User fees, and 4)State Revenue Bonds. The specific question and the respondents answers follow: We had a scripted explanation of each of these means of financing that could be given to the respondents if they asked for an explanation.

Q5f. What do you think is the best way to finance improvements in the state park system?

Taxes	User Fees	Combination of Taxes and User Fees	State Revenue Bonds	Don't Know
91	473	929	171	242
4.8%	24.8%	48.7%	9.0%	12.7%

The 94 who did not want a state park system did not answer this question, so the total number of answers is 1906. The most popular means of financing improvements in the park system is clear a combination of taxes and user fees with just user fees the second most popular.

We then asked if the respondents would favor moving money from some other program or agency to the park system to finance improvements.

Q5g. Would you favor redistributing tax dollars in the current budget from some other program to the state park system?

Again the total number of respondents was 1906, of which 877 (46.0%) favored redistributing money from some other agency or program, 586 (30.7%) were opposed to redistributing money, and 443 (23.2%) did not know what they preferred.

We followed this question with another question for those who favored redistribution. We asked them to name the program they would take the money from. In addition, we did not allow the answer eliminate waste and fraud.

Q5h. What program would you want to take money from for the state park system?

The answers to this question are to some extent difficult to interpret. The table below summarizes an edited versions of these answers. We edited to reduce the number of different answers. So if we had the answers take money from highways and take money from roads, we combined these into two answers for highways. We did not combine DEA and drug enforcement because the DEA is a federal program and drug enforcement might refer to state programs. In addition, some people gave multiple answers; for example, agriculture and welfare and welfare and drug enforcement. In these cases we counted one for welfare and one for the other program. As a result, we have 885 responses from 877 respondents. More than 85% of the respondents said they did not know from what program to take the money. (Because of the 8 additional responses, don't know is only 84.9% of total responses.) The 750 people who said they did not know from what program to take the money indicates that in some sense the previous question was a free question for these people. They favored redistribution, but did not know where to get the money. Combining the responses from this open ended question with Q5g suggests there is probably a lot less support for redistribution of state budget resources than question Q5g suggests.

Agency or Program to Shift Funds from for the State Park System	Number of Persons	Percentage of Total
Agriculture	1	0.1%
Arts Program	1	0.1%
Bureau of Alcoholic Control	1	0.1%
Campaign Funds	2	0.2%
Civil Defense	1	0.1%
Corporate Welfare	4	0.5%
DEA	3	0.3%
Department of Wildlife	1	0.1%
Don't Know	751	84.9%
Drug Enforcement	2	0.2%
Economic Development Fund	2	0.2%
Education	4	0.5%
Family Planning	1	0.1%
Gambling	2	0.2%
Government Building Funds	1	0.1%
Government Expense Accounts	4	0.5%
Government Salaries	7	0.8%
Health and Human Services	1	0.1%
Health Care	1	0.1%
Highways	22	2.5%
Internal Revenue	1	0.1%
Kansas Board of Regents	1	0.1%
KBI	1	0.1%
Law Enforcement	6	0.7%
Legislative Salaries	5	0.6%
Legislative Retirement	1	0.1%
Legislative Office Spending	1	0.1%
Lottery	9	1.0%
Prisons	5	0.6%
Public Sports Programs	1	0.1%
Reelection Funds	1	0.1%
Social Rehabilitative Services	2	0.2%
State Administration	1	0.1%
State Funded Political Primaries	1	0.1%
Transportation	1	0.1%
Welfare	35	4.0%
Woodlands Track	1	0.1%
TOTAL	885	100.0%

APPENDIX F
RESPONSES TO CURRENT VALUATION OF THE STATE PARK SYSTEM BY COUNTY

This appendix presents the responses to question Q5c, the basis of our estimations of the demand curve for the state parks and the value of the state park system, by county. Kansas has 105 counties, but only 101 had responses in our survey sample. The missing counties are Gove, Graham, Hodgeman, and Stanton. For each of the other 101 counties, this appendix has a table with the responses from the county.

The tables are all the same format. The columns separate the responses by sub-sample; i.e. whether the respondent was given the choice between preserving the park system or taking a $5, $10, $20, $50, $100 tax rebate. The rows separate the responses based on the answer given: 1 is preserved the park system, 2 is reduce taxes, and 3 is don't know. The percentages under the number of responses are the percentage that the number of responses in that particular cell is of the total number of responses for that county. The numbers at the end of the rows and columns are row and column sums.

Before the tables is the exact question asked on the survey.

Q5c. If you had a choice between
1) keeping the current park system, or
2) eliminating the park system by reducing your taxes $5, $10, $20, $50, or $100,
which would you choose?
1) Preserve the Park System
2) Reduce Taxes
3) Don't Know

TABLE 1 ALLEN

Q5C(choice 1)	VERSION $5	$10	$20	$50	$100	Total
1	5 33.33	3 20.00	3 20.00	3 20.00	0 0.00	14 93.33
2	0 0.00	0 0.00	0 0.00	0 0.00	1 6.67	1 6.67
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	5 33.33	3 20.00	3 20.00	3 20.00	1 6.67	15 100.00

TABLE 2 ANDERSON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	0 0.00	3 50.00	0 0.00	5 83.33
2	0 0.00	0 0.00	1 16.67	0 0.00	0 0.00	1 16.67
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	1 16.67	1 16.67	3 50.00	0 0.00	6 100.00

TABLE 3 ATCHISON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 20.00	4 40.00	2 20.00	1 10.00	0 0.00	9 90.00
2	0 0.00	0 0.00	0 0.00	1 10.00	0 0.00	1 10.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 20.00	4 40.00	2 20.00	2 20.00	0 0.00	10 100.00

Frequency Missing = 2

TABLE 4 BARBER

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	1 16.67	2 33.33	1 16.67	6 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	1 16.67	1 16.67	2 33.33	1 16.67	6 100.00

TABLE 5 BARTON

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	8	3	5	7	7	30
	25.00	9.38	15.63	21.88	21.88	93.75
2	0	0	0	1	1	2
	0.00	0.00	0.00	3.13	3.13	6.25
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	8	3	5	8	8	32
	25.00	9.38	15.63	25.00	25.00	100.00

Frequency Missing = 1

TABLE 6 BOURBON

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	2	1	2	2	2	9
	18.18	9.09	18.18	18.18	18.18	81.82
2	0	0	1	1	0	2
	0.00	0.00	9.09	9.09	0.00	18.18
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	2	1	3	3	2	11
	18.18	9.09	27.27	27.27	18.18	100.00

TABLE 7 BROWN

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	0	4	2	0	1	7
	0.00	40.00	20.00	0.00	10.00	70.00
2	1	0	0	0	0	1
	10.00	0.00	0.00	0.00	0.00	10.00
3	0	1	0	1	0	2
	0.00	10.00	0.00	10.00	0.00	20.00
Total	1	5	2	1	1	10
	10.00	50.00	20.00	10.00	10.00	100.00

TABLE 8 BUTLER

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	6	3	3	8	4	24
	20.00	10.00	10.00	26.67	13.33	80.00
2	1	0	0	3	2	6
	3.33	0.00	0.00	10.00	6.67	20.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	7	3	3	11	6	30
	23.33	10.00	10.00	36.67	20.00	100.00

Frequency Missing = 2

TABLE 9 CHASE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00

TABLE 10 CHAUTAUQUA

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	1	0	0	2	3
	0.00	25.00	0.00	0.00	50.00	75.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	1	0	0	0	0	1
	25.00	0.00	0.00	0.00	0.00	25.00
Total	1	1	0	0	2	4
	25.00	25.00	0.00	0.00	50.00	100.00

Frequency Missing = 1

TABLE 11 CHEROKEE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 12.50	5 31.25	2 12.50	3 18.75	2 12.50	14 87.50
2	0 0.00	1 6.25	1 6.25	0 0.00	0 0.00	2 12.50
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 12.50	6 37.50	3 18.75	3 18.75	2 12.50	16 100.00

TABLE 12 CHEYENNE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1 100.00

TABLE 13 CLARK

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	0 0.00	1 50.00	2 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	0 0.00	0 0.00	1 50.00	2 100.00

TABLE 14 CLAY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 27.27	0 0.00	1 9.09	1 9.09	2 18.18	7 63.64
2	1 9.09	0 0.00	0 0.00	0 0.00	1 9.09	2 18.18
3	1 9.09	0 0.00	0 0.00	1 9.09	0 0.00	2 18.18
Total	5 45.45	0 0.00	1 9.09	2 18.18	3 27.27	11 100.00

Frequency Missing = 1

TABLE 15 CLOUD

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 10.00	2 20.00	5 50.00	2 20.00	0 0.00	10 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 10.00	2 20.00	5 50.00	2 20.00	0 0.00	10 100.00

TABLE 16 COFFEY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	3 100.00	0 0.00	0 0.00	3 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	3 100.00	0 0.00	0 0.00	3 100.00

TABLE 17 COMANCHE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 50.00	0 0.00	0 0.00	1 50.00	2 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	1 50.00	0 0.00	0 0.00	1 50.00	2 100.00

TABLE 18 COWLEY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 15.38	7 26.92	2 7.69	3 11.54	5 19.23	21 80.77
2	0 0.00	0 0.00	2 7.69	0 0.00	0 0.00	2 7.69
3	0 0.00	0 0.00	2 7.69	0 0.00	1 3.85	3 11.54
Total	4 15.38	7 26.92	6 23.08	3 11.54	6 23.08	26 100.00

TABLE 19 CRAWFORD

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 11.54	6 23.08	3 11.54	8 30.77	6 23.08	26 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	3 11.54	6 23.08	3 11.54	8 30.77	6 23.08	26 100.00

TABLE 20 DECATUR

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	1 33.33	2 66.67	0 0.00	3 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	1 33.33	2 66.67	0 0.00	3 100.00

Frequency Missing = 1

TABLE 21 DICKINSON

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	3 20.00	5 33.33	3 20.00	2 13.33	2 13.33	15 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	3 20.00	5 33.33	3 20.00	2 13.33	2 13.33	15 100.00

TABLE 22 DONIPHAN

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	2 18.18	2 18.18	3 27.27	1 9.09	2 18.18	10 90.91
2	0 0.00	0 0.00	0 0.00	1 9.09	0 0.00	1 9.09
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 18.18	2 18.18	3 27.27	2 18.18	2 18.18	11 100.00

Frequency Missing = 2

TABLE 23 DOUGLAS

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	16 16.67	19 19.79	16 16.67	16 16.67	18 18.75	85 88.54
2	3 3.13	0 0.00	4 4.17	2 2.08	1 1.04	10 10.42
3	0 0.00	0 0.00	0 0.00	0 0.00	1 1.04	1 1.04
Total	19 19.79	19 19.79	20 20.83	18 18.75	20 20.83	96 100.00

Frequency Missing = 12

TABLE 24 EDWARDS

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	2 25.00	3 37.50	0 0.00	0 0.00	1 12.50	6 75.00
2	1 12.50	0 0.00	0 0.00	0 0.00	0 0.00	1 12.50
3	0 0.00	0 0.00	0 0.00	0 0.00	1 12.50	1 12.50
Total	3 37.50	3 37.50	0 0.00	0 0.00	2 25.00	8 100.00

TABLE 25 ELK

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	0 0.00	1 100.00	0 0.00	1 100.00

TABLE 26 ELLIS

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	6	3	3	3	4	19
	30.00	15.00	15.00	15.00	20.00	95.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	5.00	5.00
Total	6	3	3	3	5	20
	30.00	15.00	15.00	15.00	25.00	100.00

Frequency-- Missing = 1

TABLE 27 ELLSWORTH

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	1	0	1	2	6
	28.57	14.29	0.00	14.29	28.57	85.71
2	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	14.29	14.29
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	2	1	0	1	3	7
	28.57	14.29	0.00	14.29	42.86	100.00

TABLE 28 FINNEY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3	4	6	4	5	22
	12.50	16.67	25.00	16.67	20.83	91.67
2	0	0	1	0	1	2
	0.00	0.00	4.17	0.00	4.17	8.33
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	4	7	4	6	24
	12.50	16.67	29.17	16.67	25.00	100.00

