



TRC9701

# **Long-Term Economic Impact of Highway Improvements on Small Towns**

Joe Horsley

Final Report

2004

**“Long Term Economic Impact of  
Highway Improvements on Small Towns”**

**FINAL REPORT**

**Prepared for the  
Arkansas State Highway &  
Transportation Department**

**TRC-9701**

**Prepared by**

**Joe Horsley, Ph.D.  
Director  
Transportation Management Program  
College of Business  
Arkansas State University  
Jonesboro, Arkansas**

**May 2004**



## TABLE OF CONTENTS

Introduction .....	1
Problem Statement .....	1
Literature Review .....	2
Methodology .....	8
Study Findings	
Trumann .....	10
Hoxie .....	20
Huntsville .....	27
Conclusions	
Original Study .....	36
Follow-Up Survey .....	40
Follow-Up Comments .....	46
Recommendations .....	49
Appendix A Survey .....	52
Appendix B Survey Results for Hoxie & Huntsville by Route Segments .....	56
Appendix C Follow-Up Survey Results .....	66
Appendix D Bypass Impact Criteria for Small Towns to Consider .....	67

## TABLES

TABLE A	Original Study Communities	9
TABLE B	Trumann Bypass Survey Participants	11
TABLE C	Trumann Overall Results	12
TABLE D	Trumann Group Summary Results	15
TABLE E	Things Liked Most/Least About Trumann Bypass	18
TABLE F	Hoxie Bypass Survey Participants/Segments	22
TABLE G	Hoxie Overall Results	23
TABLE H	Things Liked Most/Least About Hoxie Bypass	25
TABLE I	Huntsville Bypass Survey Participants/Segments	28
TABLE J	Huntsville Overall Results	31
TABLE K	Huntsville Group Summary Results	32
TABLE L	Things Liked Most/Least About Huntsville Bypass	34
TABLE M	Comparative Survey Totals	38
TABLE N	Comparative Follow-Up Survey Totals	42
TABLE O	Original Survey and Follow-Up Score Comparisons	43
TABLE P	Trumann/Hoxie Follow-Up Business Inventories	45
TABLE Q	Follow-Up Comments	47

## **INTRODUCTION**

Highway bypasses have historically been looked upon with favor by traffic engineers and transportation managers as a progressive and efficient method of alleviating local traffic congestion problems. Local governments, however, have not always viewed bypasses with the same enthusiasm. Local governments and communities sometimes perceive a highway bypass around their community as a direct threat to their local economies. Even though the intent of highway bypasses is to improve the flow of traffic, some local communities perceive these structures to be potentially fatal blows to the future economic vitality of the local community. This perception is often prevalent in the many small, or rural, communities that are so common in Arkansas, and this perception presents two important questions regarding highway bypasses that need to be considered. First, do bypasses that are successful in alleviating local traffic congestion directly benefit the local community? Secondly, do these bypasses pose a serious economic threat to the individual businesses or communities which they bypass?

This study examines these two questions for three small towns in north Arkansas. Through a multi-year series of personal interviews and discussions with local business owners and community leaders in three separate and distinct towns that have been recently bypassed, a better understanding of the local attitudes and opinions about the impact of bypasses should be reached. This understanding should be helpful in helping other rural communities prepare for the impact of future bypass projects affecting their local economy.

## **PROBLEM STATEMENT**

Our research will examine the perceived impact that bypasses have had on local business owners in three small rural communities in north Arkansas. Different types of local businesses are probably effected in different ways, and different communities should be impacted in various ways, also. The primary purpose of this study is to identify local business owner opinions and perceptions reflecting these differences, determine their relative importance to individual business groups and communities, and use these findings to identify ways local businesses and communities can better understand and prepare for the local impact of highway improvements that bypass their local business district. Finally, this study will address what role the state highway department, or other state or regional

agencies, could play in assisting communities to either maximize the opportunities, or minimize the adverse effects created by highway bypasses.

This study assumes the precise design and location of a particular bypass is a given. A subtle, but important, issue for this assumption is the fundamental reason for building most bypasses in the first place. In nearly all cases, these projects are part of a larger, geographically far-reaching highway improvement plan to facilitate intercity travel. The actual bypassing of any one small town is somewhat incidental to the overall project. The near universal reason for constructing these bypass projects is to widen or "four-lane" certain corridors where intercity traffic volumes have outgrown existing two-lane capacity, usually along "Main Street" in small towns. Intercity highway traffic counts, engineering constraints, environmental issues, traffic safety, and a number of other issues will primarily determine just when and where bypasses will be constructed. Whether or not the bypass should have been constructed is, properly, not a question in this study. Neither is the question of whether or not the new route should have been located through towns located along the old highway to protect existing trade areas.

## **LITERATURE REVIEW**

Hundreds of articles written about the economic impacts of highway bypasses on small towns have been written over the years and are readily available for examination. Many of these articles date back to the 1960's as reactionary studies to the events of post World War II, American suburbanization. The majority of these studies follow the familiar route of examining economic and demographic figures as indicators of economic vitality. Some of these articles even examined Arkansas towns that had been bypassed. More recently, the central theme of highway bypass studies have changed along with the functional nature of highway bypasses themselves. The growth of SMSA's, or more recently, SMA's and MPO's has changed the nature of many highways and bypasses. Today, one could make the argument that bypasses are more essential to the survival of small cities on the fringes of urban areas than they are threats to them. The United States is also not alone in the academic pursuit of answers to these questions. Many studies were also found from the United Kingdom and the rest of Europe as well as from Australia and New Zealand.

A number of studies will be discussed in this section, beginning with a study released by the Transportation Research Board of the National Research Council in

Washington, D.C. in 1996. This report, entitled *Assessing the Effects of Highway-Widening Improvements on Urban and Suburban Areas*, deals not as much with bypasses as it discusses general highway improvements in regards to their overall effects on urban and suburban areas. Still, this project can prove instrumental, especially considering the changing nature of highway bypasses discussed above. The stated purpose of this project was to examine the “social, economic, and other conditions” that highway widening projects place on the surrounding areas. Under the heading of economic impacts of highway widening projects, the study found eight general categories where these projects had some sort of impact. These eight categories are:

- Land use
- Business impacts
- Location and relocation of utilities
- Employment
- Property values
- Tax base
- Parking
- Safety

This study proved to be somewhat beneficial in that four of the eight categories mentioned above were directly addressed in the business owner survey used in this study. Those four categories were land use, business impacts, employment, and property values. This study went on to examine social and environmental impacts of these highway improvement projects on the surrounding communities while admitting that there is really no known or accepted method for doing so (Assessing . . ., 1996).

The second study examined here was produced in 1962 by William H. Dodge, Director of the Wisconsin Highway Impact Study and Associate Professor of Commerce at the University of Wisconsin. This work is entitled *Influence of a Major Highway Improvement Upon the Economy of Dunn and St. Croix Counties*. This study is more similar to our study because it does quiz the community business leaders on their feelings about the economic impacts of the highway improvement projects. Although the two projects are separated by more than 35 years, the methodology used is very similar. This project is also representative of other works produced during a similar time period in its findings. While the general consensus among community members surveyed was that the bypass was beneficial in bringing more jobs to the area, most often in the form of manufacturing jobs now that highway improvements had made the region more attractive to industry, the same community members also felt that these projects had a very negative economic impact on the areas that had been bypassed. This feeling manifests itself in the



fact that downtown sales were lower since the construction of the bypass and that there had also been a noticeable drop in property values along the old "strip." Community business leaders had been very vocal in their opposition to the bypass project. Another complaint expressed by the community members here was that exits off the bypass were not adequate to the business interests of the bypassed communities. This conclusion would prove important in our study communities. The conclusion of an overall negative economic impact for downtown business is not at all unusual considering the historical context of the study (Dodge, 1962). For example, construction of the Interstate system was just beginning.

The next study reviewed is entitled *Dynamic Highway Impacts on Economic Development*, by David Eagle and Yorgos J. Stephanedes. Produced in the late 1980's, this work attempts to explain how economic impacts are different for differing areas depending on their geography. This work divided Minnesota's counties into five distinct categories.

- Regional centers
- Next to regional centers
- Urban
- Next to urban
- Rural

This statistical evaluation uses a cause and effect equation as well as a chronological equation in order to determine how the effects to economic development by highway bypasses differ among the five categories. The authors concluded that while these highway bypass projects did not have a statistical impact on the economies of Minnesota's communities as a whole, those areas classified as regional centers did experience some benefits in the area of employment. The authors concluded that \$1 million spent on highway improvements could be expected to result in over 100 new jobs being created (Eagle and Stephanedes, 1990). This finding is important to this research in that a correlation to economic impact based on the distance away from an urban center (in our case, Jonesboro or Springdale) could prove to be a determining factor in the amount and type of economic impact.

*Economic Impacts of Road and Waterway Improvements* by Rick Szostak provides historical context of transportation improvements in the United States by which we can evaluate the impacts found in our own study. This study is influential by providing historical theory to the "long term effects of investment in transport infrastructure and the institutional structures conducive to investment in transport." The author argues that while the methods

of transportation and of improving transportation infrastructure may have changed greatly over the years, the ways that these methods of improvements impact local economies have remained relatively stable over time. The author makes the obvious connection between industrialization, urbanization, and the improvements in transportation infrastructure. The author makes the argument that improvements in transportation by local and regional governments are almost necessary to ensure growth in an economic world based on industrialization. This article is important to this research in that it poses a perplexing question. Can the interests of the secondary, or non-local, sector be met in regards to improvements in transportation infrastructure without greatly damaging the tertiary sector of the local economy? This question becomes increasingly important in the modern American economy where losses in manufacturing jobs are routinely replaced by employment gains in the service sector. The tertiary, or local economy, sector in our study is most often farming or agriculture.

These conflicts in benefits issues would lead to one fundamental question relevant to this research: Who are transportation infrastructure improvements intended to benefit? If these improvements are done for the secondary sector, the traveling public, at the expense of the service sector, then it appears that local governments face a very important dilemma. Do local governments support transportation infrastructure improvements in order to attract industry jobs, or do they protect the interests of the local business community by opposing infrastructure improvements (Szostak, 1996).

*Cities, Transportation and Change* by Herbert S. Levinson is a study dedicated to examining the changes in American transportation since the 1920's. Even though this is a very broad study, there are some areas of discussion in this work that are pertinent to the study of economic impacts of bypasses on small Arkansas towns. One section is the discussion of the changing focus of traffic engineering in this country. In general, there has been a great philosophical shift from a goal of simply building enough streets and highways to handle the total driving public, to a more recent emphasis on efficient traffic management. The difference between the two being that traffic management does not surrender to the glory of growth, but instead focuses on efficient flow of traffic in the amount of space allotted. Often, traffic management takes the paths of alternative forms of transportation, as well as mass transit and public transportation. The author notes that cities were the first to recognize the importance and need for effective traffic management. American cities were the first to face the problems of crowding to transportation systems, and have been much more effective than their rural counterparts in enacting mass transit

programs. The author also noted how the focus of transportation has shifted since the 1960's from inter-urban transportation to intra-urban transportation. Transportation no longer necessarily flows from neighborhood to workplace within the city, but rather from surrounding suburbs to the city or even from suburb to suburb (Levinson, 1996). This discussion is pertinent to the study of bypasses in small Arkansas towns because these small towns might have to undergo a similar change in philosophy as population growth and sprawl continues to merge once isolated and rural communities together.

Another study from the 1960's, *The Economic Impact of Interstate Highway Bypasses*, by Jessie L. Buffington in 1968, differs quite a bit from the Minnesota study discussed previously. This study, conducted in Texas, found an overall favorable economic impact in regards to land use, property values, traffic flow, business activity and overall community development. There were nine different communities studied here with populations ranging from 1,935 to 186,545. The effect on land value was reported as positive, since land values along the new interstate bypass increased significantly. The paper also makes the point that residential land also became more valuable as a result of the highway bypass. This study mentions that property values along the area which had been bypassed were not negatively affected and might have even increased as a result of less traffic congestion along the old route. The article reported overall positive long-term effects on land use patterns since the bypass made more land available to traffic serving businesses along the new bypass and allowed the old routes to be a business district to only the local communities instead of also having to compete with the traffic serving businesses. These findings support the fact that several of our study communities have become less isolated from nearby urban areas and are experiencing a residential housing boom as the area evolves into a "bedroom" community supported by a growth in non-transportation service sector businesses.

The differences reported by these two different studies are most likely the result of differences of the two economies of the regions in which they are located. The region of eastern Texas in this study is a typical "sunbelt" location which was experiencing phenomenal growth during this period and is still growing today, both in terms of population and economic development. The region discussed previously in the state of Minnesota study was not your typical "rustbelt" area of the north or mid-west, but was still an area of relative demographic and economic stagnation during this period when compared with much of the southern and western U.S. The fears of economic devastation of the downtown area in the communities were most likely not irrational ones. These northern



communities did not have the luxury of a rapidly expanding economy and population as did the area in Texas. The Texas communities were more concerned in relieving traffic congestion than they were in possible negative economic impacts of these highway improvement projects. The Texas communities were growing rapidly enough to be able to adjust favorably to the changes brought on by these highway improvements. This study is important for showing the type of environment in which almost any type of growth will be viewed as positive (Buffington, 1968). The dichotomy presented by the towns in Texas and the towns in Minnesota could prove beneficial in examining differences between economic impact on different towns in our own study. The relative prosperity of northwest Arkansas in comparison to the Arkansas Delta presents similar economic activity parallels.