Frequency Missing = 2

TABLE 29 FORD

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	2	5	2	0	10
	6.25	12.50	31.25	12.50	0.00	62.50
2	0	1	1	2	2	6
	0.00	6.25	6.25	12.50	12.50	37.50
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	3	6	4	2	16
	6.25	18.75	37.50	25.00	12.50	100.00

Frequency Missing = 1

TABLE 30 FRANKLIN

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3	2	4	2	3	14
	16.67	11.11	22.22	11.11	16.67	77.78
2	0	2	0	0	0	2
	0.00	11.11	0.00	0.00	0.00	11.11
3	0	1	1	0	0	2
	0.00	5.56	5.56	0.00	0.00	11.11
Total	3	5	5	2	3	18
	16.67	27.78	27.78	11.11	16.67	100.00

Frequency Missing = 2

TABLE 31 GEARY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	4	4	3	11	22
	0.00	13.79	13.79	10.34	37.93	75.86
2	0	3	2	0	0	5
	0.00	10.34	6.90	0.00	0.00	17.24
3	1	0	0	0	1	2
	3.45	0.00	0.00	0.00	3.45	6.90
Total	1	7	6	3	12	29
	3.45	24.14	20.69	10.34	41.38	100.00

Frequency Missing = 2

TABLE 32 GRANT

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 11.11	2 22.22	1 11.11	2 22.22	6 66.67
2	1 11.11	0 0.00	0 0.00	2 22.22	0 0.00	3 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 11.11	1 11.11	2 22.22	3 33.33	2 22.22	9 100.00

TABLE 33 OF GRAY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	1 33.33	1 33.33	0 0.00	2 66.67
2	0 0.00	0 0.00	0 0.00	1 33.33	0 0.00	1 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	1 33.33	2 66.67	0 0.00	3 100.00

TABLE 34 GREELEY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00

TABLE 35 GREENWOOD

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	4	4	2	0	12
	15.38	30.77	30.77	15.38	0.00	92.31
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	1	0	0	0	1
	0.00	7.69	0.00	0.00	0.00	7.69
Total	2	5	4	2	0	13
	15.38	38.46	30.77	15.38	0.00	100.00

TABLE 36 HAMILTON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	0	1	0	1	2
	0.00	0.00	50.00	0.00	50.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	0	1	0	1	2
	0.00	0.00	50.00	0.00	50.00	100.00

TABLE 37 HARPER

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	1	1	0	0	4
	40.00	20.00	20.00	0.00	0.00	80.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	1	0	0	0	0	1
	20.00	0.00	0.00	0.00	0.00	20.00
Total	3	1	1	0	0	5
	60.00	20.00	20.00	0.00	0.00	100.00

TABLE 38 HARVEY

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	5 19.23	6 23.08	3 11.54	7 26.92	3 11.54	24 92.31
2	0 0.00	0 0.00	0 0.00	0 0.00	2 7.69	2 7.69
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	5 19.23	6 23.08	3 11.54	7 26.92	5 19.23	26 100.00

Frequency Missing = 2

TABLE 39 HASKELL

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	2 33.33	0 0.00	2 33.33	0 0.00	2 33.33	6 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 33.33	0 0.00	2 33.33	0 0.00	2 33.33	6 100.00

TABLE 40 JACKSON

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	1 12.50	0 0.00	3 37.50	2 25.00	2 25.00	8 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 12.50	0 0.00	3 37.50	2 25.00	2 25.00	8 100.00

Frequency Missing = 1

TABLE 41 JEFFERSON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3	0	4	2	1	10
	27.27	0.00	36.36	18.18	9.09	90.91
2	0	0	0	1	0	1
	0.00	0.00	0.00	9.09	0.00	9.09
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	0	4	3	1	11
	27.27	0.00	36.36	27.27	9.09	100.00

TABLE 42 JEWELL

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	1	0	2	1	6
	28.57	14.29	0.00	28.57	14.29	85.71
2	1	0	0	0	0	1
	14.29	0.00	0.00	0.00	0.00	14.29
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	1	0	2	1	7
	42.86	14.29	0.00	28.57	14.29	100.00

TABLE 43 JOHNSON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	46	54	63	48	58	269
	15.38	18.06	21.07	16.05	19.40	89.97
2	3	6	2	5	5	21
	1.00	2.01	0.67	1.67	1.67	7.02
3	1	4	2	1	1	9
	0.33	1.34	0.67	0.33	0.33	3.01
Total	50	64	67	54	64	299
	16.72	21.40	22.41	18.06	21.40	100.00

Frequency Missing = 7

TABLE 44 KEARNY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 30.00	2 20.00	1 10.00	1 10.00	2 20.00	9 90.00
2	1 10.00	0 0.00	0 0.00	0 0.00	0 0.00	1 10.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	4 40.00	2 20.00	1 10.00	1 10.00	2 20.00	10 100.00

TABLE 45 KINGMAN

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 66.67	0 0.00	0 0.00	0 0.00	1 33.33	3 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 66.67	0 0.00	0 0.00	0 0.00	1 33.33	3 100.00

TABLE 46 KIOWA

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	2 33.33	1 16.67	0 0.00	0 0.00	3 50.00
2	1 16.67	0 0.00	1 16.67	0 0.00	1 16.67	3 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	2 33.33	2 33.33	0 0.00	1 16.67	6 100.00

Frequency Missing = 1

TABLE 47 LABETTE

Q5C(choice 1)	VERSION					
	5	$10	$20	$50	$100	Total
1	3	3	4	1	1	12
	20.00	20.00	26.67	6.67	6.67	80.00
2	0	1	1	0	1	3
	0.00	6.67	6.67	0.00	6.67	20.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	4	5	1	2	15
	20.00	26.67	33.33	6.67	13.33	100.00

Frequency Missing = 1

TABLE 48 LANE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	2	0	0	1	4
	25.00	50.00	0.00	0.00	25.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	2	0	0	1	4
	25.00	50.00	0.00	0.00	25.00	100.00

TABLE 49 LEAVENWORTH

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	9	4	5	5	0	23
	32.14	14.29	17.86	17.86	0.00	82.14
2	0	0	1	0	2	3
	0.00	0.00	3.57	0.00	7.14	10.71
3	0	0	2	0	0	2
	0.00	0.00	7.14	0.00	0.00	7.14
Total	9	4	8	5	2	28
	32.14	14.29	28.57	17.86	7.14	100.00

TABLE 50 LINCOLN

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 100.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 100.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00

TABLE 51 LINN

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 20.00	2 40.00	0 0.00	0 0.00	0 0.00	3 60.00
2	0 0.00	1 20.00	0 0.00	0 0.00	0 0.00	1 20.00
3	0 0.00	1 20.00	0 0.00	0 0.00	0 0.00	1 20.00
Total	1 20.00	4 80.00	0 0.00	0 0.00	0 0.00	5 100.00

Frequency Missing = 1

TABLE 52 LOGAN

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 25.00	1 25.00	1 25.00	1 25.00	0 0.00	4 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 25.00	1 25.00	1 25.00	1 25.00	0 0.00	4 100.00

TABLE 53 LYON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3	2	4	7	4	20
	13.04	8.70	17.39	30.43	17.39	86.96
2	1	1	0	0	0	2
	4.35	4.35	0.00	0.00	0.00	8.70
3	0	0	1	0	0	1
	0.00	0.00	4.35	0.00	0.00	4.35
Total	4	3	5	7	4	23
	17.39	13.04	21.74	30.43	17.39	100.00

Frequency Missing = 2

TABLE 54 MARION

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	2	1	1	3	9
	18.18	18.18	9.09	9.09	27.27	81.82
2	1	0	0	0	0	1
	9.09	0.00	0.00	0.00	0.00	9.09
3	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	9.09	9.09
Total	3	2	1	1	4	11
	27.27	18.18	9.09	9.09	36.36	100.00

Frequency Missing = 1

TABLE 55 MARSHALL

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	0	0	0	1	2
	16.67	0.00	0.00	0.00	16.67	33.33
2	1	1	0	0	1	3
	16.67	16.67	0.00	0.00	16.67	50.00
3	0	1	0	0	0	1
	0.00	16.67	0.00	0.00	0.00	16.67
Total	2	2	0	0	2	6
	33.33	33.33	0.00	0.00	33.33	100.00

Frequency Missing = 1

TABLE 56 MCPHERSON

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	3	6	5	4	4	22
	12.50	25.00	20.83	16.67	16.67	91.67
2	0	0	1	0	1	2
	0.00	0.00	4.17	0.00	4.17	8.33
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	6	6	4	5	24
	12.50	25.00	25.00	16.67	20.83	100.00

Frequency Missing = 2

TABLE 57 MEADE

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	3	0	1	1	1	6
	42.86	0.00	14.29	14.29	14.29	85.71
2	0	0	0	1	0	1
	0.00	0.00	0.00	14.29	0.00	14.29
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	0	1	2	1	7
	42.86	0.00	14.29	28.57	14.29	100.00

Frequency Missing = 1

TABLE 58 MIAMI

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	5	2	0	2	9	18
	27.78	11.11	0.00	11.11	50.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	5	2	0	2	9	18
	27.78	11.11	0.00	11.11	50.00	100.00

TABLE 59 MITCHELL

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	0 0.00	1 33.33	0 0.00	0 0.00	0 0.00	1 33.33
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	1 33.33	1 33.33	0 0.00	0 0.00	0 0.00	2 66.67
Total	1 33.33	2 66.67	0 0.00	0 0.00	0 0.00	3 100.00

TABLE 60 MONTGOMERY

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	8 19.51	7 17.07	3 7.32	5 12.20	5 12.20	28 68.29
2	0 0.00	0 0.00	3 7.32	1 2.44	3 7.32	7 17.07
3	2 4.88	1 2.44	1 2.44	2 4.88	0 0.00	6 14.63
Total	10 24.39	8 19.51	7 17.07	8 19.51	8 19.51	41 100.00

Frequency Missing = 4

TABLE 61 MORRIS

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	1 14.29	2 28.57	0 0.00	3 42.86	1 14.29	7 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 14.29	2 28.57	0 0.00	3 42.86	1 14.29	7 100.00

TABLE 62 MORTON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	0 0.00	2 33.33	0 0.00	1 16.67	4 66.67
2	0 0.00	0 0.00	1 16.67	0 0.00	1 16.67	2 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	0 0.00	3 50.00	0 0.00	2 33.33	6 100.00

Frequency Missing = 1

TABLE 63 NEMAHA

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33	1 33.33
2	0 0.00	0 0.00	1 33.33	1 33.33	0 0.00	2 66.67
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	1 33.33	1 33.33	1 33.33	3 100.00

Frequency Missing = 1

TABLE 64 NEOSHO

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 25.00	2 25.00	2 25.00	0 0.00	1 12.50	7 87.50
2	1 12.50	0 0.00	0 0.00	0 0.00	0 0.00	1 12.50
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	3 37.50	2 25.00	2 25.00	0 0.00	1 12.50	8 100.00

Frequency Missing = 1

Table 65 NESS

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	2 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	2 100.00

TABLE 66 NORTON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 28.57	0 0.00	2 28.57	2 28.57	0 0.00	6 85.71
2	0 0.00	0 0.00	0 0.00	1 14.29	0 0.00	1 14.29
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 28.57	0 0.00	2 28.57	3 42.86	0 0.00	7 100.00

TABLE 67 OSAGE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 6.67	1 6.67	1 6.67	2 13.33	6 40.00	11 73.33
2	0 0.00	2 13.33	0 0.00	0 0.00	2 13.33	4 26.67
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 6.67	3 20.00	1 6.67	2 13.33	8 53.33	15 100.00

Frequency Missing = 1

TABLE 68 OSBORNE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	2 40.00	0 0.00	2 40.00	1 20.00	5 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	2 40.00	0 0.00	2 40.00	1 20.00	5 100.00

TABLE 69 OTTAWA

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	1 50.00	0 0.00	0 0.00	2 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	1 50.00	0 0.00	0 0.00	2 100.00

TABLE 70 PAWNEE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 36.36	1 9.09	1 9.09	2 18.18	3 27.27	11 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	4 36.36	1 9.09	1 9.09	2 18.18	3 27.27	11 100.00