The last article examined here was published by the National Cooperative Highway Research Program in its Research Results Digest and is entitled *Effects of Highway Bypasses on Rural Communities and Small Urban Areas*. This work was published in 1996. This research is very beneficial to our study since it is not only timely, but also focuses on "(a) the impacts of highway and bypasses on rural communities and urban areas of less than 50,000 population and (b) current practices in using that knowledge in the planning of bypass developments." This article examined the familiar areas of population change, business activity, land use, land values, and employment. The study was extremely extensive. It involved 190 cities in 47 U. S. States and 6 Canadian provinces. It reviewed almost 200 publications on highway bypasses on communities, a testament to the volume of work available on the subject. The study consisted of a survey sent to all 50 states and Canadian provinces to discuss bypass projects in their own state. The study found that there was a tendency for larger communities, in this case communities with a population between 10,000 - 40,000, to view these projects more favorably than small communities, <5,000. The study also reported that there is less concern today about negative economic impacts of highway bypasses than there have been in recent history. This study also reports that their interviews with residents and businesses indicate that there is usually the potential for development around the fringes of the new bypass route and that the negative economic impact along the old route is usually minimal. While the article admitted that there is still a general decline in many "main street" areas of many communities, it stated that it would be nearly impossible to continue to claim that highway bypasses are still a major factor in this decline (Effects..., 1996). The follow-up visits to our study areas bear out this observation.

## METHODOLOGY

Determination of local business owner perceptions and opinions about the impact of traffic pattern changes caused by new bypasses in the local community were made through a series of direct interviews and surveys conducted with local community leaders and business owners. It was felt that this type of survey would be most effective in measuring the variables that were targeted by this research. Previous researchers attempted to measure things like traffic count and sales tax revenue changes in order to gauge the economic impact that a bypass had on a small community. However, our preliminary interviews suggested this approach would not be the most beneficial to this study. The overlying question to be answered by this research is whether individual local business owners expect a personal financial or economic benefit or downfall brought on by highway bypasses. This process involves an attempt to measure personal opinions or attitude--a human emotion. Human emotions can be and often are non-economic. People's perceptions may not change accordingly with economic indicators, or may in fact change even when there is apparently no significant objective basis for doing so.

In order to encourage participation, the surveys used in this study were very brief (one page) and very direct in their format. The survey instructions and data collection documents are attached in Appendix A. Questions were asked regarding local business owner's perceptions of traffic congestion in their town both before and after the bypass. Additionally, they were asked whether they perceived traffic congestion to be a serious problem. Questions were also asked regarding the success of their business since the opening of the bypass. Respondents were asked questions regarding future intentions of their business locations in order to determine if there would be a pattern of migration by businesses to the area around the new bypass. The business owners were also allowed to list things they liked and disliked about the bypass. These open-ended comments gave the respondents freedom to address issues not covered by the survey, and also provide insight into issues not considered in the initial design of this survey.

Preliminary on-site visits and surveys were initially conducted in 5 communities, and are listed in Table A below:

**TABLE A**

<b>ORIGINAL STUDY COMMUNITIES</b>				
TOWN	LOCAL BUSINESSES	POPULATION 1990	POPULATION 2000	% CHANGE
TRUMANN	27	6,335	6,889	8.8%
HOXIE	22	2,773	2,871	1.6%
HUNTSVILLE	39	1,573	1,931	22.7%
BROOKLAND	18	956	1,332	39.3%
OMAHA	9	110	165	49.8%

Omaha was deleted from further analysis because of both the very small number of businesses located there and their one common characteristic—tourist dependency. Most of these small businesses had been opened or attracted to Omaha by Branson-related traffic which ultimately became so great that it helped create the need for the highway improvement that now bypasses their small retail zone. Small tourist dependent retail trade zones like Omaha present a real cause and effect issue. These small businesses usually opened in some opportunistic response to traffic passing through their small town as a result of the tourist boom in Branson. The congestion that now generates their drive-by business is the same traffic that disadvantaged the general traveling public to the extent that these highway improvements became necessary. These small businesses were presented an opportunity to exploit intercity traffic not of their making. Is it, therefore, unfair to suggest that these businesses should first consider relocating their tourist dependent business to continue to take advantage of a business opportunity created by the rapid growth in this intercity travel that created their market in the first place? The negative impact is obvious, but any remedy for these local businesses is probably not the responsibility of either the traveling public or highway department.

Brookland was also deleted from more rigorous analysis because of its near contiguous proximity to Jonesboro, making it primarily a residential neighborhood area of the Jonesboro urban area. There is little current justification to classify Brookland as an isolated rural community. Only two small businesses in Brookland, convenience/gasoline stores, are at all traffic dependent. Most of the remaining ten are small neighborhood businesses serving the local community or self-employed contractors with their business located near their residence. Finally, the recent inclusion of Brookland in the new

Jonesboro MPO geographic area reinforces Brookland's status as more a Jonesboro neighborhood than isolated rural area.

## **STUDY FINDINGS**

### **Trumann**

The first of the three towns to be examined in this study was Trumann, Arkansas. The city of Trumann is located in the northeast corner of Poinsett County and had a population of 6,346 according to the 1990 census, making it the largest of the three cities examined in this study. Trumann's population increased to 6,899 in 2000, a moderately healthy increase of about 9%. Trumann now lies along Highway 463, which is the old two-lane highway (U.S. 63) that connected Jonesboro and Memphis prior to the bypass opening. Highway 463 runs through the central business district of Trumann and has two traffic lights. In October of 1996, a bypass around Highway 463 was constructed beginning and ending completely outside the city limits of Trumann. Two interchanges were constructed, one south and one north of town, with the northernmost adjacent to Trumann city limits. Initially, the business community in Trumann and many local residents were concerned that the loss of traffic along old Highway U.S. 63 (now 463) would result in noticeable revenue loss for businesses located along the highway, especially for traffic dependent businesses such as gas stations/convenience stores and fast food restaurants.

To begin this study, an inventory and classification of local businesses was conducted. Once all the businesses were inventoried and placed within their proper classification, personal interviews and surveys were conducted with willing participants to obtain the overall opinions of not only all businesses within each classification, but also for the business district of Trumann as a whole. The nine classifications and number of businesses in each group for Trumann are listed in Table B on page 11. These classifications were designed to be useful in identifying the types and number of businesses primarily either traffic or non-traffic dependent.

The overall results showed that most business owners strongly agreed that traffic congestion was a serious downtown problem before the construction of the bypass, and that the bypass was very helpful in alleviating traffic congestion. Table C on page 12 summarizes the overall findings. Respondents were generally more likely to respond that the bypass increased their local business from inside Trumann than that it had decreased



their business from within Trumann, suggesting a net gain in sales. Respondents indicated a strong likelihood that they would not move their business from downtown to either the new bypass area or to an area outside of Trumann. However, respondents were more likely to say that the bypass hurt the value of their property rather than helped it, and were much more likely to say that the bypass had been beneficial for the city of Trumann as a whole, than to say it had been beneficial for their personal business.

**TABLE B**

<b>TRUMANN BYPASS SURVEY PARTICIPANTS</b>	
<b>BUSINESS CATEGORIES</b>	<b>BUSINESS NAMES</b>
1. Gas/Service Stations	1. Exxon 2. Massey's Fast Track 3. Citgo 4. Mapco Express
2. Restaurants	1. McDonald's 2. Subway 3. Jerry's Steak House
3. Small Retail Businesses	1. Jan's Video 2. Wedding Fantasies 3. Carter's Flowers
4. Medium Retail Businesses	1. D & P Furniture 2. Guy's Discount Furniture 3. Trumann Hardware Company
5. Large Retail Businesses	1. Wal-Mart (not surveyed) 2. Wood Ford 3. Dixie Equipment Company
6. Building Supply Companies	1. Baker Lumber & Hardware Company 2. Barton's of Trumann
7. Grocery Stores	1. Price Chopper 2. Payless Grocery 3. Bill Teague's Grocery
8. Industries	1. Roach Manufacturing 2. Dixie Gin 3. Baldwin Piano & Organ Company 4. Parker Hannefin Company
9. Realtors	1. Design Associates Realty 2. McDaniel Realty

**TABLE C**

<b>TRUMANN OVERALL RESULTS</b>						
<b>OPINION STATEMENTS</b>	<b>Overall Total * (1-5 scale)</b>	<b>Strongly Agree ** 5</b>	<b>Somewhat Agree 4</b>	<b>Neutral 3</b>	<b>Somewhat Disagree 2</b>	<b>Strongly Disagree 1</b>
1. Traffic congestion was a problem in Trumann on highway before the by-pass was opened.	4.4 #2	62% (16)	23% (6)	8% (2)	4% (1)	4% (1)
2. The by-pass opening has resulted in a noticeable reduction in the amount of congestion in Trumann.	4.6 #1	62% (16)	35% (9)	4% (1)		
3. Due to easier access to Trumann from Jonesboro and other areas, I have gained business from outside Trumann.	2.9 #6	8% (2)	15% (4)	46% (12)	15% (4)	15% (4)
4. Due to easier access to Jonesboro and other areas, I have lost business from inside Trumann.	2.6 #9	12% (3)	15% (4)	23% (6)	27% (7)	23% (6)
5. I have considered relocating my business closer to the bypass.	2.0 #12		12% (3)	31% (8)	12% (3)	46% (12)
6. Since the construction of the bypass, I have considered relocating my business to a city other than Trumann.	1.7 #11		4% (1)	35% (9)	8% (2)	54% (14)
7. The value of my property has increased as a result of the by-pass opening.	2.5 #10	4% (1)	15% (4)	50% (13)	8% (2)	23% (6)
8. The value of my property has decreased as a result of the by-pass opening.	2.9 #7	4% (1)	23% (6)	42% (11)	15% (4)	15% (4)
9. I have changed my advertising methods since the opening of the by-pass.	2.9 #8		19% (5)	54% (14)	4% (1)	23% (6)
10. The by-pass has been very beneficial for Trumann.	3.9 #3	35% (9)	31% (8)	15% (4)	12% (3)	8% (2)
11. The by-pass has been very beneficial for my business.	2.9 #5	15% (4)	23% (6)	27% (7)	8% (2)	27% (7)
12. Trumann has become a more attractive place to live since the by-pass opened.	3.5 #4	27% (7)	27% (7)	27% (7)	4% (1)	15% (4)

\* The box contains the average score with the overall favorable rank of that score below.

\*\* The box contains the percentage of responses and the total number of responses for that choice in ( ) below

When the results of the survey are examined based on the different business classifications used in Table B, some interesting and somewhat predictable patterns emerge. Table D on page 15, contains comparative survey results for each of the individual business categories. Predictably, gas/service stores and grocery stores were much less likely to respond that traffic congestion had been a problem in Trumann before the construction of the bypass. Both gas/service stations and grocery stores indicated that they had not gained any new business from outside Trumann, and gas/service stations gave the strongest indication that they would consider a move either closer to the bypass, or to another town. Both gas/service stations and grocery stores did not agree that the bypass had been beneficial for Trumann, and were even less positive about what the bypass had meant for their business. These two groups did not feel that the construction of the bypass had made Trumann a more attractive place to live.

However, industries, realtors, and medium and large retail stores all responded that traffic congestion was a serious problem before the construction of the bypass. Note that Trumann is the only study city with any industrial/manufacturing base. Surprisingly, restaurants also responded that traffic congestion was a business problem in Trumann before the construction of the bypass. This finding is surprising because the literature examined indicated that restaurants would be considered traffic dependent businesses, and likely to be hurt by reductions in traffic flow. Building supply stores and realtors also felt like they had actually gained some business from outside Trumann since the opening of the bypass. Small retail businesses and building supply companies were the least likely of all business types to report a loss of business from within Trumann. Industries, restaurants, and large retail businesses responded that the value of their business had actually increased since the construction of the bypass. Building supply companies, industries, realtors reported that the bypass had been very beneficial for their business.

The fact that realtors reported that the bypass had been so beneficial for their business was an interesting and somewhat unexpected find. Realtors responded that, since the construction of the bypass, Trumann had been experiencing a housing boom of sorts. These realtors reported that almost all of the new housing being constructed was middle income housing, and that the buyers and residents of this new housing were most often employed in Jonesboro. These realtors reported that the bypass, along with the other highway improvements along Highway 63 between Jonesboro and Trumann, made living in Trumann more attractive and travel between Jonesboro and Trumann much easier and quicker. The same was true to a lesser extent for Memphis. The trip between Trumann

and the Jonesboro Industrial Park now takes less than 15 minutes. Memphis is about 45 minutes away.



TABLE D

TRUMANN GROUP SUMMARY RESULTS										
OPINION STATEMENTS	Overall Totals	Building Supply (2)*	Gas/Service Stations (4)	Grocery Stores (3)	Industries (4)	Restaurants (3)	Realtors (2)	Small Retail Business (3)	Medium Retail Business (3)	Large Retail Business (2)
1. Traffic congestion was a problem in Trumann before the bypass opened.	4.4 #2***	4.5	3.3	3.0	5.0	4.7	5.0	4.0	5.0	4.7
2. The by-pass opening has resulted in a noticeable reduction in the amount of congestion in Trumann.	4.6 #1	4.5	4.3	4.7	5.0	5.0	4.0	4.3	4.3	5.0
3. Due to easier access to Trumann from Jonesboro and other areas, I have gained business from outside Trumann.	2.9 #6	4.0	1.3	1.3	3.3	3.0	4.0	3.0	3.0	3.3
4. Due to easier access to Jonesboro and other areas, I have lost business from inside Trumann.	2.6 #9	3.0	3.0	4.0	3.0	2.3	2.0	1.3	2.3	2.0
5. I have considered relocating my business closer to the by-pass.	2.0 #12	1.0	3.3	2.7	2.3	2.7	1.5	1.0	1.3	2.3
6. Since construction of the by-pass, I have considered relocating my business to a city other than Trumann.	1.7 #11	1.0	3.0	1.7	1.8	1.7	1.5	1.0	1.7	1.7
7. The value of my property has increased as a result of the bypass opening.	2.5 #10	2.5	1.7	2.0	3.8	3.3	2.5	1.7	1.7	3.3
8. The value of my property has decreased as a result of the by-pass opening.	2.9 #7	2.5	4.3	2.7	2.3	3.5	2.5	2.7	3.0	2.7
9. I have changed my advertising methods since the opening of the bypass.	2.6 #8	2.5	3.3	2.7	2.8	2.7	3.0	3.0	1.7	1.7
10. The by-pass has been very beneficial for Trumann.	3.8 #3	5.0	2.3	1.7	4.5	3.3	4.5	4.0	4.3	4.3
11. The bypass has been very beneficial for my business.	2.9 #5	2.5	1.0	1.3	4.0	2.7	5.0	4.0	3.3	2.7
12. Trumann has become a more attractive place to live since the bypass opened.	3.5 #4	4.0	2.3	2.3	4.5	2.7	5.0	3.7	3.3	3.7

\* Number of businesses in category

Trumann also benefitted from the fact that the largest industrial park complex in Jonesboro is located in east Jonesboro, and is very accessible to Trumann. Residents in Trumann can travel to the industrial park quicker than many Jonesboro residents living in the northern or western part of town. The result is an increase in demand for residential development in Trumann, especially since residential growth in Jonesboro is occurring further and further away from the business and industrial areas of Jonesboro, and land and housing is becoming more expensive. Of course, relatively higher land values in Jonesboro combined with less stringent zoning and building codes often found in unincorporated or rural communities help contribute to this housing trend.

Interviews with the building supply companies and other retail businesses in Trumann revealed a common theme. Most of these businesses reported that traffic congestion before the construction of the bypass was bad enough to sometimes block entrance into their establishments. They also made the point that their business relied mostly on business from within Trumann and did not need the extra intercity traffic in order to increase sales. Industries were very pleased with the reduction in traffic. These industries cited problems and delays in shipping which had previously resulted from long traffic delays while they were either making or waiting on deliveries.

The research findings were a bit surprising from the restaurant owners. Many of these owners would not respond that the bypass had been beneficial for their local business, but they would admit that traffic congestion had been a local problem for them before the construction of the bypass, and that the bypass had been beneficial by reducing the amount of traffic congestion in Trumann.

There was a wide range of open-ended responses about what was liked the most and least about the bypass. These unedited comments are listed in Table E on page 18. There were many different positive comments mentioned, but the responses mentioned with the most frequency were that there were fewer "big trucks" passing through Trumann now, that there was better access to Jonesboro and Memphis, traffic congestion was much less, and that shoppers from out-of-town had quicker access now to Trumann businesses. Negative comments also dealt with the fact that less traffic now passes by Trumann businesses, concerns that the exits were not well suited for the business district, and some concerns about the safety of the new bypass. Note that the 48 favorable comments outnumbered unfavorable ones by more than 2 to 1. Sixty-nine percent of open-ended comments were favorable; just 31% were unfavorable. Curiously, only 12 of the 48

favorable comments are directly related to an effect on local business. These 12 comments are in bold print on Table E. Most of the comments were more related to personal, or quality of life, experience rather than the effect on their business. Of the 22 unfavorable remarks, 9 were not directly related to any impact on businesses.

**TABLE E**

<b>THINGS LIKED MOST ABOUT THE TRUMANN BYPASS</b>	
1. Less traffic in Trumann.	25. Easier to get to Jonesboro and skip by Trumann and Bay.
2. Get to Jonesboro quicke.r	26. Trumann is a quieter place and less congested.
3. Takes big trucks out of Trumann.	27. Larger trucks are not on highway.
4. <b>Brings business to Trumann.</b>	28. Nothing.
5. Easy access.	29. It is easier than going through Bay, AR.
6. 70 MPH.	30. It has helped in getting home quicker.
7. Quicker access to Memphis and Jonesboro.	31. Faster trip to Jonesboro.
8. <b>Easier for out-of-town customers to access.</b>	32. <b>More business from out of town.</b>
9. <b>Encourages more residential development.</b>	33. <b>Has helped spur residential growth.</b>
10. <b>Encourages more commercial development.</b>	34. Better traffic flow.
11. Speed limit.	35. Quicker to go to Jonesboro.
12. <b>My customers can get on and off Hwy 463 to my store.</b>	36. Less traffic.
13. Faster access to Memphis.	37. <b>Easy to make deliveries.</b>
14. Better road.	38. Reduction of traffic on 463.
15. Less traffic in town.	39. Easy and quick trips to Jonesboro.
16. Quicker trips to Jonesboro and Memphis.	40. Made Trumann closer to Industrial Park in Jonesboro.
17. Faster emergency trips as needed.	41. Quicker to go to Jonesboro and easier from Jonesboro to Memphis.
18. <b>Less traffic congestion at my entrance.</b>	42. No big trucks in town.
19. No 18-wheelers out front after closing.	43. Elimination of traffic.
20. Less traffic violators pulled over in front by police during business hours.	44. Easier to get to Jonesboro and Memphis.
21. <b>More out-of-town customers.</b>	45. <b>More business for Trumann.</b>
22. Roads are easier to get on.	46. Less congestion.
23. Not as many big trucks.	47. Easier to Jonesboro.
24. Faster getting to Memphis.	48. <b>Exit good location for Industrial Park.</b>

**TABLE E** (continued)

<b>THINGS LIKED LEAST ABOUT THE TRUMANN BYPASS</b>	
1. <b>Somewhat less through traffic by our business.</b>	12. <b>No out of town traffic forced to drive by my business.</b>
2. Lack of service roads.	13. <b>Causes some people to bypass and go on to Jonesboro or Memphis.</b>
3. Cut some roads in two and made traveling inconvenient.	14. <b>Diverts business away from Trumann.</b>
4. <b>It has hurt the business here.</b>	15. <b>Customers stop at truck stop instead of coming into town for gas.</b>
5. <b>We don't see as many visitors.</b>	16. Speed limit is 55 MPH from Marked Tree to I-55.
6. It's too dark and too many accidents.	17. Hurt property when it went through.
7. <b>It has taken all of my summer travelers away; they just pass me by now.</b>	18. Ruined drainage on adjoining property.
8. <b>Cost me sales.</b>	19. Grass causes insect problem for cotton farmers.
9. <b>Missed customers.</b>	20. More traffic.
10. Miss the familiar faces we used to see.	21. <b>Have lost some workers to Jonesboro.</b>
11. <b>I Lost business because people are going to Jonesboro.</b>	

## Hoxie

The second town selected for study was Hoxie, Arkansas. Hoxie is located in western Lawrence county approximately 25 miles northwest of Jonesboro. Census figures in 1990 indicate a population of 2,798 for Hoxie, making it less than half the size of Trumann. The 2000 census was 2,871, a rather meager increase of 1.6%. As with Trumann, an inventory of all businesses in Hoxie was compiled. However, it appeared not all of the businesses in Hoxie might be affected by the bypass in the same way. Hoxie is located at the intersection of Highway U.S. 63 and U.S. 67. The business area actually bypassed originally involved only Highway U.S. 63. The old route entering from the south (or east) came into Hoxie, crossed over a set of railroad tracks and immediately came to a traffic light on U.S. 67. Traveling north (or west), the new U.S. 63 bypass begins southeast of Hoxie and ends northwest of Hoxie. However, Highway U.S. 67 is the main business district for most of Hoxie and shares several blocks with U.S. 63. Highway U.S. 67 continues north and south of this segment and was excluded from the survey. Unfortunately, the bypass impact on Hoxie will be even more dramatic when the U.S. 67 four-lane improvement and relocation is completed in the near future. Those few traffic-dependent businesses included in this study, especially those along U.S. 67, will be even more adversely affected once U.S. 67 is improved.

The Hoxie businesses along U.S. 63 were divided according to their location along the highway. These highway segments were as follows:

- Segment I      Between the southern bypass exit on Highway U.S.63 and the railroad tracks at U.S. 67
- Segment II     Along Highway U.S.63 and U.S.67 inside the city limits
- Segment III    Between the northern bypass exit on Highway U.S. 63 and the U.S. 63 and U.S. 67 intersection south of the business district

The purpose of these segments was to see if any significant differences in opinions existed among the businesses located in each segment. Businesses in Hoxie were again grouped together by business types. The business categories developed in the Trumann study were not comparable for Hoxie and had to be modified. Notably missing were any industry or manufacturing, or any large retail business. In addition, practically all the retail businesses were mature, family owned entities with no multi-store corporate or franchise presence. All the Hoxie businesses are service/retail in nature and heavily dependent on

farm trade. The business inventory categories used for Hoxie are listed in Table F on page 22.

Overall results of the study for Hoxie are summarized on Table G on page 23, and show that businesses in Hoxie strongly agreed that traffic congestion had been a significant problem before the construction of the bypass, and that the bypass had helped to alleviate traffic congestion. Curiously, however, these businesses were more likely to report a loss of business from within Hoxie than they were to report a gain, or loss, of business from customers outside of Hoxie. All surveyed businesses were also much more likely to respond that the bypass had resulted in a decrease in the value of their business than they were to report an increase. Over 50% of those questioned strongly disagreed with the statement that the bypass had been beneficial for their business or beneficial for Hoxie. While the responses from Hoxie were generally the most negative of the three communities, these responses suggest that these businesses felt least dependent on travel business and, in addition, lost some of their local trade after the bypass opened. However, 81% of respondents indicated that they were giving very little thought to the idea of relocating their business anywhere else.

Examination of responses by business categories provided somewhat predictable results, but segmenting the highway route by location was not beneficial to our study. Both the two restaurants and two motels were far less likely than the other categories to agree that traffic congestion was a problem before the construction of the bypass and motels did not feel like the bypass had been beneficial to them by reducing the amount of traffic flow. Restaurants, motels, and large retail businesses indicated that they had not gained business from outside Hoxie since the opening of the bypass, and restaurants and motels were more likely to answer that they had lost business from inside Hoxie since the bypass had been constructed. Gas/Convenience stores, the most traffic-dependent category, were most likely of all businesses to consider moving closer to the bypass, while restaurants were more likely to consider moving to another city. Restaurants and motels felt the value of their business had decreased since the construction of the bypass. Restaurants, motels, and even realtors strongly disagreed that the bypass had been beneficial for their business.

**TABLE F**

<b>HOXIE BYPASS SURVEY PARTICIPANTS (21 Total)</b>	
<b>BUSINESS CATEGORIES</b>	<b>BUSINESS NAMES</b>
Gas/Convenience Stores	1. Hoxie Plaza-Fina 2. Clarke's Service Station 3. Hoxie Station
Restaurants	1. Subway 2. Ole Hickory House
Small Retail Businesses	1. Hometown Video 2. Heard's Market
Medium Retail Businesses	1. Cox Implement Company 2. Carquest of Hoxie 3. Superior Storage & Trailer Rental 4. Square Post Buildings, Inc. 5. Lawrence County Tractor 6. Pratt's Auto 7. Hoxie Lumber Company
Repair/Service Stations	1. Ed's Tire Service 2. Hoxie Glass & Auto Service 3. Bill Franks Body Shop
Realtors	1. Rodgers Real Estate 2. Black & Fowler Insurance & Real Estate
Motels	1. Ole Hickory Motel 2. Jones' Motel & Trading post

**TABLE F (continued)**

<b>HOXIE BYPASS SURVEY PARTICIPANTS</b>		
<b>SEGMENT I</b>	<b>SEGMENT II</b>	<b>SEGMENT III</b>
1. Cox Implement Company	1. Hometown Video	1. Jones' Motel/Trading Post
2. Ed's Tire Service	2. Black & Fowler Insurance & Real Estate	2. Rodgers Real Estate
3. Hoxie Glass & Auto Service	3. Superior Storage & Trailer Rental	4. Pratt Auto
4. Carquest of Hoxie	4. Ole Hickory House	5. Lawrence County Tractor
	5. Subway	6. Square Post Buildings, Inc.
	6. Ole Hickory House Motel	7. Hoxie Lumber Company
	7. Clarke's Service Station	8. Bill Franks Body Shop
	8. Hoxie Station	
	9. Hoxie Plaza-Fina	
	10. Heard's Market	



**TABLE G**

<b>HOXIE OVERALL RESULTS</b>						
<b>OPINION STATEMENTS</b>	<b>Overall Total * (1-5 scale)</b>	<b>Strongly Agree ** 5</b>	<b>Somewhat Agree 4</b>	<b>Neutral 3</b>	<b>Somewhat Disagree 2</b>	<b>Strongly Disagree 1</b>
1. Traffic congestion was a problem in Hoxie on highway before the bypass was opened.	4.6	76% (16)	14% (3)		10% (2)	
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Hoxie.	4.0	67% (14)	19% (4)			14% (3)
3. I have gained business from outside Hoxie since the bypass opened.	2.9			19% (4)	19% (4)	62% (13)
4. I have lost business from bypass opened.	2.8	28% (6)	10% (2)	10% (2)	14% (3)	38% (8)
5. I have considered relocating my business closer to the bypass.	1.4		5% (1)	10% (2)	5% (1)	81% (17)
6. Since the construction of the bypass, I have considered relocating my business to a city other than Hoxie.	1.6	10% (2)	5% (1)	5% (1)		81% (17)
7. The value of my property has increased as a result of the bypass opening.	1.6			29% (6)	5% (1)	67% (14)
8. The value of my business has decreased as a result of the bypass opening.	3.3	48% (10)		14%	14% (3)	24% (5)
9. I have changed my advertising methods since the opening of the bypass.	3.1	19% (4)	24% (5)	29% (6)	5% (1)	29% (6)
10. The bypass has been very beneficial for Hoxie.	2.7	24% (5)	33% (7)	14% (3)		57% (12)
11. The bypass has been very beneficial for my business.	2.0	5% (1)		38% (8)		57% (12)
12. Hoxie has become a more attractive place to live since the bypass opened.	2.8	5% (1)	24% (5)	38% (8)		24% (5)

\* The box contains the average score with the overall favorable rank of that score below.