TABLE 71 PHILLIPS

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 25.00	2 25.00	0 0.00	1 12.50	0 0.00	5 62.50
2	0 0.00	3 37.50	0 0.00	0 0.00	0 0.00	3 37.50
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 25.00	5 62.50	0 0.00	1 12.50	0 0.00	8 100.00

Frequency Missing = 1

TABLE 72 POTTAWATOMIE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 18.75	4 25.00	1 6.25	4 25.00	1 6.25	13 81.25
2	0 0.00	0 0.00	0 0.00	3 18.75	0 0.00	3 18.75
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	3 18.75	4 25.00	1 6.25	7 43.75	1 6.25	16 100.00

Frequency Missing = 1

TABLE 73 PRATT

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	3 37.50	2 25.00	2 25.00	0 0.00	7 87.50
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	1 12.50	1 12.50
Total	0 0.00	3 37.50	2 25.00	2 25.00	1 12.50	8 100.00

TABLE 74 RAWLINS

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	0 0.00	2 66.67	0 0.00	0 0.00	0 0.00	2 66.67
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33	1 33.33
Total	0 0.00	2 66.67	0 0.00	0 0.00	1 33.33	3 100.00

TABLE 75 RENO

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	9 18.00	6 12.00	5 10.00	14 28.00	8 16.00	42 84.00
2	0 0.00	1 2.00	1 2.00	0 0.00	0 0.00	2 4.00
3	1 2.00	0 0.00	2 4.00	2 4.00	1 2.00	6 12.00
Total	10 20.00	7 14.00	8 16.00	16 32.00	9 18.00	50 100.00

Frequency Missing = 1

TABLE 76 REPUBLIC

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	1 16.67	2 33.33	0 0.00	0 0.00	1 16.67	4 66.67
2	0 0.00	1 16.67	0 0.00	0 0.00	1 16.67	2 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	3 50.00	0 0.00	0 0.00	2 33.33	6 100.00

TABLE 77 RICE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	2	0	0	0	3
	33.33	66.67	0.00	0.00	0.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	2	0	0	0	3
	33.33	66.67	0.00	0.00	0.00	100.00

Frequency Missing = 1

TABLE 78 RILEY

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	5	5	4	12	3	29
	15.15	15.15	12.12	36.36	9.09	87.89
2	1	0	1	0	2	4
	3.03	0.00	3.03	0.00	6.06	12.12
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	6	5	5	12	5	33
	18.18	15.15	15.15	36.36	15.15	100.00

Frequency Missing = 5

TABLE 79 ROOKS

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	3	1	0	1	5
	0.00	50.00	16.67	0.00	16.67	83.33
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	1	0	0	0	1
	0.00	16.67	0.00	0.00	0.00	16.67
Total	0	4	1	0	1	6
	0.00	66.67	16.67	0.00	16.67	100.00

Frequency Missing = 1

TABLE 80 RUSH

Q5C(choice 1) VERSION

t	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	1 50.00	0 0.00	2 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	0 0.00	1 50.00	0 0.00	2 100.00

TABLE 81 RUSSELL

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	2 33.33	0 0.00	1 16.67	2 33.33	1 16.67	6 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 33.33	0 0.00	1 16.67	2 33.33	1 16.67	6 100.00

TABLE 82 SALINE

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	8 18.18	8 18.18	6 13.64	9 20.45	5 11.36	36 81.82
2	1 2.27	0 0.00	2 4.55	1 2.27	1 2.27	5 11.36
3	1 2.27	0 0.00	1 2.27	0 0.00	1 2.27	3 6.82
Total	10 22.73	8 18.18	9 20.45	10 22.73	7 15.91	44 100.00

Frequency Missing = 4

TABLE 83 SCOTT

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00

TABLE 84 SEDGWICK

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	47 17.41	45 16.67	61 22.59	38 14.07	39 14.44	230 85.19
2	4 1.48	6 2.22	6 2.22	2 0.74	10 3.70	28 10.37
3	2 0.74	2 0.74	3 1.11	2 0.74	3 1.11	12 4.44
Total	53 19.63	53 19.63	70 25.93	42 15.56	52 19.26	270 100.00

Frequency Missing = 5

TABLE 85 SEWARD

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	1 16.67	0 0.00	1 16.67	4 66.67
2	0 0.00	0 0.00	0 0.00	1 16.67	1 16.67	2 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	1 16.67	1 16.67	1 16.67	2 33.33	6 100.00

TABLE 86 SHAWNEE

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	22	18	11	27	21	99
	18.03	14.75	9.02	22.13	17.21	81.15
2	4	3	1	3	2	13
	3.28	2.46	0.82	2.46	1.64	10.66
3	2	5	0	3	0	10
	1.64	4.10	0.00	2.46	0.00	8.20
Total	28	26	12	33	23	122
	22.95	21.31	9.84	27.05	18.85	100.00

Frequency Missing = 6

TABLE 87 SHERIDEN

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00

TABLE 88 SHERMAN

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	1	0	2	0	0	3
	33.33	0.00	66.67	0.00	0.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	0	2	0	0	3
	33.33	0.00	66.67	0.00	0.00	100.00

TABLE 89 SMITH

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	4 66.67	0 0.00	0 0.00	6 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	1 16.67	4 66.67	0 0.00	0 0.00	6 100.00

TABLE 90 STAFFORD

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
2	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	2 100.00

TABLE 91 STEVENS

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	1 20.00	1 20.00	2 40.00
2	0 0.00	0 0.00	0 0.00	0 0.00	1 20.00	1 20.00
3	1 20.00	0 0.00	0 0.00	1 20.00	0 0.00	2 40.00
Total	1 20.00	0 0.00	0 0.00	2 40.00	2 40.00	5 100.00

TABLE 92 SUMNER

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3	2	4	5	3	17
	13.64	9.09	18.18	22.73	13.64	77.27
2	1	0	0	2	0	3
	4.55	0.00	0.00	9.09	0.00	13.64
3	1	0	1	0	0	2
	4.55	0.00	4.55	0.00	0.00	9.09
Total	5	2	5	7	3	22
	22.73	9.09	22.73	31.82	13.64	100.00

Frequency Missing = 2

TABLE 93 THOMAS

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	0	4	1	2	7
	0.00	0.00	57.14	14.29	28.57	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	0	4	1	2	7
	0.00	0.00	57.14	14.29	28.57	100.00

TABLE 94 TREGO

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	2	2	1	0	6
	14.29	28.57	28.57	14.29	0.00	85.71
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	1	0	0	1
	0.00	0.00	14.29	0.00	0.00	14.29
Total	1	2	3	1	0	7
	14.29	28.57	42.86	14.29	0.00	100.00

TABLE 95 WABAUNSEE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	2 33.33	2 33.33	0 0.00	0 0.00	5 83.33
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.0
3	0 0.00	0 0.00	1 16.67	0 0.00	0 0.00	1 16.67
Total	1 16.67	2 33.33	3 50.00	0 0.00	0 0.00	6 100.00

Frequency Missing = 1

TABLE 96 WALLACE

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 33.33	0 0.00	1 33.33	0 0.00	0 0.00	2 66.67
2	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33	1 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 33.33	0 0.00	1 33.33	0 0.00	1 33.33	3 100.00

TABLE 97 WASHINGTON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 25.00	0 0.00	0 0.00	1 25.00	0 0.00	2 50.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	1 25.00	1 25.00	0 0.00	2 50.00
Total	1 25.00	0 0.00	1 25.00	2 50.00	0 0.00	4 100.00

TABLE 98 WICHITA

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
2	0 0.00	0 0.00	1 50.00	0 0.00	0 0.00	1 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	1 50.00	0 0.00	0 0.00	2 100.00

TABLE 99 WILSON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	5 50.00	1 10.00	1 10.00	1 10.00	2 20.00	10 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	5 50.00	1 10.00	1 10.00	1 10.00	2 20.00	10 100.00

Frequency Missing = 1

TABLE 100 WOODSON

Q5C(choice 1)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	2 50.00	0 0.00	1 25.00	3 75.00
2	0 0.00	0 0.00	0 0.00	1 25.00	0 0.00	1 25.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	2 50.00	1 25.00	1 25.00	4 100.00

Frequency Missing = 1

TABLE 101 WYANDOTTE

Q5C(choice 1) VERSION

	$5	$10	$20	$50	$100	Total
1	13	17	16	27	19	92
	12.38	16.19	15.24	25.71	18.10	87.62
2	0	3	2	2	4	11
	0.00	2.86	1.90	1.90	3.81	10.48
3	2	0	0	0	0	2
	1.90	0.00	0.00	0.00	0.00	1.90
Total	15	20	18	29	23	105
	14.29	19.05	17.14	27.62	21.90	100.00

Frequency Missing = 6

APPENDIX G
THE DEMAND FOR IMPROVEMENTS IN THE STATE PARK SYSTEM USING TAXES FOR FINANCING BY COUNTY

This appendix presents the responses to question Q5d, the basis of our estimations of the demand curve for improvement in the state parks, by county. Kansas has 105 counties, but only 101 had responses in our survey sample. The missing counties are Gove, Graham, Hodgeman, and Stanton. For each of the other 101 counties, this appendix has a table with the responses from the county.

The tables are all the same format. The columns separate the responses by sub-sample; i.e. whether the respondent was given the choice between preserving the park system or taking a $5, $10, $20, $50, $100 tax rebate. The rows separate the responses based on the answer given: 1 is preserved the park system, 2 is reduce taxes, and 3 is don't know. The percentages under the number of responses are the percentage that the number of responses in that particular cell is of the total number of responses for that county. The numbers at the end of the rows and columns are row and column sums.

Before the tables is the exact question asked on the survey.

Q5d. If you had a choice between

1) improving the current park system by increasing your taxes $5, $10, $20, $50, or $100, or

2) keeping the current park system as it is with no improvement of park facilities,

which would you choose?

1) Improving parks and increasing taxes
2) Leave parks as they are and no increase in taxes
3) Don't Know

TABLE 1 ALLEN

Q5D(choice 2)	VERSION $5	$10	$20	$50	$100	Total
1	1 6.67	1 6.67	0 0.00	1 6.67	0 0.00	3 20.00
2	2 13.33	2 13.33	2 13.33	2 13.33	1 6.67	9 60.00
3	2 13.33	0 0.00	1 6.67	0 0.00	0 0.00	3 20.00
Total	5 33.33	3 20.00	3 20.00	3 20.00	1 6.67	15 100.00

TABLE 2 ANDERSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	0 0.00	1 16.67	0 0.00	3 50.00
2	0 0.00	0 0.00	0 0.00	2 33.33	0 0.00	2 33.33
3	0 0.00	0 0.00	1 16.67	0 0.00	0 0.00	1 16.67
Total	1 16.67	1 16.67	1 16.67	3 50.00	0 0.00	6 100.00

TABLE 3 ATCHISON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 20.00	2 20.00	1 10.00	0 0.00	0 0.00	5 50.00
2	0 0.00	2 20.00	1 10.00	2 20.00	0 0.00	5 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 20.00	4 40.00	2 20.00	2 20.00	0 0.00	10 100.00

Frequency Missing = 2

TABLE 4 BARBER

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	1 16.67	0 0.00	0 0.00	3 50.00
2	0 0.00	0 0.00	0 0.00	2 33.33	1 16.67	3 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	1 16.67	1 16.67	2 33.33	1 16.67	6 100.00

TABLE 5 BARTON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	7	2	3	1	1	14
	21.88	6.25	9.38	3.13	3.13	43.75
2	1	1	2	7	7	18
	3.13	3.13	6.25	21.88	21.88	56.25
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	8	3	5	8	8	32
	25.00	9.38	15.63	25.00	25.00	100.00

Frequency Missing = 1

TABLE 6 BOURBON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	1	0	2	0	4
	9.09	9.09	0.00	18.18	0.00	36.36
2	1	0	3	1	2	7
	9.09	0.00	27.27	9.09	18.18	63.64
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	2	1	3	3	2	11
	18.18	9.09	27.27	27.27	18.18	100.00

TABLE 7 BROWN

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	2	2	0	0	4
	0.00	20.00	20.00	0.00	0.00	40.00
2	1	3	0	0	1	5
	10.00	30.00	0.00	0.00	10.00	50.00
3	0	0	0	1	0	1
	0.00	0.00	0.00	10.00	0.00	10.00
Total	1	5	2	1	1	10
	10.00	50.00	20.00	10.00	10.00	100.00

TABLE 8 BUTLER

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	2	2	4	0	10
	6.67	6.67	6.67	13.33	0.00	33.33
2	4	1	1	7	6	19
	13.33	3.33	3.33	23.33	20.00	63.33
3	1	0	0	0	0	1
	3.33	0.00	0.00	0.00	0.00	3.33
Total	7	3	3	11	6	30
	23.33	10.00	10.00	36.67	20.00	100.00

Frequency Missing = 2

TABLE 9 =CHASE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00

TABLE 10 CHAUTAUQUA

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	1	0	0	0	1
	0.00	25.00	0.00	0.00	0.00	25.00
2	1	0	0	0	2	3
	25.00	0.00	0.00	0.00	50.00	75.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	1	0	0	2	4
	25.00	25.00	0.00	0.00	50.00	100.00

Frequency Missing = 1

TABLE 11 CHEROKEE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 6.25	4 25.00	0 0.00	0 0.00	0 0.00	5 31.25
2	1 6.25	1 6.25	3 18.75	3 18.75	2 12.50	10 62.50
3	0 0.00	1 6.25	0 0.00	0 0.00	0 0.00	1 6.25
Total	2 12.50	6 37.50	3 18.75	3 18.75	2 12.50	16 100.00

TABLE 12 CHEYENNE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1 100.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00	1 100.00

TABLE 13 CLARK

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
2	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00	1 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	0 0.00	0 0.00	1 50.00	2 100.00

TABLE 14 CLAY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4	0	0	1	1	6
	36.36	0.00	0.00	9.09	9.09	54.55
2	1	0	1	1	2	5
	9.09	0.00	9.09	9.09	18.18	45.45
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	5	0	1	2	3	11
	45.45	0.00	9.09	18.18	27.27	100.00

Frequency Missing = 1

TABLE 15 CLOUD

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	2	3	0	0	5
	0.00	20.00	30.00	0.00	0.00	50.00
2	1	0	2	1	0	4
	10.00	0.00	20.00	10.00	0.00	40.00
3	0	0	0	1	0	1
	0.00	0.00	0.00	10.00	0.00	10.00
Total	1	2	5	2	0	10
	10.00	20.00	50.00	20.00	0.00	100.00

TABLE 16 COFFEY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
2	0	0	2	0	0	2
	0.00	0.00	66.67	0.00	0.00	66.67
3	0	0	1	0	0	1
	0.00	0.00	33.33	0.00	0.00	33.33
Total	0	0	3	0	0	3
	0.00	0.00	100.00	0.00	0.00	100.00

TABLE 17 COMANCHE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 50.00	0 0.00	0 0.00	0 0.00	1 50.00
2	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00	1 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	1 50.00	0 0.00	0 0.00	1 50.00	2 100.00

TABLE 18 COWLEY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 11.54	5 19.23	1 3.85	0 0.00	1 3.85	10 38.46
2	1 3.85	1 3.85	2 7.69	3 11.54	5 19.23	12 46.15
3	0 0.00	1 3.85	3 11.54	0 0.00	0 0.00	4 15.38
Total	4 15.38	7 26.92	6 23.08	3 11.54	6 23.08	26 100.00

TABLE 19 CRAWFORD

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 7.69	3 11.54	1 3.85	2 7.69	3 11.54	11 42.31
2	0 0.00	3 11.54	2 7.69	4 15.38	2 7.69	11 42.31
3	1 3.85	0 0.00	0 0.00	2 7.69	1 3.85	4 15.38
Total	3 11.54	6 23.08	3 11.54	8 30.77	6 23.08	26 100.00

TABLE 20 DECATUR

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	1 33.33	0 0.00	0 0.00	1 33.33
2	0 0.00	0 0.00	0 0.00	2 66.67	0 0.00	2 66.67
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	1 33.33	2 66.67	0 0.00	3 100.00

Frequency Missing = 1

TABLE 21 DICKINSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 20.00	2 13.33	1 6.67	0 0.00	0 0.00	6 40.00
2	0 0.00	2 13.33	2 13.33	1 6.67	1 6.67	6 40.00
3	0 0.00	1 6.67	0 0.00	1 6.67	1 6.67	3 20.00
Total	3 20.00	5 33.33	3 20.00	2 13.33	2 13.33	15 100.00

TABLE 22 DONIPHAN

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 18.18	0 0.00	2 18.18	0 0.00	2 18.18	6 54.55
2	0 0.00	1 9.09	1 9.09	2 18.18	0 0.00	4 36.36
3	0 0.00	1 9.09	0 0.00	0 0.00	0 0.00	1 9.09
Total	2 18.18	2 18.18	3 27.27	2 18.18	2 18.18	11 100.00

Frequency Missing = 2

TABLE 23 DOUGLAS

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	12	11	10	6	4	43
	12.50	11.46	10.42	6.25	4.17	44.79
2	7	7	9	10	13	46
	7.29	7.29	9.38	10.42	13.54	47.92
3	0	1	1	2	3	7
	0.00	1.04	1.04	2.08	3.13	7.29
Total	19	19	20	18	20	96
	19.79	19.79	20.83	18.75	20.83	100.00

Frequency Missing = 12

TABLE 24 EDWARDS

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	1	3	0	0	1	5
	12.50	37.50	0.00	0.00	12.50	62.50
2	2	0	0	0	1	3
	25.00	0.00	0.00	0.00	12.50	37.50
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	3	0	0	2	8
	37.50	37.50	0.00	0.00	25.00	100.00

TABLE 25 ELK

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
2	0	0	0	1	0	1
	0.00	0.00	0.00	100.00	0.00	100.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	0	0	1	0	1
	0.00	0.00	0.00	100.00	0.00	100.00

TABLE 26 ELLIS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 20.00	2 10.00	2 10.00	3 15.00	2 10.00	13 65.00
2	2 10.00	1 5.00	0 0.00	0 0.00	2 10.00	5 25.00
3	0 0.00	0 0.00	1 5.00	0 0.00	1 5.00	2 10.00
Total	6 30.00	3 15.00	3 15.00	3 15.00	5 25.00	20 100.00

Frequency Missing = 1

TABLE 27 ELLSWORTH

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 14.29	0 0.00	0 0.00	0 0.00	1 14.29	2 28.57
2	1 14.29	0 0.00	0 0.00	1 14.29	2 28.57	4 57.14
3	0 0.00	1 14.29	0 0.00	0 0.00	0 0.00	1 14.29
Total	2 28.57	1 14.29	0 0.00	1 14.29	3 42.86	7 100.00

TABLE 28 FINNEY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 4.17	2 8.33	2 8.33	2 8.33	5 20.83	12 50.00
2	2 8.33	2 8.33	4 16.67	2 8.33	1 4.17	11 45.83
3	0 0.00	0 0.00	1 4.17	0 0.00	0 0.00	1 4.17
Total	3 12.50	4 16.67	7 29.17	4 16.67	6 25.00	24 100.00

Frequency Missing = 2

TABLE 29 FORD

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	1	2	2	1	0	6
	6.25	12.50	12.50	6.25	0.00	37.50
2	0	1	4	2	2	9
	0.00	6.25	25.00	12.50	12.50	56.25
3	0	0	0	1	0	1
	0.00	0.00	0.00	6.25	0.00	6.25
Total	1	3	6	4	2	16
	6.25	18.75	37.50	25.00	12.50	100.00

Frequency Missing = 1

TABLE 30 FRANKLIN

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	1	3	3	1	0	8
	5.56	16.67	16.67	5.56	0.00	44.44
2	2	1	1	1	3	8
	11.11	5.56	5.56	5.56	16.67	44.44
3	0	1	1	0	0	2
	0.00	5.56	5.56	0.00	0.00	11.11
Total	3	5	5	2	3	18
	16.67	27.78	27.78	11.11	16.67	100.00

Frequency Missing = 2

TABLE 31 GEARY

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	1	6	3	2	5	17
	3.45	20.69	10.34	6.90	17.24	58.62
2	0	1	3	1	5	10
	0.00	3.45	10.34	3.45	17.24	34.48
3	0	0	0	0	2	2
	0.00	0.00	0.00	0.00	6.90	6.90
Total	1	7	6	3	12	29
	3.45	24.14	20.69	10.34	41.38	100.00

Frequency Missing = 2

TABLE 32 GRANT

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 11.11	0 0.00	1 11.11	1 11.11	0 0.00	3 33.33
2	0 0.00	1 11.11	1 11.11	2 22.22	2 22.22	6 66.67
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 11.11	1 11.11	2 22.22	3 33.33	2 22.22	9 100.00

TABLE 33 GRAY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	0 0.00	0 0.00	2 66.67	0 0.00	2 66.67
3	0 0.00	0 0.00	1 33.33	0 0.00	0 0.00	1 33.33
Total	0 0.00	0 0.00	1 33.33	2 66.67	0 0.00	3 100.00

TABLE 34 GREELEY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00

TABLE 35 GREENWOOD

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	2	1	0	0	5
	15.38	15.38	7.69	0.00	0.00	38.46
2	0	3	2	1	0	6
	0.00	23.08	15.38	7.69	0.00	46.15
3	0	0	1	1	0	2
	0.00	0.00	7.69	7.69	0.00	15.38
Total	2	5	4	2	0	13
	15.38	38.46	30.77	15.38	0.00	100.00

TABLE 36 HAMILTON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	50.00	50.00
2	0	0	1	0	0	1
	0.00	0.00	50.00	0.00	0.00	50.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	0	1	0	1	2
	0.00	0.00	50.00	0.00	50.00	100.00

TABLE 37 HARPER

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	1	0	0	0	2
	20.00	20.00	0.00	0.00	0.00	40.00
2	2	0	1	0	0	3
	40.00	0.00	20.00	0.00	0.00	60.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	1	1	0	0	5
	60.00	20.00	20.00	0.00	0.00	100.00

TABLE 38 HARVEY

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	4	5	0	2	1	12
	15.38	19.23	0.00	7.69	3.85	46.15
2	0	1	2	3	4	10
	0.00	3.85	7.69	11.54	15.38	38.46
3	1	0	1	2	0	4
	3.85	0.00	3.85	7.69	0.00	15.38
Total	5	6	3	7	5	26
	19.23	23.08	11.54	26.92	19.23	100.00

Frequency Missing = 2

TABLE 39 HASKELL

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	2	0	1	0	1	4
	33.33	0.00	16.67	0.00	16.67	66.67
2	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	16.67	16.67
3	0	0	1	0	0	1
	0.00	0.00	16.67	0.00	0.00	16.67
Total	2	0	2	0	2	6
	33.33	0.00	33.33	0.00	33.33	100.00

TABLE 40 JACKSON

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	1	0	2	1	1	5
	12.50	0.00	25.00	12.50	12.50	62.50
2	0	0	1	1	1	3
	0.00	0.00	12.50	12.50	12.50	37.50
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	0	3	2	2	8
	12.50	0.00	37.50	25.00	25.00	100.00

Frequency Missing = 1

TABLE 41 JEFFERSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 18.18	0 0.00	2 18.18	0 0.00	1 9.09	5 45.45
2	1 9.09	0 0.00	2 18.18	3 27.27	0 0.00	6 54.55
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	3 27.27	0 0.00	4 36.36	3 27.27	1 9.09	11 100.00

TABLE 42 JEWELL

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 14.29	0 0.00	0 0.00	0 0.00	0 0.00	1 14.29
2	2 28.57	1 14.29	0 0.00	2 28.57	1 14.29	6 85.71
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	3 42.86	1 14.29	0 0.00	2 28.57	1 14.29	7 100.00

TABLE 43 JOHNSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	30 10.03	26 8.70	39 13.04	23 7.69	21 7.02	139 46.49
2	19 6.35	27 9.03	24 8.03	24 8.03	37 12.37	131 43.81
3	1 0.33	11 3.68	4 1.34	7 2.34	6 2.01	29 9.70
Total	50 16.72	64 21.40	67 22.41	54 18.06	64 21.40	299 100.00