\*\* The box contains the percentage of responses and the total number of responses for that choice in ( ) below.

Besides restaurants and motels, all other business categories indicated that traffic congestion had been a problem before the construction of the bypass, and that the bypass had resulted in a decrease in the amount of traffic congestion around Hoxie. Most groups did not agree that they had gained business from inside Hoxie since the construction of the bypass, however, most businesses did not agree with the statement that they had lost business from within Hoxie, suggesting most businesses depended primarily on the local community. No group gave any indication of plans to relocate their business, although several relocations did, in fact, occur in Hoxie. While these moves were good for the individual businesses, Hoxie officials felt they actually lost sales tax, since these businesses moved outside the city limits. Also, no group would agree with the statement that the value of their property had increased since the construction of the bypass. Only medium retail businesses, primarily farm dependent, tended to disagree with the statement that their business was less valuable now than when the bypass opened. Small retail businesses agreed with the idea that the bypass had been generally beneficial for Hoxie, and several medium retail businesses gave some slight indication that the bypass might have helped their business. It should be noted that 5 of the 7 medium retail businesses—farm implement, building supply, etc.—depend on agricultural or farm trade, the dominant economic activity in the area. Hoxie, more than anything else, is an isolated farm community typical of so many other small towns in the Arkansas Delta.

Remarks about what was liked most and least about the bypass were somewhat similar to the remarks made in the other studies. Most of the positive remarks stated that it was much better to no longer have the “big trucks coming through the middle of town” and that overall traffic congestion was better. Some of the negative remarks indicated that there were not enough signs along the new bypass to tell motorists where to turn off for Hoxie, and there were some major concerns expressed about highway safety. Once again, respondents appeared to have some difficulty disassociating their personal opinions as residents and the impact of the bypass on their business. It seemed most respondents are influenced as much by living the community as they are by their personal business experience. Positive comments outnumbered negative ones 21 to 15, and only 3 of the 21 positive comments directly related to business impact. Table H on page 25 lists these comments, with the positive comments in bold type.

The fact that the scores from the Hoxie study indicate that the bypass is viewed more negatively than the other communities raises some interesting points. First, there was no mention by any of the respondents of the possibility of a “bedroom community” emerging

in Hoxie, much like had been observed in both Trumann and Huntsville. It is interesting to note here that while the bypass project in Trumann was part of an overall larger project that made a better connection between Trumann and Jonesboro, or Memphis, the Hoxie bypass does not yet serve to help link Hoxie to any other towns. The bypass has to yet make travel time between Hoxie and Jonesboro any shorter for local residents, it only serves to move passing traffic around Hoxie more efficiently. One could make the argument that while the Trumann and Huntsville bypasses helped make a quicker connection to a larger urban area, the bypass around Hoxie doesn't really "go" anywhere, yet. Hoxie's proximity to Walnut Ridge is another negative issue since Walnut Ridge has a larger, more diverse retail trade and is probably more likely to emerge as a "bedroom" community for workers in Jonesboro.

**TABLE H**

<b>THINGS LIKED MOST ABOUT THE HOXIE BYPASS</b>	
1. Less traffic.	12. Through traffic reduced.
2. <b>Makes our store more accessible.</b>	13. Easy access (no railroad tracks).
3. Less traffic congestion.	14. <b>Equipment easy to move.</b>
4. <b>Possibility of new business.</b>	15. Traffic control.
5. Bypassing the trains.	16. I can get on the highway easier.
6. Less traffic.	17. Safety.
7. Less traffic.	18. Less traffic.
8. Quiet.	19. Quicker around town.
9. Less big trucks.	20. Traffic decrease.
10. Reduced traffic with trains.	21. Easy access.
11. Makes getting around easy.	

**TABLE H** (continued)

<b>THINGS LIKED LEAST ABOUT THE HOXIE BYPASS</b>	
1. <b>Less traffic for local business.</b>	9. <b>Less traffic.</b>
2. Dangerous turnoffs.	10. <b>Took business away.</b>
3. Not enough signs.	11. <b>Local people have no reason to drive by office.</b>
4. Relocating to the bypass.	12. The 3 roads, it's cross will get people killed.
5. <b>Takes away jobs.</b>	13. Police patrol.
6. <b>Costs business.</b>	14. <b>Not as many out of town people to see our business.</b>
7. Those outside Hoxie miss town.	15. <b>Less traffic for local business.</b>
8. <b>We will definitely locate north of Walnut Ridge.</b>	

## **Huntsville**

The last community included in this study is Huntsville, Arkansas. Huntsville is located on U.S. Highway 412 in Madison County and is about 30 miles from the Fayetteville/Springdale urban area in northwest Arkansas. The 1990 census population was 1,573, nearly half the size of Hoxie and, by far, the smallest of our study sites. The 2000 population was 1,931—an increase of nearly 23%. Recent highway improvements on U.S. 412 included a bypass of the Huntsville business district. This bypass included two access points, both about two miles from the downtown business district, making Huntsville the most isolated of the three study towns, both from the bypass and nearby urban areas.

Huntsville, however, is a regional retailing and service center for this remote rural area. First, it is the county seat for Madison County, the only county seat study site, with several county and state administrative offices located there. Huntsville is the only study community with a general aviation airport. Huntsville has two medical clinics and seven doctors. Trumann, nearly four times as large, has only two family practice physicians. Most significantly, Huntsville has 38 local businesses, about 26% more than Trumann and nearly twice as many as Hoxie. Huntsville's small population belies its role as a rural, but regional, retail and service center.

Table I on pages 28 and 29 contains the Huntsville business inventory and classification. As with Hoxie, the businesses were divided into segments determined by their location in relation to the bypass. Segments II and III are the old U.S. 412 highway segments east and west of town connecting downtown with the new bypass. Both II and III are about two miles long. Segment I is the downtown district, primarily those businesses "on the square." Note this segment contains 50% of all the businesses inventoried. And, most of the businesses along II and III are within one-half mile of downtown. Note also there is no industry or manufacturing activity in Huntsville. Like Hoxie, agriculture and farm trade is the dominant local economic activity, but it is cattle and poultry production rather than row crops.

**TABLE I**

<b>HUNTSVILLE BYPASS SURVEY PARTICIPANTS</b>	
<b>BUSINESS CATEGORIES</b>	<b>BUSINESS NAMES</b>
Gas/Convenience Stores	<ol style="list-style-type: none"> <li>1. T-Mart</li> <li>2. Citgo</li> <li>3. Total-Vanessa's One-Stop</li> <li>4. Jet-Trip Citgo</li> </ol>
Restaurants	<ol style="list-style-type: none"> <li>1. Pizza Hut</li> <li>2. That Little Pizza Place</li> <li>3. Frederick's "Y" Drive-In</li> <li>4. Burger Shack</li> <li>5. Granny's Kitchen</li> <li>6. Crossbow Restaurant</li> <li>7. Sonic</li> </ol>
Small Retail Businesses	<ol style="list-style-type: none"> <li>1. Ozark Shoppe</li> <li>2. Parts Unlimited</li> <li>3. Cogger Drug Store–Rexall</li> <li>4. Brashears Florist</li> <li>5. Step-Up-Stores/Attic Dress Shop</li> <li>6. Huntsville Appliance</li> <li>7. Poor Mans Auto</li> <li>8. Midway Auto Supply</li> <li>9. Amber Light Hotel</li> <li>10. Family Time Videos</li> <li>11. Roger's Farm Equipment</li> <li>12. Economy Drug</li> <li>13. Victorian Cottage</li> <li>14. Tobacco World</li> <li>15. Cleaver Farm &amp; Home</li> <li>16. Locks, Clocks, &amp; Baubles</li> <li>17. War Eagle Western Store</li> <li>18. Huntsville Floral &amp; Gifts</li> </ol>
Medium Retail Businesses	<ol style="list-style-type: none"> <li>1. Bob's Market</li> <li>2. Dollar General Store</li> <li>3. Ace Hardware</li> <li>4. Radio Shack</li> </ol>
Trucking	<ol style="list-style-type: none"> <li>1. Lew Thompson's Trucking</li> </ol>
CPA office/Insurance Agents	<ol style="list-style-type: none"> <li>1. J.J. Voelner, CPA</li> <li>2. Shelter Insurance</li> </ol>
Banking	<ol style="list-style-type: none"> <li>1. Madison Bank &amp; Trust</li> <li>2. First National Bank</li> </ol>

**TABLE I** (continued)

<b>HUNTSVILLE BYPASS SURVEY PARTICIPANTS</b>		
<b>SEGMENT I DOWNTOWN</b>	<b>SEGMENT II EAST</b>	<b>SEGMENT III WEST</b>
1. Pizza Hut	1. Huntsville Floral & Gifts	1. Victorian Cottage
2. Parts Unlimited	2. Sonic Drive-In	2. Economy Drug, Inc.
3. Coger Drug Store – Rexall	3. Jet-Trip Citgo	3. Radio Shack
4. Brashear's Florist, Inc.	4. War Eagle Western Store	4. Roger's Farm Equipment
5. Step-Up-Shoes	5. Crossbow Restaurant	5. Family Time Video
6. Huntsville Appliance	6. Locks, Clocks, & Baubles	6. Burger Shack
7. J.J. Voelner, CPA	7. Total–Vanessa's One- Stop	7. Citgo
8. Shelter Insurance	8. Granny's Kitchen	8. Frederick's "Y" Drive-In
9. Bob's Market	9. Tobacco World	9. Amber Light Hotel
10. Dollar General Store	10. Cleaver Farm & Home	
11. Poor Man's Auto		
12. That Little Pizza Place		
13. Lew Thompson's Trucking		
14. Madison Bank & Trust		
15. Ace Hardware		
16. First National Bank		
17. Midway Auto Supply		
18. T-Mart		
19. Ozark Shoppe		

Table J on page 31 Contains the overall survey results. While Huntsville business owners strongly agreed that congestion was a problem and the bypass was a big help in eliminating it, their responses were slightly lower than either Trumann or Hoxie. No business felt they had gained any new business from outside Huntsville, 5 of the 38 businesses felt the bypass cost them local trade. Like both Trumann and Hoxie, Huntsville business owners showed little or no interest in relocating their business. And the business owners generally agreed that the bypass was more beneficial to the community than to their own business.

Table K on page 32 contains the response scores for the various business categories in Huntsville. While most group responses are fairly consistent with overall results, the two most traffic dependent categories produced some curious results. Curiously, gasoline and convenience stores most strongly agreed that congestion was a problem prior to the bypass opening, and that the bypass was a big help in reducing congestion. They showed no interest, however, in relocating closer to the bypass. Restaurants were less positive than convenience stores that congestion was a problem and strongly disagreed that the bypass had been good for their business. They also most strongly disagreed that their property value had increased and did agree more than any other group that their businesses were now worth less.

The two banks and one trucking company had the overall most positive scores of all the business categories. The trucking company was the largest employer in Huntsville with 40 employees, but 35 of those were drivers, most of whom lived elsewhere. Deleting these two categories would have made the overall scores for Huntsville somewhat less positive, or more neutral, in nature. Of course, deleting the 7 restaurants would have made the overall results much more positive.