Frequency Missing = 7

TABLE 44 KEARNY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 10.00	1 10.00	1 10.00	0 0.00	0 0.00	3 30.00
2	1 10.00	1 10.00	0 0.00	1 10.00	2 20.00	5 50.00
3	2 20.00	0 0.00	0 0.00	0 0.00	0 0.00	2 20.00
Total	4 40.00	2 20.00	1 10.00	1 10.00	2 20.00	10 100.00

TABLE 45 KINGMAN

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 33.33	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33
2	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33	1 33.33
3	1 33.33	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33
Total	2 66.67	0 0.00	0 0.00	0 0.00	1 33.33	3 100.00

TABLE 46 KIOWA

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	2 33.33	1 16.67	0 0.00	1 16.67	4 66.67
2	1 16.67	0 0.00	1 16.67	0 0.00	0 0.00	2 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	2 33.33	2 33.33	0 0.00	1 16.67	6 100.00

Frequency Missing = 1

TABLE 47 LABETTE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3	2	1	1	1	8
	20.00	13.33	6.67	6.67	6.67	53.33
2	0	2	4	0	1	7
	0.00	13.33	26.67	0.00	6.67	46.67
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	4	5	1	2	15
	20.00	26.67	33.33	6.67	13.33	100.00

Frequency Missing = 1

TABLE 48 LANE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	0	0	0	0	1
	25.00	0.00	0.00	0.00	0.00	25.00
2	0	2	0	0	1	3
	0.00	50.00	0.00	0.00	25.00	75.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	2	0	0	1	4
	25.00	50.00	0.00	0.00	25.00	100.00

TABLE 49 LEAVENWORTH

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	7	2	3	2	0	14
	25.00	7.14	10.71	7.14	0.00	50.00
2	2	1	4	2	2	11
	7.14	3.57	14.29	7.14	7.14	39.29
3	0	1	1	1	0	3
	0.00	3.57	3.57	3.57	0.00	10.71
Total	9	4	8	5	2	28
	32.14	14.29	28.57	17.86	7.14	100.00

TABLE 50 LINCOLN

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	1 100.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 100.00	0 0.00	0 0.00	0 0.00	0 0.00	1 100.00

TABLE 51 LINN

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 20.00	2 40.00	0 0.00	0 0.00	0 0.00	3 60.00
2	0 0.00	2 40.00	0 0.00	0 0.00	0 0.00	2 40.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 20.00	4 80.00	0 0.00	0 0.00	0 0.00	5 100.00

Frequency Missing = 1

TABLE 52 LOGAN

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 25.00	0 0.00	1 25.00	0 0.00	2 50.00
2	1 25.00	0 0.00	1 25.00	0 0.00	0 0.00	2 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 25.00	1 25.00	1 25.00	1 25.00	0 0.00	4 100.00

TABLE 53 LYON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 8.70	3 13.04	2 8.70	2 8.70	0 0.00	9 39.13
2	2 8.70	0 0.00	2 8.70	5 21.74	2 8.70	11 47.83
3	0 0.00	0 0.00	1 4.35	0 0.00	2 8.70	3 13.04
Total	4 17.39	3 13.04	5 21.74	7 30.43	4 17.39	23 100.00

Frequency Missing = 2

TABLE 54 MARION

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	1 9.09	1 9.09
2	2 18.18	1 9.09	1 9.09	1 9.09	3 27.27	8 72.73
3	1 9.09	1 9.09	0 0.00	0 0.00	0 0.00	2 18.18
Total	3 27.27	2 18.18	1 9.09	1 9.09	4 36.36	11 100.00

Frequency Missing = 1

TABLE 55 MARSHALL

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	1 16.67	1 16.67
2	2 33.33	0 0.00	0 0.00	0 0.00	1 16.67	3 50.00
3	0 0.00	2 33.33	0 0.00	0 0.00	0 0.00	2 33.33
Total	2 33.33	2 33.33	0 0.00	0 0.00	2 33.33	6 100.00

Frequency Missing = 1

TABLE 56 MCPHERSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	4	3	0	1	9
	4.17	16.67	12.50	0.00	4.17	37.50
2	2	2	3	3	3	13
	8.33	8.33	12.50	12.50	12.50	54.17
3	0	0	0	1	1	2
	0.00	0.00	0.00	4.17	4.17	8.33
Total	3	6	6	4	5	24
	12.50	25.00	25.00	16.67	20.83	100.00

Frequency Missing = 2

TABLE 57 MEADE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2	0	0	0	1	3
	28.57	0.00	0.00	0.00	14.29	42.86
2	1	0	1	2	0	4
	14.29	0.00	14.29	28.57	0.00	57.14
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	3	0	1	2	1	7
	42.86	0.00	14.29	28.57	14.29	100.00

Frequency Missing = 1

TABLE 58 MIAMI

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4	2	0	0	3	9
	22.22	11.11	0.00	0.00	16.67	50.00
2	1	0	0	1	6	8
	5.56	0.00	0.00	5.56	33.33	44.44
3	0	0	0	1	0	1
	0.00	0.00	0.00	5.56	0.00	5.56
Total	5	2	0	2	9	18
	27.78	11.11	0.00	11.11	50.00	100.00

TABLE 59 MITCHELL

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 33.33	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33
2	0 0.00	1 33.33	0 0.00	0 0.00	0 0.00	1 33.33
3	0 0.00	1 33.33	0 0.00	0 0.00	0 0.00	1 33.33
Total	1 33.33	2 66.67	0 0.00	0 0.00	0 0.00	3 100.00

TABLE 60 MONTGOMERY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	5 12.20	7 17.07	1 2.44	1 2.44	2 4.88	16 39.02
2	3 7.32	1 2.44	5 12.20	5 12.20	5 12.20	19 46.34
3	2 4.88	0 0.00	1 2.44	2 4.88	1 2.44	6 14.63
Total	10 24.39	8 19.51	7 17.07	8 19.51	8 19.51	41 100.00

Frequency Missing = 4

TABLE 61 MORRIS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 14.29	0 0.00	2 28.57	0 0.00	3 42.86
2	1 14.29	1 14.29	0 0.00	1 14.29	1 14.29	4 57.14
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 14.29	2 28.57	0 0.00	3 42.86	1 14.29	7 100.00

TABLE 62 MORTON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	0 0.00	2 33.33	0 0.00	0 0.00	3 50.00
2	0 0.00	0 0.00	1 16.67	0 0.00	2 33.33	3 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	0 0.00	3 50.00	0 0.00	2 33.33	6 100.00

Frequency Missing = 1

TABLE 63 NEMAHA

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	0 0.00	1 33.33	1 33.33	1 33.33	3 100.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	1 33.33	1 33.33	1 33.33	3 100.00

Frequency Missing = 1

TABLE 64 NEOSHO

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 12.50	2 25.00	0 0.00	1 12.50	4 50.00
2	3 37.50	0 0.00	0 0.00	0 0.00	0 0.00	3 37.50
3	0 0.00	1 12.50	0 0.00	0 0.00	0 0.00	1 12.50
Total	3 37.50	2 25.00	2 25.00	0 0.00	1 12.50	8 100.00

Frequency Missing = 1

TABLE 65 NESS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	2 100.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	2 100.00

TABLE 66 NORTON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 28.57	0 0.00	2 28.57	1 14.29	0 0.00	5 71.43
2	0 0.00	0 0.00	0 0.00	1 14.29	0 0.00	1 14.29
3	0 0.00	0 0.00	0 0.00	1 14.29	0 0.00	1 14.29
Total	2 28.57	0 0.00	2 28.57	3 42.86	0 0.00	7 100.00

TABLE 67 OSAGE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 6.67	1 6.67	1 6.67	2 13.33	5 33.33
2	1 6.67	2 13.33	0 0.00	1 6.67	5 33.33	9 60.00
3	0 0.00	0 0.00	0 0.00	0 0.00	1 6.67	1 6.67
Total	1 6.67	3 20.00	1 6.67	2 13.33	8 53.33	15 100.00

Frequency Missing = 1

TABLE 68 OSBORNE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 20.00	0 0.00	0 0.00	0 0.00	1 20.00
2	0 0.00	1 20.00	0 0.00	2 40.00	1 20.00	4 80.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	2 40.00	0 0.00	2 40.00	1 20.00	5 100.00

TABLE 69 OTTAWA

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	1 50.00	0 0.00	0 0.00	1 50.00
2	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	1 50.00	0 0.00	0 0.00	2 100.00

TABLE 70 PAWNEE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 36.36	1 9.09	0 0.00	0 0.00	2 18.18	7 63.64
2	0 0.00	0 0.00	1 9.09	2 18.18	1 9.09	4 36.36
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	4 36.36	1 9.09	1 9.09	2 18.18	3 27.27	11 100.00

TABLE 71 PHILLIPS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 25.00	2 25.00	0 0.00	0 0.00	0 0.00	4 50.00
2	0 0.00	0 0.00	0 0.00	1 12.50	0 0.00	1 12.50
3	0 0.00	3 37.50	0 0.00	0 0.00	0 0.00	3 37.50
Total	2 25.00	5 62.50	0 0.00	1 12.50	0 0.00	8 100.00

Frequency Missing = 1

TABLE 72 POTTAWATOMIE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	2 12.50	1 6.25	2 12.50	0 0.00	5 31.25
2	3 18.75	1 6.25	0 0.00	5 31.25	1 6.25	10 62.50
3	0 0.00	1 6.25	0 0.00	0 0.00	0 0.00	1 6.25
Total	3 18.75	4 25.00	1 6.25	7 43.75	1 6.25	16 100.00

Frequency Missing = 1

TABLE 73 PRATT

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	1 12.50	1 12.50	0 0.00	2 25.00
2	0 0.00	1 12.50	1 12.50	1 12.50	0 0.00	3 37.50
3	0 0.00	2 25.00	0 0.00	0 0.00	1 12.50	3 37.50
Total	0 0.00	3 37.50	2 25.00	2 25.00	1 12.50	8 100.00

TABLE 74 RAWLINS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	1 33.33	0 0.00	0 0.00	1 33.33	2 66.67
2	0 0.00	1 33.33	0 0.00	0 0.00	0 0.00	1 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	2 66.67	0 0.00	0 0.00	1 33.33	3 100.00

TABLE 75 RENO

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 8.00	2 4.00	4 8.00	9 18.00	1 2.00	20 40.00
2	5 10.00	5 10.00	4 8.00	4 8.00	6 12.00	24 48.00
3	1 2.00	0 0.00	0 0.00	3 6.00	2 4.00	6 12.00
Total	10 20.00	7 14.00	8 16.00	16 32.00	9 18.00	50 100.00

Frequency Missing = 1

TABLE 76 REPUBLIC

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	0 0.00	0 0.00	0 0.00	0 0.00	1 16.67
2	0 0.00	2 33.33	0 0.00	0 0.00	2 33.33	4 66.67
3	0 0.00	1 16.67	0 0.00	0 0.00	0 0.00	1 16.67
Total	1 16.67	3 50.00	0 0.00	0 0.00	2 33.33	6 100.00

TABLE 77 RICE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	2 66.67	0 0.00	0 0.00	0 0.00	2 66.67
2	1 33.33	0 0.00	0 0.00	0 0.00	0 0.00	1 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 33.33	2 66.67	0 0.00	0 0.00	0 0.00	3 100.00

Frequency Missing = 1

TABLE 78 RILEY

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 12.12	3 9.09	3 9.09	2 6.06	0 0.00	12 36.36
2	2 6.06	2 6.06	2 6.06	10 30.30	4 12.12	20 60.61
3	0 0.00	0 0.00	0 0.00	0 0.00	1 3.03	1 3.03
Total	6 18.18	5 15.15	5 15.15	12 36.36	5 15.15	33 100.00

Frequency Missing = 5

TABLE 79 ROOKS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	3 50.00	0 0.00	0 0.00	0 0.00	3 50.00
2	0 0.00	0 0.00	1 16.67	0 0.00	0 0.00	1 16.67
3	0 0.00	1 16.67	0 0.00	0 0.00	1 16.67	2 33.33
Total	0 0.00	4 66.67	1 16.67	0 0.00	1 16.67	6 100.00

Frequency Missing = 1

TABLE 80 RUSH

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	1 50.00	0 0.00	2 100.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 50.00	0 0.00	0 0.00	1 50.00	0 0.00	2 100.00