**TABLE J**

<b>HUNTSVILLE OVERALL RESULTS</b>						
<b>OPINION STATEMENTS</b>	<b>Overall Total * (1-5 scale)</b>	<b>Strongly Agree ** 5</b>	<b>Somewhat Agree 4</b>	<b>Neutral 3</b>	<b>Somewhat Disagree 2</b>	<b>Strongly Disagree 1</b>
1. Traffic congestion was a problem in Huntsville highway before the bypass was opened.	4.1 (#2)	50% (19)	26% (10)	16% (6)	5% (2)	3% (1)
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Huntsville.	4.3 (#1)	40% (15)	42% (16)	13% (5)	3% (1)	3% (1)
3. I have gained business from outside Huntsville since the bypass opened.	1.9 (#10)			32% (12)	13% (5)	55% (21)
4. I have lost business from inside Huntsville since the bypass opened.	2.7 (#5)	8% (3)	5% (2)	53% (20)	8% (3)	26% (10)
5. I have considered relocating my business closer to the bypass.	1.8 (#11)		5% (2)	18% (7)	16% (6)	61% (23)
6. Since the construction of the bypass, I have considered relocating my business to a city other than Huntsville.	1.6 (#12)			16% (6)	21% (8)	63% (24)
7. The value of my property has increased as a result of the bypass opening.	2.5 (#7)		3% (1)	37% (14)	21% (8)	63% (24)
8. The value of my property has decreased as a result of the bypass opening.	2.7 (#5)	11% (4)	5% (2)	42% (16)	21% (8)	24% (9)
9. I have changed my advertising methods since the opening of the bypass.	2.5 (#7)	5% (3)	5% (3)	50% (19)	8% (3)	32% (12)
10. The bypass has been very beneficial for Huntsville.	4.0 (#3)	26% (10)	32% (12)	24% (9)	11% (4)	8% (3)
11. The bypass has been very beneficial to my business.	2.4 (#9)	3% (1)	5% (2)	40% (15)	16% (6)	37% (14)
12. Huntsville has become a more attractive place to live since the bypass opened.	3.7 (#4)	11% (4)	18% (7)	45% (17)	13% (5)	13% (5)

\* The box contains the average score with the overall favorable rank score of that score below.

\*\* The box contains the percentage of responses and the total number of responses for that choice in ( ) below

**TABLE K**

<b>HUNTSVILLE GROUP SUMMARY RESULTS</b>								
<b>OPINION STATEMENTS</b>	<b>Overall Totals 38*</b>	<b>Gas/ Convenience Stores 4</b>	<b>Restaurants 7</b>	<b>Small Retail Business 18</b>	<b>Medium Retail Business 4</b>	<b>Trucking 1</b>	<b>CPA/ Insurance 2</b>	<b>Banks 2</b>
1. Traffic congestion was a problem in Huntsville before the bypass opened.	4.1 #2**	4.8	3.4	4.2	4.0	5.0	2.0	5.0
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Huntsville.	4.3 #1	4.3	4.3	4.2	3.0	5.0	4.5	4.5
3. I have gained business from outside Huntsville since the bypass opening.	1.9 #10	2.3	1.1	1.8	1.8	1.0	2.0	3.0
4. I have lost business from inside Huntsville since the bypass opening.	2.7 #5	3.0	3.1	2.4	2.0	3.0	2.0	3.0
5. I have considered relocating my business closer to the bypass.	1.8 #11	1.0	1.7	1.9	1.8	3.0	2.0	1.0
6. Since construction of the bypass, I have considered relocating my business to a city other than Huntsville.	1.6 #12	1.0	1.7	1.4	1.0	3.0	2.0	1.0
7. The value of my property has increased as a result of the bypass opening.	2.5 #7	2.5	1.4	1.8	2.5	3.0	3.0	3.5
8. The value of my property has decreased as a result of the bypass opening.	2.7 #5	3.0	3.9	2.5	1.8	3.0	3.0	2.0
9. I have changed my advertising methods since the opening of the bypass.	2.5 #7	2.5	3.3	2.4	1.5	3.0	2.0	3.0
10. The bypass has been very beneficial for Huntsville.	4.0 #3	3.8	3.4	3.4	3.3	5.0	4.5	4.5
11. The bypass has been very beneficial for my business.	2.4 #9	3.3	1.9	1.9	2.3	1.0	3.0	3.5
12. Huntsville has become a more attractive place to live since the bypass opened.	3.7 #4	4.0	2.3	2.6	3.0	5.0	4.5	4.5

\* Number of businesses in category

\*\* Overall rank order of score

Table L on pages 34 and 35 contain the open-ended comments from Huntsville business owners. Once again, the respondents tended to answer more like local residents than business operators. Of the 72 total comments, 50 were positive and only one of those was a general comment relating to any business issues. And, 23 of these, nearly half, specifically mentioned something about fewer trucks in town. Six of the comments alluded to easier access to other areas, especially Fayetteville and Springdale.

The least liked comments were much more focused on the negative effects on businesses with 13 of the 22 comments relating in some way to local business effects. Still, most of these are more general than specific to one business.

TABLE L

THINGS LIKED MOST ABOUT THE HUNTSVILLE BYPASS	
1. Fewer large trucks in town.	26. Nice road.
2. Less traffic in town.	27. Possible less truck traffic on square.
3. Less people asking for directions.	28. Diversion of large truck traffic.
4. Through traffic around city.	29. Less truck traffic problems.
5. Time savings for through traffic.	30. Less RV traffic problems.
6. Better connect for workers in and out of town.	31. Less wrong way traffic on square.
7. Relieves 2 land pressure on through traffic.	32. Convenient.
8. It's faster if you want to bypass town.	33. Location.
9. It stops big trucks from passing through.	34. Big trucks coming through Huntsville.
10. When its all done it will be faster to go to Springdale or Fayetteville.	35. Less large trucks traveling through.
11. Less truck traffic.	36. Less heavy flow of traffic.
12. Easier to get on and off 412.	37. Cuts down on semi-trucks traveling through town.
13. Will divert some of the big trucks around town.	38. No semi-trucks in town.
14. Will be quicker for people working in Springdale to get to work.	39. Smoother road.
15. <b>It might bring in more industry.</b>	40. Less traffic congestion throughout town.
16. No trucks.	41. Absence of semis.
17. It has relieved truck traffic.	42. Less traffic congestion.
18. Trucks not going through town.	43. Trucks have better route.
19. Less traffic in Huntsville.	44. Ease of travel east and west.
20. Traffic congestion.	45. Keeps big trucks out of town.
21. Reroute 18-wheelers.	46. Makes traveling easier.
22. Keep trucks out of town.	47. Smooth roads.
23. Fewer trucks in town.	48. Less traffic in town.
24. Reduction of heavy truck traffic.	49. Keeps trucks out.
25. Slower traffic in downtown.	50. Safety traffic on bridges backed up.

**TABLE L** (continued)

<b>THINGS LIKED LEAST ABOUT THE HUNTSVILLE BYPASS</b>	
1. <b>My business has dropped off 100%.</b>	12. <b>Diversion of tourist traffic on/off access on 412W.</b>
2. Cost for short distances.	13. <b>Loss of tourist trade.</b>
3. Approaches not lighted and clear.	14. I don't like the turning lane off 412 at highway department exit—dangerous, should be exit ramp.
4. <b>It takes business away from town.</b>	15. <b>Would-be customers that normally drive through Huntsville don't.</b>
5. People don't get to see Huntsville.	16. <b>Tourists bypass Huntsville.</b>
6. <b>Taken away business.</b>	17. <b>Less traffic will hurt local business.</b>
7. <b>Fewer customers drop into town; they just bypass town and this results in lost business.</b>	18. <b>Lost business.</b>
8. Will result in more traffic on 412 going out of Springdale to lower parts of the state instead of going to Fort Smith then taking I-40.	19. <b>Tourist route around Huntsville.</b>
9. Poor intersection into Huntsville.	20. Buses can now route around Huntsville.
10. <b>Less tourist business.</b>	21. <b>Routes customers away from Huntsville.</b>
11. Exit signs not good.	22. Bypass is confusing—signs are not good.

## **CONCLUSIONS**

### **Original Study**

The study conclusions summarized below are presented in two sections, first, the original study and second, the follow-up study. Comparing the two findings presents some challenges. For example, exactly one-third as many businesses participated in the follow-up, 87 versus 29. Closed businesses were obviously not included in the follow-up, as well as new businesses. The overall level of interest in participating in the follow-up was much lower, also. Perhaps the impact of the bypass was simply not as important an issue after several years of experience and adjustments.

The databases compiled in this study are simply too small to support any rigorous statistical analysis for either the overall results or, especially, any one community. Such is the nature of the inherently small communities that are the basis for this study. However, both the surveys and personal interviews were comprehensive in scope for each community, and the results fairly consistent across all questions and communities. Therefore, it is not unreasonable to suggest some conclusions that could be of benefit to other similar communities faced with assessing the impact of a highway improvement that will bypass their local community and business district. Table M on page 38 provides a comparative description for both each community studied here and the overall study summary results. In addition, these conclusions contain the results of personal interviews with local public and civic officials.

The most significant overall finding is that local business owners also live in these communities and have some great difficulty separating their personal from their business opinions and experiences with the bypass in question. Most respondents strongly agreed that congestion was a problem and that the bypass has significantly reduced it, as evidenced by the responses to questions 1 and 2 on Table M. Neither do the business owners indicate they have any plans to relocate their businesses, either closer to the bypass or another town, as questions 5 and 6 show. These communities are the respondents' homes and they show no interest in relocating.



Overall, the businesses in all these communities indicate they are rather neutral about the impact of the bypass on their business, as reflected by the neutral, or average, scores on questions 4, 7, 8, and 11. Most business owners seem to conclude that they don't expect the value of their businesses to change very much as a result of the bypass. In other words, most businesses seem to expect "business as usual." That's not to suggest that certain businesses such as convenience stores and restaurants don't feel threatened, and justifiably so. A review of the comment summary in tables on pages 18, 25, and 34 in the earlier sections of this report reflect this general and predictable tendency. Many of these local businesses did indicate, however, they do benefit from less congestion and easier local access in and out of their businesses.

Most local employment in these communities will be in the retail or service sectors that depend primarily on the local population for their customer base. It is also safe to assume that these new bypasses will do little to help attract new industry or manufacturing into these small towns. Only Trumann, with a population of nearly 7,000, has any industrial or manufacturing presence. And, these industries were located in Trumann prior to the bypass construction. Trumann has the only full-time Chamber of Commerce director, who has an office in the City Hall. Small communities such as Hoxie or Huntsville generally lack the labor pool, both in numbers and skill levels, to support any significant industrial development. In addition, infrastructure issues such as water, energy, sewage and trash disposal, generally do not make these smaller communities attractive for industry. Non-profit rural water and electric co-operatives are the typical utility providers.

**TABLE M**

<b>COMPARATIVE SURVEY TOTALS</b>				
<b>OPINION STATEMENTS*</b>	<b>Trumann (Scale 1-5)</b>	<b>Hoxie (scale 1-5)</b>	<b>Huntsville (Scale 1-5)</b>	<b>Overall Score</b>
1. Traffic congestion was a problem in (Trumann/Hoxie/Huntsville) before the bypass was opened.	4.4 #2	4.6 #1	4.1 #2	4.3 #2
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in (Trumann, Hoxie, Huntsville).	4.6 #1	4.2 #2	4.3 #1	4.4 #1
3. Due to easier access to (Trumann/Hoxie/Huntsville) from other areas, I have gained business from outside (Trumann/Hoxie/Huntsville).	2.9 #6	1.8 #9 (tie)	1.9 #10	2.1 #10
4. Due to easier access to other areas, I have lost business from inside Trumann/Hoxie/Huntsville).	2.6 #9	2.8 #5	2.7 #5	2.7 #6
5. I have considered relocating my business closer to the bypass.	2.0 #12	1.4 #12	1.8 #11	1.8 #11
6. Since the construction of the bypass, I have considered relocating my business to a city other than (Trumann/Hoxie/Huntsville).	1.7 #11	1.6 #9 (tie)	1.6 #12	1.6 #12
7. The value of my property has increased as a result of the bypass opening.	2.5 #10	1.6 #9 (tie)	1.6 #12	2.3 #9
8. The value of my property has decreased as a result of the bypass opening.	2.9 #7	3.3 #3	2.7 #5	2.9 #5
9. I have changed my advertising methods since the opening of the bypass.	2.9 #9	3.1 #4	2.5 #7	2.7 #6
10. The bypass has been very beneficial to (Trumann/Hoxie/Huntsville).	3.8 #3	2.7 #7	4.0 #3	3.6 #3
11. The bypass has been very beneficial for my business.	2.9 #5	2.0 #8	2.4 #9	2.5 #8
12. (Trumann/Hoxie/Huntsville) has become a more attractive place to live since the bypass opened.	3.5 #4	2.8 #5	3.7 #4	3.4 #4

\*5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

Residential housing growth seems to be the primary economic growth factor for these small communities. The likelihood of any significant residential development is dependent on many factors, but the two most important are, first, the communities' self-sufficiency and, second, its proximity to larger urban areas. Self-sufficiency refers to the variety of shopping options available to residents that are necessary to generally conduct daily household affairs. These services include private sector services such as groceries, housewares, automotive, drug, hardware, banking, and primary medical care. In addition, public service such as fire and police protection, trash collection, utilities, and even public schools play a role in attracting residential development. All of these variables effect both the quality and cost of living considerations for new residents considering moving to a small community.

Employment opportunities for many residents, especially new ones, of these small communities are often "out-of-town." Residential development is much more likely where highway improvements involving the bypass provide easier access to larger communities that offer more and broader job opportunities. In addition, quicker access to these nearby urban areas make health care, educational, and entertainment services more readily available and convenient. This urban proximity and access, along with some minimum level of local shopping self-sufficiency, are, probably, the key determinants for these small communities' long-term survival and prosperity.

Local governance, or advocacy, is another issue effecting the economic development and destiny of these small communities. Governance for all three study sites include a part-time mayor, one city clerk, sometimes a part-time assistant, a police force of two or three officers with one or two cars, and a fire department often dependent on volunteers, and little or no local chamber of commerce or economic development community involvement. These small communities are ill-equipped to aggressively recruit and promote industrial development. Residential development is another matter. Inexpensive land availability, lower construction costs, relaxed zoning requirements, and less stringent building and development codes usually work to a small communities advantage, given some small level of self-sufficiency and proximity to jobs in nearby urban areas. Of course, many small communities experiencing residential growth for these reasons could do well to insure that this growth is orderly and does not put undue strains on city services or finances.

Such residential growth has been the case for both Trumann and Huntsville, but unfortunately not Hoxie. Both Trumann and Huntsville have an adequate level of self-

sufficiency, or retail diversity, and proximity to a nearby prosperous urban area—Jonesboro and Fayetteville/Springdale. Trumann and Huntsville have both benefitted from the bypass in two ways - less congestion downtown, and quicker access to the jobs and services of nearby urban areas. Such is not the case for Hoxie. A review of Hoxie's business inventory shown previously on page 22 is telling. There is no grocery store, no banking, drug, medical, clothing, or home supply services. Most local retail services depend primarily on farm trade. Personal interviews suggested most people in Hoxie shop in either Walnut Ridge or Jonesboro for daily home essentials. Hoxie was not self-sufficient in any way prior to the bypass opening, and is unlikely to become so. Hoxie will be even more threatened by growth and annexation in nearby Walnut Ridge, which is much more likely than Hoxie to emerge as a "bedroom" community for Jonesboro once the U.S. 63 and U.S. 67 highway improvements are completed.

## **FOLLOW-UP SURVEY**

In the spring and summer of 2003, follow-up visits, interviews, and surveys were conducted in each of the original three study communities. The purpose of these follow-up activities was to look for any changes in the opinions of business owners and compare current local business activity to that present two or three years earlier when the original surveys were conducted.

Our follow-up activities disclosed several issues that could compromise the comparable integrity of the two sets of data. First, fewer of the original local business owners participated. A few had closed, but most of those not responding were apparently less concerned now about the bypass impact than they were originally. Those businesses that had adjusted over time, or were not affected, and told us they were less interested in participating in the follow-up. If this were true, those businesses following up with us were probably more likely to have been affected by the bypass, and, most likely, in a negative way.

Another issue for the follow-up study was the length of time the bypass had been open. Trumann's bypass had been open for nearly seven years, while Huntsville's and Hoxie's about two years. Trumann has had nearly three times as long to adjust to the bypass as either of the other two much smaller communities.

Still, the follow-up surveys and inventories produced some interesting and persuasive results. Table N on page 42 contains the follow-up survey results for each

town. The most conclusive and consistent responses had not changed. The responses to questions 1 and 2 still most strongly suggest that the congestion problem had improved. These two questions were still the two highest scoring responses. Questions 5 and 6 were the two lowest scoring responses and reconfirmed that these local business owners showed little or no interest in relocating. Most other responses were more neutral in value, suggesting the effect of the bypass was of little concern to these respondents. Questions 7 and 8 indicate these businesses do not feel the value of their business has been effected much by the bypass.

Table O on page 43 compares the original survey results with the follow-up survey. One observation stands out. In every case but one, follow-up responses were either marginally less favorable (8 of 12) or no higher than the original survey results (3 of 12). The reason for this result is certainly inconclusive due, in some part, to the participant and time frame issues mentioned earlier. But these results do suggest that these respondents feel no better about the bypasses impact now than when it first opened several years earlier. A total of 87 surveys made up the original results, and only 29 surveys were used to compile the follow-up results.

**TABLE N**

<b>COMPARATIVE FOLLOW-UP SURVEY TOTALS</b>			
<b>OPINION STATEMENTS</b>	<b>TRUMANN (Scale 1-5)</b>	<b>HOXIE (Scale 1-5)</b>	<b>HUNTSVILLE (Scale 1-5)</b>
1. Traffic congestion was a problem in (Trumann/Hoxie/Huntsville) before the by-pass was opened.	4.1 #2	3.8 #2	4.4 #1
2. The by-pass opening has resulted in a noticeable reduction in the amount of congestion in (Trumann/Hoxie/Huntsville).	4.1 #1	4.7 #1	4.1 #2
3. Due to easier access to (Trumann/Hoxie/Huntsville) from other areas, I have gained business from outside Trumann/Hoxie/Huntsville.	2.5 #8	2.4 #6	1.8 #11
4. Due to easier access to other areas, I have lost business from inside (Trumann/Hoxie/Huntsville).	3.5 #3	2.4 #6	3.0 #3
5. I have considered relocating my business closer to the by-pass.	1.9 #12	2.0 #11	1.9 #10
6. Since the construction of the by-pass, I have considered relocating my business to a city other than (Trumann/Hoxie/Huntsville).	2.4 #10	1.5 #12	1.4 #12
7. The value of my property has increased as a result of the by-pass opening.	2.1 #11	2.4 #6	2.3 #8
8. The value of my property has decreased as a result of the by-pass opening.	2.9 #5	2.3 #9	3.0 #3
9. I have changed my advertising methods since the opening of the by-pass.	2.8 #7	2.0 #10	2.9 #5
10. The by-pass has been very beneficial to (Trumann/Hoxie/Huntsville).	3.0 #4	3.4 #3	2.8 #6
11. The by-pass has been very beneficial for my business.	2.5 #8	2.6 #5	2.0 #9
12. (Trumann/Hoxie/Huntsville) has become a more attractive place to live since the by-pass opened.	2.9 #5	2.8 #4	2.7 #7

\*The rank order of the response scores.

5 - Strongly Agree

3 - Neutral

1 - Strongly Disagree

4 - Somewhat Agree

2 - Somewhat Disagree



**TABLE O**

<b>ORIGINAL SURVEY AND FOLLOW-UP SCORE COMPARISONS</b>		
<b>OPINION STATEMENTS</b>	<b>ORIGINAL AVERAGE (Scale 1-5)</b>	<b>FOLLOW-UP AVERAGE (Scale 1-5)</b>
1. Traffic congestion was a problem in (Trumann/Hoxie/Huntsville) before the bypass was opened.	4.3	4.2
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in (Trumann/Hoxie/Huntsville).	4.4	4.2
3. Due to easier access to (Trumann/Hoxie/Huntsville) from other areas, I have gained business from outside (Trumann/Hoxie/Huntsville).	2.1	2.1
4. Due to easier access to other areas, I have lost business from inside (Trumann/Hoxie/Huntsville).	2.7	3.1
5. I have considered relocating my business closer to the bypass.	1.8	1.9
6. Since the construction of the bypass, I have considered relocating my business to a city other than (Trumann/Hoxie/Huntsville).	1.7	1.8
7. The value of my property has increased as a result of the bypass opening.	2.3	2.3
8. The value of my property has decreased as a result of the bypass opening.	3.0	2.8
9. I have changed my advertising methods since the opening of the bypass.	2.7	2.7
10. The bypass has been very beneficial to (Trumann/Hoxie/Huntsville).	3.6	3.0
11. The bypass has been very beneficial for my business.	2.5	2.3
12. (Trumann/Hoxie/Huntsville) has become a more attractive place to live since the bypass opened.	3.4	2.8

\*The rank order of the response scores.

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

In addition to the follow-up surveys, business openings and closings were determined for Trumann and Hoxie, where the bypasses had been in place for at least 2 years—almost 7 in Trumann's case. The summary of these openings and closings are listed in Table P on page 45. The pattern of openings and closings in Trumann is rather encouraging. Twenty-two new businesses opened during the three year period between the original study and the follow-up. All but three are typical of non-travel dependent businesses where markets are local and are the types of businesses that support a community's self-sufficiency.

Three of the new businesses (numbers 17, 18, 19) are located at the north access interchange on the new bypass. Two convenience stores downtown did close—one for family-related reasons. The downtown Citgo was relocated to the bypass and ownership changed. The motel under construction during the survey is now open. In addition, Wal-Mart is building a new Supercenter on the bypass to replace the old Wal-Mart in downtown Trumann. This store is about twice as large as the old store and will employ about twice as many people. This new Wal-Mart, whose relocation and expansion can be attributed in a significant way to the bypass, poses more of a threat to small business owners in Trumann than the relocation of highway traffic ever did. Fortunately for Trumann, every new business listed on Table P is inside the city limits and collects city sales taxes, where appropriate. According to local city officials, none of the seven closings could be directly attributable to the bypass opening, even the three service stations. In addition, Gibson Guitar Company recently acquired two existing industries in Trumann and expects to increase local industrial employment.

**TABLE P**

<b>TRUMANN FOLLOW-UP BUSINESS INVENTORIES</b>	
<b>NEW BUSINESSES</b>	<b>CLOSED BUSINESSES</b>
1. Dollar General 2. Burger King (formerly Hardee's) 3. Movie Gallery 4. Pennzoil Fast Lube 5. Trinity Beauty Supply Store 6. Furniture & Appliances Now (FAN) 7. O'Reilly Auto Parts 8. Action Medical Supply 9. Couch's Barbecue 10. Magic Moments Bridal Shop 11. Willow Pointe Inn Motel 12. Lowery's Nursery & Landscaping 13. Taqueria Don Juan's Restaurant 14. Ray Ray's Antiques 15. Jenny's Custom Framing 16. LaNita's Boutique 17. Citgo 18. BP Station 19. Motel (previously under construction)	1. Exxon (closed, death in family) 2. Massey's Fast Track Station (closed, other business interests in Marked Tree) 3. Citgo (closed, approx. 2 years) 4. Payless Grocery (closed, not due to bypass, owner went into trucking business) 5. Pizza Hut (closed, lighting issues, 25-year old building) 6. D&P Furniture (closed, family illness) 7. Autozone (closed)
	<b>NEW OWNERSHIP</b>
	1. Baldwin Piano & Organ Company (purchased by Gibson Guitar Company) 2. Delta Wood Products (purchased by Gibson Guitar Company)

**TABLE P** (continued)

<b>HOXIE FOLLOW-UP BUSINESS INVENTORIES</b>	
<b>NEW BUSINESSES</b>	<b>CLOSED BUSINESSES</b>
1. Down's Disposal	1. Ed's Tire Service (closed prior to bypass opening)
2. Dollar General Store	2. Clark's Service Station (closed)
3. G&H Equipment (repairs, lawnmowers, etc.)	3. Heard's Market (relocated)
4. Fiddler's Catfish/Antique Shop	4. The Ammo Shop (relocated)
5. Exxon (outside Hoxie, on new bypass)	5. Subway (relocated to Plaza, under new ownership)
6. Antique Shop (outside Hoxie, on new bypass)	6. Jones Market (now a BP Station)

Hoxie has not been so fortunate during the two-plus years between surveys. Only one new business collects any significant city sales tax, Dollar General, while every other closing or relocation has reduced Hoxie's sales tax base. The three new businesses (listed

4, 5, and 6) are located outside the city limits, as are the three relocations. Each of these three new businesses, and three relocations can be directly attributed to the bypass, with no direct benefit to Hoxie. None collect sales tax, and none contribute to Hoxie's self-sufficiency.

Huntsville was not included in the follow-up business primarily because of the relatively short time the bypass had been opened between surveys. City officials told us there had been very little turnover in businesses, and the only significant new business opening was the new convenience store outside the city limits on the eastern end of the bypass.

### **Follow-up Comments**

Table Q on page 47 lists all the unedited follow-up open-ended comments for each town. The bolded comments are those that are more business related than personal in nature. The original open-ended comments for each town can be found on pages 18, 25, and 34, respectively. There are several noticeable response differences in the original and follow-up comments. As with the follow-up survey responses, the follow-up comments are generally slightly less favorable than the original ones. For example, in every case there are many more negative comments relative to positive ones on the follow-up comments, and practically all negative comments were business, rather than personal, in nature. In Trumann's case, eleven of the twelve negative comments were business related, versus twelve of twenty-one on the original survey. Huntsville's response pattern is similar. Thirteen of fourteen negative comments are business related versus thirteen of twenty-two on the original survey. This more negative and more business-related response pattern may suggest that business owners have simply had more time to consider and evaluate the bypasses' impact on their business and are now less positive about the bypasses effect than when it first opened. But positive comments continue to outnumber negative ones, and the majority of positive responses continue to be about personal, rather than business experiences.