TABLE 81 RUSSELL

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	0 0.00	1 16.67	0 0.00	0 0.00	2 33.33
2	0 0.00	0 0.00	0 0.00	2 33.33	1 16.67	3 50.00
3	1 16.67	0 0.00	0 0.00	0 0.00	0 0.00	1 16.67
Total	2 33.33	0 0.00	1 16.67	2 33.33	1 16.67	6 100.00

TABLE 82 SALINE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	3 6.82	5 11.36	4 9.09	6 13.64	3 6.82	21 47.73
2	5 11.36	3 6.82	3 6.82	2 4.55	3 6.82	16 36.36
3	2 4.55	0 0.00	2 4.55	2 4.55	1 2.27	7 15.91
Total	10 22.73	8 18.18	9 20.45	10 22.73	7 15.91	44 100.00

Frequency Missing = 4

TABLE 83 SCOTT

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
3	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00
Total	0 0.00	1 100.00	0 0.00	0 0.00	0 0.00	1 100.00

TABLE 84 SEDGWICK

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	33 12.22	32 11.85	33 12.22	22 8.15	13 4.81	133 49.26
2	14 5.19	20 7.41	31 11.48	17 6.30	32 11.85	114 42.22
3	6 2.22	1 0.37	6 2.22	3 1.11	7 2.59	23 8.52
Total	53 19.63	53 19.63	70 25.93	42 15.56	52 19.26	270 100.00

Frequency Missing = 5

TABLE 85 SEWARD

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	0 0.00	1 16.67	0 0.00	0 0.00	2 33.33
2	0 0.00	0 0.00	0 0.00	1 16.67	2 33.33	3 50.00
3	0 0.00	1 16.67	0 0.00	0 0.00	0 0.00	1 16.67
Total	1 16.67	1 16.67	1 16.67	1 16.67	2 33.33	6 100.00

TABLE 86 Q9A=SHAWNEE

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	18	11	5	10	3	47
	14.75	9.02	4.10	8.20	2.46	38.52
2	8	13	6	20	15	62
	6.56	10.66	4.92	16.39	12.30	50.82
3	2	2	1	3	5	13
	1.64	1.64	0.82	2.46	4.10	10.66
Total	28	26	12	33	23	122
	22.95	21.31	9.84	27.05	18.85	100.00

Frequency Missing = 6

TABLE 87 SHERIDEN

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00
2	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	0	1	0	0	0	1
	0.00	100.00	0.00	0.00	0.00	100.00

TABLE 88 SHERMAN

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
2	1	0	2	0	0	3
	33.33	0.00	66.67	0.00	0.00	100.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	0	2	0	0	3
	33.33	0.00	66.67	0.00	0.00	100.00

TABLE 89 SMITH

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 16.67	1 16.67	2 33.33	0 0.00	0 0.00	4 66.67
2	0 0.00	0 0.00	2 33.33	0 0.00	0 0.00	2 33.33
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 16.67	1 16.67	4 66.67	0 0.00	0 0.00	6 100.00

TABLE 90 STAFFORD

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
2	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	2 100.00	0 0.00	0 0.00	0 0.00	0 0.00	2 100.00

TABLE 91 STEVENS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	1 20.00	1 20.00
2	0 0.00	0 0.00	0 0.00	2 40.00	1 20.00	3 60.00
3	1 20.00	0 0.00	0 0.00	0 0.00	0 0.00	1 20.00
Total	1 20.00	0 0.00	0 0.00	2 40.00	2 40.00	5 100.00

TABLE 92 SUMNER

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	2 9.09	1 4.55	3 13.64	0 0.00	1 4.55	7 31.82
2	3 13.64	0 0.00	2 9.09	6 27.27	2 9.09	13 59.09
3	0 0.00	1 4.55	0 0.00	1 4.55	0 0.00	2 9.09
Total	5 22.73	2 9.09	5 22.73	7 31.82	3 13.64	22 100.00

Frequency Missing = 2

TABLE 93 THOMAS

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	2 28.57	0 0.00	0 0.00	2 28.57
2	0 0.00	0 0.00	2 28.57	0 0.00	2 28.57	4 57.14
3	0 0.00	0 0.00	0 0.00	1 14.29	0 0.00	1 14.29
Total	0 0.00	0 0.00	4 57.14	1 14.29	2 28.57	7 100.00

TABLE 94 TREGO

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	2 28.57	2 28.57	0 0.00	0 0.00	4 57.14
2	1 14.29	0 0.00	1 14.29	1 14.29	0 0.00	3 42.86
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	1 14.29	2 28.57	3 42.86	1 14.29	0 0.00	7 100.00

TABLE 95 WABAUNSEE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	2	0	0	0	3
	16.67	33.33	0.00	0.00	0.00	50.00
2	0	0	3	0	0	3
	0.00	0.00	50.00	0.00	0.00	50.00
3	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
Total	1	2	3	0	0	6
	16.67	33.33	50.00	0.00	0.00	100.00

Frequency Missing = 1

TABLE 96 WALLACE

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00
2	1	0	1	0	0	2
	33.33	0.00	33.33	0.00	0.00	66.67
3	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	33.33	33.33
Total	1	0	1	0	1	3
	33.33	0.00	33.33	0.00	33.33	100.00

TABLE 97 WASHINGTON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	1	0	0	0	0	1
	25.00	0.00	0.00	0.00	0.00	25.00
2	0	0	0	2	0	2
	0.00	0.00	0.00	50.00	0.00	50.00
3	0	0	1	0	0	1
	0.00	0.00	25.00	0.00	0.00	25.00
Total	1	0	1	2	0	4
	25.00	0.00	25.00	50.00	0.00	100.00

TABLE 98 WICHITA

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	0 0.00	1 50.00	0 0.00	0 0.00	1 50.00
3	1 50.00	0 0.00	0 0.00	0 0.00	0 0.00	1 50.00
Total	1 50.00	0 0.00	1 50.00	0 0.00	0 0.00	2 100.00

TABLE 99 WILSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	4 40.00	1 10.00	0 0.00	1 10.00	1 10.00	7 70.00
2	1 10.00	0 0.00	1 10.00	0 0.00	1 10.00	3 30.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	5 50.00	1 10.00	1 10.00	1 10.00	2 20.00	10 100.00

Frequency Missing = 1

TABLE 100 WOODSON

Q5D(choice 2)	VERSION					
	$5	$10	$20	$50	$100	Total
1	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
2	0 0.00	0 0.00	2 50.00	1 25.00	1 25.00	4 100.00
3	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00	0 0.00
Total	0 0.00	0 0.00	2 50.00	1 25.00	1 25.00	4 100.00

Frequency Missing = 1

TABLE 101 WYANDOTTE

Q5D(choice 2) VERSION

	$5	$10	$20	$50	$100	Total
1	9	13	11	17	10	60
	8.57	12.38	10.48	16.19	9.52	57.14
2	3	7	7	11	12	40
	2.86	6.67	6.67	10.48	11.43	38.10
3	3	0	0	1	1	5
	2.86	0.00	0.00	0.95	0.95	4.76
Total	15	20	18	29	23	105
	14.29	19.05	17.14	27.62	21.90	100.00

Frequency Missing = 6

APPENDIX H
THE SURVEY INSTRUMENT FOR THE ON-SITE SURVEY

This appendix contains the survey instrument that was the used for the on-site survey. Unlike the telephone survey, this survey is not brokendown into different sections. This was done because we wanted to the survey to be as short possible including using as few pages as possible. However, the survey does have a basic structure.

1. Introduction and identification of the respondent
2. Why is the respondent coming to the park and how did they learn about it
3. Description of the group the respondent is with
4. How much did the respondent spend at the state park and in the area around the park
5. The frequences of visits to the state parks and activities taken part in when visiting
6. Rating the facilities and suggestions for changes

University of Kansas
Institute for Public Policy & Business Research

On-Site Survey of State Parks

Park: Clinton Lake

Date:_____ Time:_____ Surveyor Initials:_____

Hello. Are you a visitor *(continue)* **or a worker** *(stop).*

My name is XXX and I am working with the University of Kansas. Today we are doing a survey of visitors to the Park. Do you have a few minutes to answer some questions?
(If yes, continue. If no, thank them, record refusal below and move to next group)

Refusals _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

I'd like you to know that participation in this survey is voluntary, and all responses will be kept confidential. This card *(give card)* **has a phone number that you can call if you have any questions about the survey. I'll start the survey now.**

0. Don't read. Just check off. Is respondent: _____ Male _____ Female

1. How would you best describe yourself. Are you:
___ **a. a day visitor**
___ **b. an overnight visitor**
___ **c.** some other (don't prompt) _____

2. a. In what state do you live? _____
b. and in what county? *(circle or fill in)* Douglas, or _____
c. About how far (in miles) did you travel to get here? _____
(If answer is given in hours, multiply by 60 to get miles.)
(If person lives in a county whose name is pre-printed in #3, they are considered a local resident.)
(If a local resident, skip directly to #5.)

3. What is the main reason for your visit to this area?
_____ **the Park?** *(Cue this one.)*
If not, then what? *(Check off best option. Do not cue.)*
____ to visit friends or relatives
____ to go shopping
____ to conduct business
____ passing through on the way to another destination
____ to attend other tourism attractions in this county
____ other: describe _____

4. How many days are you staying in the area? _____ *(enter number of days)*

5. How did you learn about the park?
(don't cue)
___ signs
___ friends
___ maps
___ news media
___ other: describe _____
___ advertisements
___ Wildlife & Parks Magazine
___ camping guide
___ commercial campground directory

6a. **How many are in your party?** _____ *(# of people in party)*
(Note: if person is with a tour group, have them confine the answer to immediate friends/family.)

6b. **How many of the group, including yourself, are females and how many are males?**
_____females _____males

7. **What is your general age category? Are you...**

		___	**26-40**
___	**less than 18**	___	**41-60**
___	**18-25**	___	**over 60**

8. **We are trying to get an idea of how visitors to the park affect the county and state economies. We would like to get an estimate of how much you think your group will spend during your stay in the area and as a result of your visit to the park.**

I am going to list several possible categories of expenditures. Please estimate how much your group spent in each:

$_____ **8a.** **How much did you pay in entry fees/licenses?**
$_____ **8b.** **On food, souvenirs and other concessions here on the park grounds?**
(If local residents, skip to 8h.)
$_____ **8c. Can you estimate how much you spent on other attractions in the County?**
none / camped / $____ ↘ **8d. How much on motels or other lodging?** *(circle or enter $)*
Yes / No ↘ **8e. Is your lodging located in the local area?** *(circle)*
8f. Was it in Kansas? Yes / No _____

8g. How much do you estimate your group will spend on:
_____ **8g[1]. gas and other vehicle expenses here in the area?**
_____ **8g[2]. restaurants and food in the local area, outside of the park?**
_____ **8g[3]. retail shopping in the local area?**

No / Yes **8h. Have we missed any other type of expenditures?** *(circle)*
↘ *(if yes)* **Could you describe it?**
$_____ type of expense _____

9. **Suppose for a moment that you had NOT made a trip to the park. Which of the following best describes what you would have done with your money? Would you have:**
___**a) spent it elsewhere: locally**
___**b) spent it elsewhere: within Kansas**
___**c) spent it elsewhere: outside of Kansas**
___**d) something else?** _____

10. **Do you own:** *(check if yes)* _____ **a Boat** _____ **an RV**

11a. **How frequently do you visit this park?**
____ often (> 2/yr) ____ occasionally (1-2/yr) ___ seldom (<1/yr)
(if occasionally or seldom, ask 11b)

11b. **What is the main reason why you don't visit more often?** *(don't cue)*
___ not interested
___ too expensive
___ don't have time
___ other (explain)
___ too far to travel
___ conflicts with other events
___ prefer another park/location

_____

Park Activities (don't prompt)	**12a. What activities did you do while here at the park?** (check all that apply)	**12b. How many times do you do these things in a year?** #	**12c. Which of these were your primary reasons for this trip to the park?** (check one, or maybe two)
Camping			
Hunting			
Fishing			
Boating			
Biking			
Hiking			
Horseback Riding			
Wildlife Viewing / Photography			
Sightseeing / Relaxation			
Picnic / Socialize			
Special Event:			
Other:			

13. How would you rate the facilities in the park on a Good / Adequate / Bad scale?

(They may also add comments)

beaches	good	adequate	bad	no opinion _____
boating	good	adequate	bad	no opinion _____
marina, docks, ramps	good	adequate	bad	no opinion _____
trails	good	adequate	bad	no opinion _____
camp pads	good	adequate	bad	no opinion _____
landscaping	good	adequate	bad	no opinion _____
utility service	good	adequate	bad	no opinion _____
picnic facilities	good	adequate	bad	no opinion _____
cabins	good	adequate	bad	no opinion _____
concession services	good	adequate	bad	no opinion _____
parking	good	adequate	bad	no opinion _____
roads & vehicle access	good	adequate	bad	no opinion _____
restrooms & showers	good	adequate	bad	no opinion _____
other? _____	good	adequate	bad	no opinion _____

14. Are there other services or opportunities that you think <u>should</u> be available at the park that you would be likely to use? Such as: *(Cue these.)*

a. _____ boat rentals
b. _____ modern lodging
c. _____ other concession services
d. _____ convention facilities
e. _____ other _____

THANK YOU VERY MUCH. HAVE A SAFE TRIP HOME.

APPENDIX I
ANALYSIS OF THE ON-SITE SURVEY

Survey Biases

The on-site survey was developed by the Institute for Public Policy and Business Research (IPPBR) staff with the help of the staff of the Department of Wildlife and Parks (DWP). Five state parks were chosen by DWP staff for the survey: Clinton Lake, El Dorado, Elk City, Glen Elder, and Scott. The surveying was begun on August 26, 1996, the Monday before Labor Day, and run through the middle of December.

A total of 1352 valid responses were obtained with the breakdown by state park as follows:

Clinton Lake 424
El Dorado 349
Elk City 181
Glen Elder 172
Scott 226

Table I-1 on the next page has the number of survey completed for each month by state park and the estimated number of daily.visits per month, provided by the DWP, for each of the five state parks involved in the survey. Table I-1 points to one of the limitations of the on-site survey — the sample of the on-site survey is only partially representative of the visitors to each of these state parks. For example, visitors in May, June and July of 1996 represented about half of all visitors. The on-site survey was not conducted during that period. However, it was conducted in late August and early September and did capture the Labor Day crowd. Thus, the on-site survey is somewhat representative of the May, June and July period, including capturing some of the effect of a holiday. Unfortunately, Labor Day has not historically been the draw to state parks that Memorial Day and especially Independence Day have been.

An additional problem with not capturing more of the summer attendance was the lack of out-of state travelers captured in the on-site survey. The great majority of state park visitors are instate visitors rather than visitors from other states. Table I-2 has the state of origin for each of the 1352 visitors in our sample. From our sample, the 12.8% of the visitors were from out-of-state and two from outside the United States — one from Canada and Switzerland each. Exactly what is the actual percentage of out-of-state visitors is difficult to estimate from our survey. If the sample is split into two samples — the first 700 responses were taken from August 26 to September 14, 1996 and the second 652 responses were taken from September 28 to December 9, 1996, then the earlier sub-sample has about 14.3% from out-of-state and the later sample has 11.2% from out-of-state. Since we did not sample during the May through July period when more than 50% of the visitations to the state parks took place in 1996, and this is the period when more families are traveling on vacation, one would expect that probably 15% to 20% of the total visitations during the year are from out-of-state, or given the DWP's estimate of state park visitations, about 1,000,000 state park visitors were from out-of-state.

TABLE I-1
NUMBER OF ON-SITE SURVEYS PER MONTH AND MONTHLY VISITATION ESTIMATES

	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
CLINTON LAKE													
Survey								49	7	173	157	38	424
%								11.6%	1.7%	40.8%	37.0%	9.0%	
Estimate	10,973	14,897	20,126	34,058	84,468	56,126	70,488	46,212	59,986	27,036	13,826	10,896	449,092
%	2.4%	3.3%	4.5%	7.6%	18.8%	12.5%	15.7%	10.3%	13.4%	6.0%	3.1%	2.4%	
EL DORADO													
Survey								105	43	55	144	2	349
%								30.1%	12.3%	15.8%	41.3%	0.6%	
Estimate	27,968	34,477	38,259	71,469	136,819	119,862	194,331	77,491	65,799	37,248	22,474	19,106	845,303
%	3.3%	4.1%	4.5%	8.5%	16.2%	14.2%	23.0%	9.2%	7.8%	4.4%	2.7%	2.3%	
ELK CITY													
Survey								75	45	61			181
%								41.4%	24.9%	33.7%			
Estimate	2,010	3,812	3,555	8,984	8,052	8,348	9,678	8,325	6,463	4,426	2,599	2,279	68,531
%	2.9%	5.6%	5.2%	13.1%	11.7%	12.2%	14.1%	12.1%	9.4%	6.5%	3.8%	3.3%	
GLEN ELDER													
Survey								87	75	7	3		172
%								50.6%	43.6%	4.1%	1.7%		
Estimate	11,463	13,686	13,693	22,955	64,414	63,585	32,484	30,918	19,548	8,578	7,439	7,725	296,488
%	3.9%	4.6%	4.6%	7.7%	21.7%	21.4%	11.0%	10.4%	6.6%	2.9%	2.5%	2.6%	
SCOTT													
Survey								52	165	1	8		226
%								23.0%	73.0%	0.4%	3.5%		
Estimate	15,817	17,780	32,317	43,297	33,947	43,621	34,423	26,774	20,425	33,720	9,910	12,083	324,114
%	4.9%	5.5%	10.0%	13.4%	10.5%	13.5%	10.6%	8.3%	6.3%	10.4%	3.1%	3.7%	

TABLE I-2
DISTRIBUTION OF VISITORS BY LOCATION OF HOME

Residence of Visitors	Number of Visitors	Percent of All Visitors	Residence of Visitors	Number of Visitors	Percent of All Visitors
Arizona	2	0.1	New Mexico	1	0.1
Arkansas	7	0.5	Ohio	1	0.1
California	7	0.5	Oklahoma	23	1.7
Colorado	19	1.4	Oregon	2	0.1
Florida	3	0.2	Rhode Island	1	0.1
Illinois	1	0.1	South Carolina	1	0.1
Indiana	2	0.1	South Dakota	1	0.1
Iowa	7	0.5	Texas	7	0.5
Kansas	1179	87.2	Utah	1	0.1
Kentucky	1	0.1	Virginia	2	0.1
Louisiana	1	0.1	Wisconsin	1	0.1
Maine	1	0.1	Wyoming	3	0.2
Maryland	1	0.1			
Minnesota	3	0.2			
Missouri	41	3.0	***Canada***	***1***	***0.1***
Nebraska	31	2.3	***Switzerland***	***1***	***0.1***

Besides Kansas, the states with the greatest number of visitors the four states which border Kansas: Colorado (19), Missouri (41), Nebraska (31), and Oklahoma (23). These states combined for 114 of the 173 out-of-state visitors or 65.9% of the out-of-state visitors. No other state had more than seven visitors to the Kansas state parks.

Another problem with the representative nature of the survey is the ratio of men to women respondents. In the household telephone survey, women outnumbered men about three to two. The split for the on-site survey sample is greater than two to one men to women: 409 women (30.3%) and 937 men (69.6%) answered the on-site survey. The gender of six respondents was not determined.[1]

As our marketing analysis proceeds, we will point out a few other groups that might be over or under represented in the on-site survey sample. These sampling problems do not mean that the on-site survey is worthless, just that the results must be carefully used. In particular, many of the responses to the open ended questions are quite valuable and certainly the results from the other parts of the survey are suggestive of marketing approaches that might be successful for the DWP.

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[1]We did ask respondents how many were in their group and how many men and women were in their group: 59% men and 41% women. But this is suspect because even though there were four more missing cases when the respondents were asked about the gender split in their group than when they were just asked the total number in their group, the number of men and women added together were 55 more than the total number the respondents said was in their groups.

Characteristics of State Park Visitors

Out-of-State and Instate Visitors

The out-of-state visitors in our sample were in smaller groups, usually two or three members in a group, and were older than the instate visitors. The average number of visitors per instate group was 3.0 while the average number of visitors per out-of-state group was 2.6. Table I-3 below has the size of the group to which each person belonged who was interviewed for the on-site survey. The largest group of out-of-state visitors was one group of eleven women. There was one group of nine visitors and two groups of eight visitors.

Table I-4 below has the age distribution of both instate and out-of-state visitors from our on-site survey. The instate visitors are clearly younger, 53.0% are 40 years old or less, than the out-of-state visitors, 65.9% are over 40 years of age.

Finally, we note that for our on-site survey, the state park with the highest percentage of out-of-state visitors was Glen Elder (26.2%) while El Dorado had the highest percentage of instate visitors (91.7%). Table I-5 has the split between instate and out-of-state visitors for each park.

Instate Visitors and non-Visitors

The number and variety of instate visitors is remarkable. Table I-6 indicates the number of state park visitors from different counties in Kansas from our sample. The 1179 Kansas residents we surveyed at the five state parks where the on-site survey took place came from 74 different counties. The number of visitors from each county is probably not representative of the state park use patterns in each county because, for example, Douglas County is probably over represented because of Clinton Lake state park and Butler County is over represented because of El Dorado state park.

From the household survey we can compare the demographics of those who have visited a state park in 1996 and those who did not. People between the ages of 26 and 60 are more likely to visit a state park than those older or younger. We found that only 30.8% of the age group 18 to 25 and only 27.6% of the age group 60 and older had visited a state park a state park in 1996. On the other hand, 37.1% of those 26 to 40 and 38.9% of those 41 to 60 had visited a state park in 1996.

Men are more likely to visit a state park than women. From our survey, 40.2% of all men and 30.5% of all women said they had visited a state park in 1996. This result adds some credence to our finding from the on-site survey that about 59% of all visitors were men. This result also helps explain why men value the state park system more highly than women.

Of the five income classes in the survey, the lowest income class visited state parks at a significantly lower rate than the other income classes which all had about the same visitation rate. Income class was defined by "gross annual household income" with five income classes: (1) under $25,000, (2) $25,000 to $50,000, (3) $50,000 to $75,000,(4) $75,000 to $100,000, and (5) over $100,000. In 1996 only 28.0% of income class (1) visited a state park. For the other four income classes the percentage visiting a state park varied from 37.4% to 39.7%. Statistically, the differences between the percentage visiting state parks is not significant.