TABLE Q

FOLLOW-UP COMMENTS	
TRUMANN POSITIVE COMMENTS	TRUMANN NEGATIVE COMMENTS
<ul style="list-style-type: none"> <li>• It saves time.</li> <li>• You get to Jonesboro faster.</li> <li>• It isn't so congested.</li> <li>• <b>Makes Trumann more attractive to industry.</b></li> <li>• Less heavy traffic in town.</li> <li>• <b>Growth of west side of town.</b></li> <li>• <b>More home sales to out-of-town buyers.</b></li> <li>• Less travel time to Jonesboro</li> <li>• Less travel time to other cities.</li> <li>• Took the thru trucks from city.</li> <li>• Big trucks gone.</li> <li>• Movement much better.</li> <li>• <b>Better access for customers.</b></li> <li>• Can get on highway better.</li> <li>• <b>My customers can get to my shop easier.</b></li> <li>• Not as much out-of-town traffic.</li> <li>• <b>Easier for transportation of product.</b></li> <li>• Quicker access to other areas.</li> <li>• 70 MPH speed limit.</li> <li>• No stops to I-55.</li> <li>• Less traffic congestion.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>It hurts business.</b></li> <li>• <b>You don't get business from other towns.</b></li> <li>• <b>Your revenue decreases.</b></li> <li>• The pond we have on our farm as a result of selling dirt for construction of the bypass.</li> <li>• <b>Hurt some local convenience stores' business.</b></li> <li>• <b>Makes it easier for people to bypass Trumann merchants.</b></li> <li>• <b>Local businesses are moving.</b></li> <li>• <b>Local businesses are closing.</b></li> <li>• <b>Lack of drive-through traffic.</b></li> <li>• <b>Business out of sight.</b></li> <li>• <b>Lack of traffic by business.</b></li> <li>• <b>20% loss of business.</b></li> </ul>
HOXIE POSITIVE COMMENTS	HOXIE NEGATIVE COMMENTS
<ul style="list-style-type: none"> <li>• Convenience in getting to bypass.</li> <li>• The diminished congestion at light in Hoxie of heavy trucks.</li> <li>• Not as many semi's.</li> <li>• Get out on Hoxie's main roads easier.</li> <li>• Not as long wait at red light.</li> <li>• Getting to Pocahontas.</li> <li>• Bypassing railroad tracks.</li> <li>• Less traffic in summer &amp; weekends.</li> <li>• Increases traffic.</li> </ul>	<ul style="list-style-type: none"> <li>• The approaches are dangerous.</li> <li>• <b>Does not allow tourists to enter.</b></li> <li>• <b>Has hurt several businesses.</b></li> <li>• No four-lane to Little Rock.</li> <li>• No four-lane to Jonesboro.</li> </ul>

**TABLE Q** (continued)

HUNTSVILLE POSITIVE COMMENTS	HUNTSVILLE NEGATIVE COMMENTS
<ul style="list-style-type: none"> <li>• Shorter distance to Springdale.</li> <li>• Not all big trucks have to come through town and get stranded on the bridge.</li> <li>• Less traffic on square.</li> <li>• Less noise on square.</li> <li>• Less feathers on square (from trucks hauling poultry)</li> <li>• Much help on east-west traffic.</li> <li>• <b>Has helped our business, I believe.</b></li> <li>• Less 18-wheelers through town.</li> <li>• It is a lot easier to get around town since the bypass.</li> <li>• Less congestion in Huntsville.</li> <li>• <b>Easier to get in &amp; out of my business.</b></li> <li>• Much easier for travelers.</li> <li>• Less traffic.</li> <li>• Not so many trucks.</li> <li>• Less congestion.</li> <li>• Easier &amp; faster to get to Springdale.</li> <li>• It relieves some big truck traffic.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Don't get out-of-town business now.</b></li> <li>• <b>People working out of town don't stop in now because they go on home, instead of driving through town.</b></li> <li>• No help on north-south truck traffic.</li> <li>• <b>Some travelers bypass us.</b></li> <li>• Some people have got killed due to how it was designed.</li> <li>• <b>Cut down on traffic.</b></li> <li>• <b>New people don't stop.</b></li> <li>• <b>Slowed business down.</b></li> <li>• <b>Less customer count in Huntsville.</b></li> <li>• <b>Creates more competition for development from Huntsville.</b></li> <li>• <b>Small businesses in Huntsville will eventually close.</b></li> <li>• <b>No tourist traffic.</b></li> <li>• <b>No signs on bypass steering folks to our business, like on the Interstate. We have explored all avenues to get "Huntsville Business District" (sign). No one will help.</b></li> <li>• <b>The talk is all new businesses, schools, etc. will move that way, thus destroying existing Huntsville businesses.</b></li> </ul>



## RECOMMENDATIONS

The very nature of the three small, rural communities in this study presents limited opportunities to generate large databases sufficient to reliably test statistically and provide any conclusive predictive value for estimating the impact of future bypass projects on other small towns. In our study, three communities provided a total of just 87 businesses with nearly half in one community - Huntsville. It is also paradoxical that Huntsville's population is, by far, the smallest of the three towns. In addition, the various types of businesses and services in each town can vary widely and make any relevant accumulation of data from different locations difficult. There are also significant regional economic and socio-cultural differences among these small towns. In fact, the nature and general condition of the regional economy will determine the likely economic prosperity of these small towns, and a new bypass will do little to change that, either positively or negatively.

Still, there is some useful cumulative anecdotal value found in the interviews, surveys, and business inventories that suggest some things both highway departments and local communities can do to prepare for the consequences of bypass projects. There is no doubt that a new bypass can change some aspects of both the economic and cultural nature of a small community. Some residents and businesses will be effected more than others, and in different ways. The conclusions in this study strongly indicate that state highway officials can safely suggest to other similar small communities that the most significant change to expect from a new bypass is an improvement in the residential quality of life that will result from re-routing most intercity travel, especially trucks, out of the center of town or local neighborhoods. Therefore, a number of non-residents might find the town a more attractive place to live as a result of the highway improvements, and many local businesses can expect these new residents to now shop locally, also. In addition, the only significant new business a small town can safely expect to gain as a result of a new bypass is one or two convenience stores adjacent to the new highway. Industrial development is not likely, unless there is already existing industry there.

The intent of the following recommendations is to suggest ways small towns can understand the likely nature of changes brought about by highway improvements and better prepare for them. First, the community should create a transition team or task force to prepare businesses and residents for the bypass opening. This team should include local city officials, business owners, residential or neighborhood members, and an "ex-officio" highway department official. This team could assist both the local community and

public agency officials in evaluating the likely effect on the local community, once the design and location of the bypass has been determined.

One of the first things this team should do is inventory and classify all the local businesses in a manner similar to ones conducted in this study. This inventory should generally determine the likelihood and type of impact the bypass will have on each local business. One very helpful method for conducting this inventory would be to contact similar small communities that have had recent experience and gone through a similar process with bypasses. For example, two bypass projects currently being planned are for Tyronza in eastern Poinsett County and Vilonia in Faulkner County. In the context of this study, the business inventory and economy of Tyronza would be more comparable to Hoxie, while Vilonia's would be much more comparable to Huntsville, or Trumann. Tyronza, like Hoxie, is a small farm town with limited retail services. Vilonia's business inventory--retail diversity with no manufacturing, is similar to Huntsville, and its business district is more a corridor through town, like Trumann. A potential role for the highway department officials would be to help local team members identify comparable communities where improvements have been constructed.

A long term statewide benefit from this process would be the accumulation of a larger and larger number of small communities who have inventoried local businesses, documented the local impact of bypasses, and, therefore are available to provide assistance to other small towns in the future. For example, the civic and business leaders in Vilonia or Tyronza could be of great assistance to another similar town 5 or 6 years from now. Individual business owners could also benefit from discussions with similar business owners in towns already experiencing a bypass opening. Several informal calls to individual business owners in Trumann found them most willing to share their experiences with similar businesses in other towns. Highway department officials could consider establishing a "clearinghouse" to help facilitate local officials and businesses contacting each other.

Finally, local civic officials should be encouraged to contact other public agencies who might provide some assistance to small towns in preparing for the opening of bypasses. These agencies may have access to resources unavailable to state highway officials. A partial list would include:



- The appropriate Regional Planning and Development District Office
- County Extension Services
- Nearby Colleges and Universities
- The Arkansas Municipal League
- The County Judge's Association
- Arkansas Rural Services
 

Bruce Campbell, Director	1-888-RURALAR
Department of Rural Services	<a href="mailto:ruralar@gte.net">ruralar@gte.net</a>
101 East Capitol, Suite 202	<a href="http://www.state.ar.us/drs/index.html">www.state.ar.us/drs/index.html</a>
Little Rock, AR 72201	
- Rural Development Administration
 

John Allen	
Arkansas State Director	501-301-3200
USDA Rural Development	501-301-3278 (Fax)
700 West Capitol, Rm. 3416	<a href="mailto:John.Allen@ar.usda.gov">John.Allen@ar.usda.gov</a>
Little Rock, AR 72201	<a href="http://www.rurdev.usda.gov/ar/index.htm">Http://www.rurdev.usda.gov/ar/index.htm</a>
- Economic Development Agency
 

Sam Spearman	
Arkansas State Director	501-324-5637
EDA	501-324-5638 (Fax)
700 West Capitol, Rm. 2509	
Little Rock, AR 72201	<a href="http://www.eda.gov/AboutEDA/Regions.xml">Http://www.eda.gov/AboutEDA/Regions.xml</a>

# **APPENDIX A**

## **Survey**

## **ASU BY-PASS SURVEY**

### **Survey Instructions**

This is an opinion statement survey. There are no right or wrong answers. Simply check the box that most accurately reflects your opinion about the 12 questions. Then give some thought to the 2 or 3 things you like most and least about the by-pass. Please place the completed survey in the provided envelope and return it to the City Clerk's office. No one's identity will be revealed in the final report. Your privacy will be protected. However, we would like to share the overall findings with your local city officials or Chamber of Commerce when the project is completed.

If you have any questions, please contact me at:

Joe Horsley, PH.D.  
Director  
Transportation Management Program  
Arkansas State University College of Business  
P.O. Box 59  
State University, AR 72467

Telephone: (870) 972-2097  
Fax: (870) 972-2467  
E-mail: [horsley@astate.edu](mailto:horsley@astate.edu)

Please have the local business owner, or other appropriate person, complete the attached survey. It's purpose is to help us document the impact the new by-pass is likely to have on your business and local community.

Thank you for your time. We appreciate your help.

## ASU Transportation Management Program Bypass Impact Survey

NAME OF BUSINESS \_\_\_\_\_ YEARS IN BUSINESS \_\_\_\_\_

Opinion Statements	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Trumann before the by-pass was opened.					
2. The by-pass opening has resulted in a noticeable reduction in the amount of congestion in Trumann.					
3. I have gained business from outside Trumann since the by-pass opened.					
4. I have lost business from inside Trumann since the by-pass opened.					
5. I have considered relocating my business closer to the by-pass since it opened.					
6. I have considered relocating my business to a city other than Trumann since the by-pass opened.					
7. The value of my business has increased as a result of the by-pass opening.					
8. The value of my business has decreased as a result of the by-pass opening.					
9. I have changed my advertising methods since the opening of the by-pass.					
10. The by-pass has been very beneficial to Trumann.					
11. The by-pass has been very beneficial for my business.					
12. Trumann has become a more attractive place to live since the by-pass opened.					

13. Estimate the percentage change in sales that your business has experienced due to the new by-pass.

14. Estimate the percentage change in employees that your business has experienced due to the new by-pass.

15. List the 3 things you like most about the by-pass

---



---



---

16. List the 3 things you like least about the by-pass.

---



---



---



**APPENDIX B**  
**Survey Result for Hoxie and Huntsville**  
**by Route Segments**

## HOXIE SEGMENT I

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Hoxie on highway before the bypass opened.	5.0	4				
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Hoxie.	5.0	4				
3. I have gained business from outside Hoxie since the bypass opened.	2.8		1	2		1
4. I have lost business inside Hoxie since the bypass opened.	3.3	1	1		1	3
5. I have considered relocating my business closer to the bypass.	1.3				1	3
6. Since the construction of the bypass, I have considered relocating my business to a city other than Hoxie.	1.3				1	3
7. The value of my business has increased as a result of the bypass opening.	2.0			2		2
8. The value of my business has decreased as a result of the bypass opening.				1	1	2
9. I have changed my advertising methods since the opening of the bypass.	2.0			2		2
10. The bypass has been very beneficial for Hoxie.	3.3	1	1	1		1
11. The bypass has been very beneficial for my business.	2.5			3		1
12. Hoxie has become a more attractive place to live since the bypass opened.	3.0		1	2	1	

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

## HOXIE SEGMENT II

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Hoxie on highway before the bypass opened.	3.7	2	1	3	2	1
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Hoxie.	4.2	7			1	1
3. I have gained business from outside Hoxie since the bypass opened.	2.3	3				6
4. I have lost business inside Hoxie since the bypass opened.	2.9	3		2	1	3
5. I have considered relocating my business closer to the bypass.	2.1	2		1		6
6. Since the construction of the bypass, I have considered relocating my business to a city other than Hoxie.	3.2	3		3		3
7. The value of my business has increased as a result of the bypass opening.	2.2	2		1	1	5
8. The value of my business has decreased as a result of the bypass opening.	3.4	5		1		3
9. I have changed my advertising methods since the opening of the bypass.	3.1	3	1	2		3
10. The bypass has been very beneficial for Hoxie.	2.2	1	1			7
11. The bypass has been very beneficial for my business.	2.3	2		2		5
12. Hoxie has become a more attractive place to live since the bypass opened.	1.4	1				8

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

### HOXIE SEGMENT III

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Hoxie on highway before the bypass opened.	4.8	4	1			
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Hoxie.	4.6	3	2			
3. I have gained business from outside Hoxie since the bypass opened.	2.2	1	2			2
4. I have lost business inside Hoxie since the bypass opened.	2.4		1	2		2
5. I have considered relocating my business closer to the bypass.	2.0		1	1		3
6. Since the construction of the bypass, I have considered relocating my business to a city other than Hoxie.	2.0		1	1		3
7. The value of my business has increased as a result of the bypass opening.	2.0			2	1	1
8. The value of my business has decreased as a result of the bypass opening.	3.4	1	2	1		1
9. I have changed my advertising methods since the opening of the bypass.	3.0		2	2		1
10. The bypass has been very beneficial for Hoxie.	3.0	1	1	1	1	1
11. The bypass has been very beneficial for my business.	2.6		1	2	1	1
12. Hoxie has become a more attractive place to live since the bypass opened.	2.6		1	2	1	1