TABLE I-3
SIZE OF VISITOR GROUPS

Number in Party	Frequency	Percent of Total Number of Parties	Total Number of Visitors per Party Group	Percent of Total Number of Visitors
0 visitors	14	1.0	0	0.0
1 visitor	263	19.5	263	6.7
2 visitors	666	49.4	1332	33.9
3 visitors	153	11.4	459	11.7
4 visitors	117	8.7	468	11.9
5 visitors	33	2.5	165	4.2
6 visitors	36	2.7	216	5.5
7 visitors	12	0.9	84	2.1
8 visitors	9	0.7	72	1.8
9 visitors	4	0.3	36	0.9
10 visitors	13	1.0	130	3.3
11 visitors	2	0.1	22	0.6
12 visitors	2	0.1	24	0.6
13 visitors	1	0.1	13	0.3
14 visitors	1	0.1	14	0.4
15 visitors	3	0.2	45	1.1
16 visitors	3	0.2	48	1.2
17 visitors	1	0.1	17	0.4
20 visitors	2	0.1	40	1.0
22 visitors	2	0.1	44	1.1
25 visitors	1	0.1	25	0.6
30 visitors	1	0.1	30	0.8
35 visitors	1	0.1	35	0.9
50 visitors	6	0.4	300	7.6
53 visitors	1	0.1	53	1.3
Total	1347	100.0	3935	100.0
Five cases missing				

TABLE I-4
AGE DISTRIBUTION OF STATE PARK VISITORS
INSTATE AND OUT-OF-STATE RESIDENCES

	under 25	26 to 40	41 to 60	over 60
Instate Visitors				
Number	235	386	314	237
Percentage	20.1%	32.9%	26.8%	20.2%
Out-of-state Visitors				
Number	16	43	56	58
Percentage	9.2%	24.9%	32.4%	33.5%

TABLE I-5
DISTRIBUTION OF INSTATE AND OUT-STATE-VISITORS
AT THE STATE PARKS SURVEYED

	Clinton	El Dorado	Elk City	Glen Elder	Scott
Instate Visitors					
Number	380	320	159	127	193
Percentage	89.6%	91.7%	87.8%	73.8%	85.4%
Out-of-state Visitors					
Number	44	29	22	45	33
Percentage	10.4%	8.3%	12.2%	26.2%	14.6%

TABLE I-6
COUNTY OF RESIDENCE FOR INSTATE VISITORS

County of Residence	Frequency	Percent of Total
Allen	1	0.1
Barber	1	0.1
Barton	4	0.3
Butler	190	16.1
Chase	7	0.6
Chautauqua	2	0.2
Cherokee	1	0.1
Cloud	12	1
Coffey	1	0.1
Cowley	5	0.4
Decatur	2	0.2
Douglas	196	16.6
Elk	3	0.3
Ellis	3	0.3
Finney	63	5.3
Ford	5	0.4
Franklin	5	0.4
Gove	1	0.1
Graham	1	0.1
Grant	10	0.8
Gray	1	0.1
Greeley	2	0.2
Greenwood	10	0.8
Hamilton	1	0.1
Harvey	2	0.2
Haskell	4	0.3
Hodgman	1	0.1
Jefferson	16	1.4
Jewell	5	0.4
Johnson	109	9.2
Kearney	7	0.6
Kingman	2	0.2
Labette	4	0.3
Lane	7	0.6
Leavenworth	17	1.4
Lincoln	1	0.1
Logan	9	0.8
Lyon	4	0.3
Marion	1	0.1
Mcpherson	3	0.3
Meade	1	0.1
Miami	5	0.4
Mitchell	28	2.4
Montgomery	81	6.9
Morton	2	0.2
Neosho	12	1.0
Ness	1	0.1
Norton	2	0.2
Osage	4	0.3
Osborne	7	0.6
Ottawa	2	0.2
Pawnee	2	0.2
Pottawatomie	1	0.1
Pratt	1	0.1
Reno	12	1.0
Republic	2	0.2
Rice	2	0.2
Riley	4	0.3
Rooks	2	0.2
Russell	2	0.2
Saline	9	0.8
Scott	58	4.9
Sedgwick	132	11.2
Seward	5	0.4
Shawnee	13	1.1
Sheridan	1	0.1
Sherman	2	0.2
Smith	4	0.3
Sumner	12	1.0
Thomas	2	0.2
Wabaunsee	2	0.2
Wallace	1	0.1
Wilson	17	1.4
Wyandotte	29	2.5

Reason for the Visit to the State Park

One of the on-site survey questions was whether visiting the state park was the main purpose for the visitors trip. For Kansas residents, the majority of the time, the main purpose of the trip was to visit the state; however, with the out-of-state visitors, visiting the state park was usually not the main purpose for the trip. About 67.5% of the total sample said that visiting the state park was the main purpose of the trip.[2] The Kansas residents said that visiting the state park was the main purpose of their trip 73.8%. However, only 34.1% of the out-of-state visitors said that the state park was the main reason for their visit. This percentage drops to 32.0% for the earlier, late August-early September, sub-sample of the on-site survey.

Respondents were asked what activities they participated in while they were at the state park and which of these activities were the primary reasons for this trip to the state park. Respondents were allowed to give no more than two primary reasons for their trip to the state park. Table I-7 has a listing of which activities were the main reason for going to the state park for each of the five parks that participated in the on-site survey. Camping (34.7%), fishing (26.9%), sightseeing and relaxation (13.8%), and picnicking and socializing (12.8%) were the four most popular primary activities. The only activity that might be significantly under represented in Table I-7 is boating. If more summer responses were available for Clinton Lake, then this activity would probably have generated a significantly higher number of visitors that pick it as their primary reason for their trip to the park.

For out-of-state visitors, the most important activity by far was camping: 58.4% of all out-of-state visitors listed camping as their primary reason to visit the state park. This activity, along with picnicking and socializing, were spread relatively equally among the five state parks. The next most popular choice was fishing (19.1%). The most popular park to fish in for out-of-state visitors was Glen Elder. Of the 20 visitors from Nebraska to Glen Elder, 13 came for fishing. The other activity which was more popular at particular state parks for out-of-state visitors was sightseeing and photography: 12 of the 16 visitors that listed this as their primary reason for visiting a state park did this activity in either Glen Elder (5) or Scott (7).

In the household survey, all respondents were asked, whether they had visited a state park the past year or not, what primary activities they did when they visited a state park, if they had visited a state park, and if they had not visited a state park in the past year, what primary activities they might do if they visited a state park. In some respects the answers were similar to the on-site survey. For example, camping is a popular activity, as is fishing, sightseeing and relaxation, and picnicking and relaxation, and hunting has a smaller group of participants. The aggregate answers to this question are listed below in Table I-8.

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[2]For this question, there were 137 survey respondents that did not answer this question. All of the non-responses came from Kansas residents.

TABLE I-7
PRIMARY REASON FOR TRIP TO THE STATE PARK

Primary Reason for Visit to State Park	Clinton Lake	El Dorado	Elk City	Glen Elder	Scott	Total for Parks
Camping						
Number	132	108	78	52	98	468
Percent of Park Visitors	31.4	31.1	43.1	30.2	43.4	34.7
Hunting						
Number	2	43	3	0	2	50
Percent of Park Visitors	0.5	12.4	1.7	0.0	0.9	3.7
Fishing						
Number	100	87	27	95	53	362
Percent of Park Visitors	23.9	25.1	14.9	55.6	23.5	26.9
Boating						
Number	45	18	19	13	2	97
Percent of Park Visitors	10.7	5.2	10.6	7.6	0.9	7.2
Biking						
Number	30	3	5	0	0	38
Percent of Park Visitors	7.1	0.9	2.8	0.0	0.0	2.8
Hiking						
Number	16	2	15	0	4	37
Percent of Park Visitors	3.8	0.6	8.3	0.0	1.8	2.7
Horseback Riding						
Number	3	2	0	0	0	5
Percent of Park Visitors	0.7	0.6	0.0	0.0	0.0	0.4
Wildlife Viewing and Photography						
Number	24	11	3	2	5	45
Percent of Park Visitors	5.7	3.2	1.7	1.2	2.2	3.3
Sightseeing and Relaxation						
Number	45	38	24	28	51	186
Percent of Park Visitors	10.7	10.9	13.3	16.3	22.6	13.8
Picnicking and Socializing						
Number	64	37	27	18	26	172
Percent of Park Visitors	15.2	10.6	14.9	10.5	11.5	12.8
Special Event						
Number	0	5	27	0	2	34
Percent of Park Visitors	0.0	1.4	15.1	0.0	0.9	2.5

TABLE I-8
PRIMARY ACTIVITIES AT A STATE PARK
FROM THE HOUSEHOLD SURVEY

The Primary Activities You (Might) Do When You Visit a State Park	Number of People Who Would Do the Activity	Percent of All People Asked
Camping	823	41.1
Hunting	726	36.3
Fishing	252	12.6
Biking	394	19.7
Hiking	794	39.8
Horseback Riding	1022	51.1
Wildlife Viewing and Photography	1425	71.2
Sightseeing and Relaxation	1379	68.9
Picnicking and Socializing	382	19.1

Reasons for not Visiting a State Park

In the household survey, after all respondents were asked whether they had visited a state park in the past year, those who had not visited a state park or did not know if they had visited a state park were asked the additional question did they know Kansas had a state park system. Only 12 respondents said they did not know Kansas had a state park. These 12 respondents along with the 689 respondents who had visited a state park in the past year skip past the question "What are the main reasons you did not visit a state park in 1996? This question was asked of the 1299 respondents who knew Kansas had a state park system, but did not visit a state park in 1996. No answers to this question were cued to the respondents, but it was assumed that certain answers would predominate and as such, these answers were already listed for the surveyors to check. In addition, if the respondents gave an answer that had not been anticipated, then they entered this answer as an open ended response.

As it turned out, none of the possible answers listed was as popular as "lack of time" which was the response of 354 people. The next most popular answer was "not interested" — 266 people gave this answer. Only one other answer gathered over a hundred responses, "too far away" which had 108. Almost 50 people preferred to go out-of-state to parks. Other interesting answers were "lacked information about state parks" (8 people), "did not think of state parks"(18), and "unaware of state parks" (15). These responses suggest that more than 12 people were unaware of the state park system. One other interesting aspect about the answers to why they did not visit a state park last

year was that very few people, less than 10, had anything critical to say about the state parks themselves. Which brings us to the last section of this part of the paper, what suggestions do people have to improve the state parks.

APPENDIX J
SUGGESTED IMPROVEMENTS OF THE STATE PARK SYSTEM

On-Site *Survey*

Two questions from the on-site survey are particular relevant in evaluating the performance of the state parks and in providing suggestions for future directions for the state park system Question 13 asked respondents to rate the existing facilities at the state park. Question 14 asked the respondents for any suggestions as to additional services or opportunities that should be available at the state parks. Question 14 has four suggested changes in the state parks and then the opportunity for the respondents to make their own suggestions.

Rating of the existing facilities

The respondents were asked to rate each of 13 facilities in the state park where they were staying. The rating system was good, adequate, bad, and no opinion. Table 18 below has the rating by the 1352 persons in the survey. The most compelling numbers are the small percentage of persons that rate any facility bad. The other interesting number is the large number (95.9%) who have no opinion about the cabins at the state parks. This result could mean a number of things; for example it could mean that when people go to the state parks they do not care about the cabins, or that so few people have used the cabins that most people know nothing about them. Certainly the 54 people that did have an opinion about the cabins do not represent enough people to provide much of an idea about how people who have used the cabins respond to them.

Suggested Improvements in the State Parks

Besides asking the respondents to the on-site survey to rate the existing facilities, they were also asked if they thought there were additional services or facilities that should be in the park. They were first asked about four new or improved services or facilities: boat rental, modern lodging, other concession services, and convention facilities. Then they were asked the open-ended question is there any other service or facility that should be in the park. The answers to the four specific improvements are provided in Table H-2 below for all the 1352 respondents to the survey. None of the suggested improvements was popular with the visitors.

Only 231 of 1352 respondents offered additional suggestions for improvements in the state parks, and only a few of these suggestions were made by more than a handfull of people. The most popular suggestions were for more hookups and more trees — each of these suggestions was offered by almost 15 people. The other suggestions by at least 10 different respondents was more fish in the lakes, a fish cleaning station, and ice machines. Because the respondents had just been asked about modern lodging and convention facilities, no one suggested either of these possibilities; however, a couple of people suggested cabins and one person wanted a Wal-Mart in the state park.

TABLE J-1
RATING OF STATE PARK FACILITIES

QUESTION: *How would you rate the facilities in the park on a Good / Adequate / Bad / scale?*				
Facility	**Good**	**Adequate**	**Bad**	**No Opinion**
Beaches	27.2%	9.9%	3.8%	59.0%
Boating	38.0%	7.6%	0.9%	53.5%
Marina, Docks, Ramps	41.1%	8.2%	0.8%	44.9%
Trails	27.1%	4.3%	1.2%	67.4%
Camp Pads	47.6%	11.3%	1.0%	40.2%
Landscaping	61.2%	12.1%	1.5%	25.1%
Utility Service	37.0%	7.8%	0.7%	54.4%
Picnic Facilities	45.4%	8.6%	0.4%	45.6%
Cabins	3.1%	0.6%	0.4%	95.9%
Concession Services	20.4%	6.5%	1.6%	71.4%
Parking	78.8%	12.4%	0.8%	8.0%
Roads &Vehicle Access	81.6%	11.3%	0.7%	6.4%
Restrooms & Showers	65.8%	11.7%	3.0%	19.5%

TABLE J -2
ADDITIONAL SERVICES OR FACILITIES IN THE STATE PARK

QUESTION: *Are there other services or opportunities that you think <u>should</u> be available at the park that you would be likely to use?*		
New Facilities or Services	**Yes**	**No**
Boat Rentals	10.8%	89.2%
Modern Lodging	6.1%	93.9%
Other Concession Services	10.1%	89.9%
Convention Facilities	1.4%	98.6%