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

## HUNTSVILLE SEGMENT I

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Huntsville on highway before the bypass opened.	4.3	10	6	2		1
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Huntsville.	4.3	7	10	2		
3. I have gained business from outside Huntsville since the bypass opened.	1.9			8	1	10
4. I have lost business inside Huntsville since the bypass opened.	2.3			12	1	6
5. I have considered relocating my business closer to the bypass.	1.5		1	3	1	14
6. Since the construction of the bypass, I have considered relocating my business to a city other than Huntsville.	1.3			3		16
7. The value of my business has increased as a result of the bypass opening.	2.4		1	11	1	6
8. The value of my business has decreased as a result of the bypass opening.	2.2			11	1	7
9. I have changed my advertising methods since the opening of the bypass.	2.1			10		9
10. The bypass has been very beneficial for Huntsville.	3.7	6	5	6	1	1
11. The bypass has been very beneficial for my business.	2.4		1	11	2	5
12. Huntsville has become a more attractive place to live since the bypass opened.	3.3	3	4	10		2

Rank order of response scores:

- 5 - Strongly Agree
- 4 - Somewhat Agree
- 3 - Neutral
- 2 - Somewhat Disagree
- 1 - Strongly Disagree

## HUNTSVILLE SEGMENT II

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Huntsville on highway before the bypass opened.	4.4	7	1	1	1	
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Huntsville.	4.2	4	5		1	
3. I have gained business from outside Huntsville since the bypass opened.	1.7			2	3	5
4. I have lost business inside Huntsville since the bypass opened.	2.4	1		4	2	3
5. I have considered relocating my business closer to the bypass.	1.8			3	2	5
6. Since the construction of the bypass, I have considered relocating my business to a city other than Huntsville.	1.6			2	6	4
7. The value of my business has increased as a result of the bypass opening.	1.8			1	5	3
8. The value of my business has decreased as a result of the bypass opening.	2.3		1	3	6	
9. I have changed my advertising methods since the opening of the bypass.	2.7		2	4	3	1
10. The bypass has been very beneficial for Huntsville.	3.3	1	5	1	2	1
11. The bypass has been very beneficial for my business.	2.0	1		2	2	5
12. Huntsville has become a more attractive place to live since the bypass opened.	2.3	1	1	3	4	1

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

### HUNTSVILLE SEGMENT III

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Huntsville on highway before the bypass opened.	3.4	2	3	3	1	
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Huntsville.	3.8	4	1	3		1
3. I have gained business from outside Huntsville since the bypass opened.	1.6			2	1	6
4. I have lost business inside Huntsville since the bypass opened.	3.4	2	2	4		1
5. I have considered relocating my business closer to the bypass.	1.9		1	1	3	4
6. Since the construction of the bypass, I have considered relocating my business to a city other than Huntsville.	1.4			1	2	6
7. The value of my business has increased as a result of the bypass opening.	1.7			2	2	5
8. The value of my business has decreased as a result of the bypass opening.	3.2	3	1	2	1	2
9. I have changed my advertising methods since the opening of the bypass.	3.0	2		5		2
10. The bypass has been very beneficial for Huntsville.	3.5	3	2	2	1	1
11. The bypass has been very beneficial for my business.	2.0		1	2	2	4
12. Huntsville has become a more attractive place to live since the bypass opened.	2.7		2	4	1	2

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree



### OVERALL FOLLOW-UP TOTALS FOR TRUMANN

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Trumann on highway before the bypass opened.	4.1	5	3		2	
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Trumann.	4.1	5	1	2	1	
3. I have gained business from outside Trumann since the bypass opened.	2.5	2		3	1	4
4. I have lost business inside Trumann since the bypass opened.	3.5	3	2	3	1	1
5. I have considered relocating my business closer to the bypass.	1.9			4	1	5
6. Since the construction of the bypass, I have considered relocating my business to a city other than Trumann.	2.4	2		3		5
7. The value of my business has increased as a result of the bypass opening.	2.1		1	3	2	4
8. The value of my business has decreased as a result of the bypass opening.	2.9	2	1	3	2	2
9. I have changed my advertising methods since the opening of the bypass.	2.8		1	7	1	1
10. The bypass has been very beneficial for Trumann.	3.0	1	4	2		3
11. The bypass has been very beneficial for my business.	2.5	1	2	3		4
12. Trumann has become a more attractive place to live since the bypass opened.	2.9	1	3	3		3

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

### OVERALL FOLLOW-UP TOTALS FOR HOXIE

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Hoxie on highway before the bypass opened.	3.8	2	2		1	
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Hoxie.	4.8	3	1			
3. I have gained business from outside Hoxie since the bypass opened.	2.4	1		2		2
4. I have lost business inside Hoxie since the bypass opened.	2.4	1		2		1
5. I have considered relocating my business closer to the bypass.	2.0			2		2
6. Since the construction of the bypass, I have considered relocating my business to a city other than Hoxie.	1.5			1		3
7. The value of my business has increased as a result of the bypass opening.	2.4	1		2		2
8. The value of my business has decreased as a result of the bypass opening.	2.3		1	1		2
9. I have changed my advertising methods since the opening of the bypass.	2.0			2		2
10. The bypass has been very beneficial for Hoxie.	3.4	1	1	2	1	
11. The bypass has been very beneficial for my business.	2.6	1		2		2
12. Hoxie has become a more attractive place to live since the bypass opened.	2.8	1		2	1	1

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

## OVERALL FOLLOW-UP TOTALS FOR HUNTSVILLE

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Trumann on highway before the bypass opened.	4.4	6	7	1		
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Trumann.	5.6	5	5	1	1	
3. I have gained business from outside Trumann since the bypass opened.	1.8	1		3	1	9
4. I have lost business inside Trumann since the bypass opened.	3.0	4	1	3	3	3
5. I have considered relocating my business closer to the bypass.	1.9	1	1	3		9
6. Since the construction of the bypass, I have considered relocating my business to a city other than Trumann.	1.4			3		11
7. The value of my business has increased as a result of the bypass opening.	2.3		2	6		6
8. The value of my business has decreased as a result of the bypass opening.	3.0	3	1	5	3	2
9. I have changed my advertising methods since the opening of the bypass.	2.9		3	8	1	2
10. The bypass has been very beneficial for Trumann.	2.8		5	4	2	3
11. The bypass has been very beneficial for my business.	2.0		2	4		8
12. Trumann has become a more attractive place to live since the bypass opened.	2.7		4	5	2	3

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

## **Appendix C**

### **Follow-up Survey Results**

### OVERALL FOLLOW-UP TOTALS FOR TRUMANN

OPINION STATEMENTS	Overall Total (1-5 Scale)	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
1. Traffic congestion was a problem in Trumann on highway before the bypass opened.	5.0	4.0				
2. The bypass opening has resulted in a noticeable reduction in the amount of congestion in Trumann.	5.0	4.0				
3. I have gained business from outside Trumann since the bypass opened.	2.8		1.0	2.0		1.0
4. I have lost business inside Trumann since the bypass opened.	3.3	1.0	1.0		1.0	3.0
5. I have considered relocating my business closer to the bypass.	1.3				1.0	3.0
6. Since the construction of the bypass, I have considered relocating my business to a city other than Trumann.	1.3				1.0	3.0
7. The value of my business has increased as a result of the bypass opening.	2.0			2.0		2.0
8. The value of my business has decreased as a result of the bypass opening.				1.0	1.0	2.0
9. I have changed my advertising methods since the opening of the bypass.	2.0			2.0		2.0
10. The bypass has been very beneficial for Trumann.	3.3	1.0	1.0	1.0		1.0
11. The bypass has been very beneficial for my business.	2.5			3.0		1.0
12. Trumann has become a more attractive place to live since the bypass opened.	3.0		1.0	2.0	1.0	

Rank order of response scores:

5 - Strongly Agree

4 - Somewhat Agree

3 - Neutral

2 - Somewhat Disagree

1 - Strongly Disagree

## **APPENDIX D**

### **Bypass Impact Criteria for Small Towns to Consider**

## **Bypass Impact Criteria for Small Towns to Consider**

Listed below are five criteria that local officials should consider when preparing for the effects of a nearby highway improvement project on their small rural town. They are, in a general order of importance:

1. Local economic conditions
2. Local economic base/diversity
3. Isolation factor
4. Local governance/city services
5. Traffic management effect

### **Local Economic Conditions**

This criteria may be both the most simple and most important to understand. The prevailing economic conditions that existed in the county or region prior to the improvement will generally be the same conditions after the improvement is in place. Local population trends, employment rates, household income, and other demographic data won't change much, if at all, after the highway improvement opens. The project will not create any beneficial economic windfall, but neither will it destroy the local community. Local officials should monitor these generally available economic indicators, both prior to and after the improvement opening. This process should help confirm for local officials that the general impact will be nominal, at best.

### **Local Economic Base/Diversity**

An inventory of local business activity should give local officials a better understanding of the self-sufficiency of their town. Self-sufficiency means the ability of local residents to shop for and obtain most of the goods and services necessary to maintain a home. This inventory will include both the counting and classifying of every business in town, especially locally owned ones. Typical classes of local businesses to look for include:



groceries	banking
household supplies	financial/accounting
automotive maintenance/repair	insurance
primary health care	floral/gift
ambulance service	barber/beauty shop
residential hardware	recreation

These services, along with other city services discussed later in this section, will help determine the likelihood of new residential interest and even the prospects of attracting new business or industry to town. The more self-sufficient a small town, the more likely it is to benefit from the highway improvement, and sadly, vice-versa.

### **Isolation Factor**

There are two issues to consider involving isolation. First, the local business district will become more remote and isolated from intercity travelers. While certain businesses such as gasoline, traffic-dependent restaurants, or tourist/novelty shops are likely to be negatively effected; this isolation also helps eliminate congestion, parking problems, long waits at traffic signals, and heavy truck traffic. Non-traffic dependent businesses and local residents all benefit by being more remote from intercity traffic that has been re-routed away from town. Non-traffic dependant businesses will typically be the vast majority of all businesses, especially in more self-sufficient towns.

The other isolation factor to consider is a small town's access to nearby urban areas and the jobs and services available there. In this instance, the small town is now less isolated, or remote, than before. Faster and safer travel to nearby urban areas will be a primary determinant for renewed interest in living in a small town. Current residents working out of town are now less likely to move away, and new residents more likely to move into town. Small towns with improved access to urban areas, given a baseline of self-sufficiency, will, more than any other effect enjoy an increase in local economic activity caused by residential/housing growth.

### **Local Governance/City Services**

Local officials need to evaluate the potential impact on city services and finances. For example, to the extent that new residential growth is expected, what new demand on

police, fire protection, street maintenance and improvements, or city-provided utilities will occur? Should town officials reconsider any local zoning or building codes? Are the criteria for building permits and residential development adequate?

Annexation may be necessary to maintain city services for several reasons. First, new residential development should generate its fair share of local property taxes that support city police, fire, or even school services. Second, any traffic-dependent businesses that relocate to the bypass may either help or hurt city sales tax and property tax revenues. If the bypass access location is in the city limits, the city stands to gain from both higher sales volumes and increased property values. If the location is outside city limits, the town stands to lose revenue. Again, annexation of property adjacent to highway improvements should be considered.

### **Traffic Management Effect**

Local officials should consider the effect that changes in traffic flow cause on and along the local routes where intercity traffic no longer travels. First, the reduction in traffic volume, especially heavy trucks, should dramatically reduce wear and tear on streets and, therefore, maintenance. Second, local residents should be able to move through town more quickly and safely. Signalization and sequencing needs may change with the reduced traffic volume. Finally, parking and access to local businesses along the bypassed route will improve.

## BIBLIOGRAPHY

- Assessing the Effects of Highway Widening Improvements on Urban and Suburban Areas, NCHRP Synthesis 221 Transportation Research Board; National Research Council, National Academy Press. Washington, DC: 1996.
- Buffington, Jesse L. The Economic Impact of Interstate Highway Bypasses. Texas Transportation Researcher, Vol. 4, No.1, pgs. 2-6. January: 1968.
- Dodge, William H. Influence of a Major Highway Improvement Upon the Economy of Dunn and St. Croix Counties. Wisconsin Commerce Papers. University of Wisconsin Press. Madison: 1962.
- Eagle, David, and Yorgos, J. Stephanedes. Dynamic Highway Impacts on Economic Development. Transportation Research Record. Pgs. 56-63. 1990.
- Effects of Highway Bypasses on Rural Communities and Small and Urban Towns. Research Results Digest: Transportation Research Board, National Research Council. National Academy Press. Washington, DC: May 1996.
- Levinson, Herbert S. Cities, Transportation and Change, Transportation Quarterly, Vol. 50, No. 4, pgs. 67-85. Washington, DC: Winter 1996.
- Szostak, Rick. Economic Impacts of Road and Waterway Improvements. Transportation Quarterly, Vol. 50, No. 4, pgs. 127-141. Washington, DC: Winter 1996.

