

# FINAL REPORT

### **FHWA-WY-08/01F**

State of Wyoming Department of Transportation

U.S. Department of Transportation Federal Highway Administration



# HIGHWAY CONSTRUCTION RELATED BUSINESS IMPACTS: PHASE 3 EFFORT FOR THE TOWN OF DUBOIS

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Abstract Highway construction projects not only impact the traveling public, but can also impact businesses situated adjacent to the construction project. Even though construction projects are temporary situations, many businesses worry about the level of impact during construction and the length and magnitude of the associated recovery period. Highway construction impacts on businesses may come in the form of a temporary loss of customers, revenue, and property value as well as the creation of noise and air pollution and a host of other problems. Phases I and II of the business impacts study attempted to quantify the estimated business impacts for rural areas such as Wyoming. The intent of Phase III is to investigate the business-related impacts in the town of Dubois, Wyoming due to four highway construction projects on Togwotee Pass scheduled for completion over seven years. The main objective of the research effort is to address the concerns of the business owners and to measure the effectiveness of mitigation and public involvement techniques undertaken by WYDOT, business owners, and the community. Research on the relationship between highway construction projects and business impacts in Dubious will provide WYDOT's project managers the information on what types of businesses benefit from various mitigation and public involvement efforts.					
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# **SI\*** (Modern Metric) Conversion Factors

Approximate Conversions from SI Units					
Symbol	When You Know	Multiply By	To Find	Symbol	
Length					
mm	millimeters	0.039	inches	in	
m	meters	3.28	feet	ft	
m	meters	1.09	yards	yd	
km	kilometers	0.621	miles	mi	
Area					
$\text{mm}^2$	square millimeters	0.0016	square inches	$in^2$	
$m^2$	square meters	10.764	square feet	$ft^2$	
$m^2$	square meters	1.195	square yards	$yd^2$	
ha	hectares	2.47	acres	ac	
$km^2$	square kilometers	0.386	square miles	$mi^2$	
Volume					
ml	milliliters	0.034	fluid ounces	fl oz	
1	liters	0.264	gallons	gal	
$m^3$	cubic meters	35.71	cubic feet	$\mathrm{ft}^3$	
$m^3$	cubic meters	1.307	cubic yards	$yd^3$	
Mass					
g	grams	0.035	ounces	oz	
kg	kilograms	2.202	pounds	lb	
Mg	megagrams	1.103	short tons (2000 lbs)	T	
Tempera	ture (exact)				
°C	Centigrade	1.8 C + 32	Fahrenheit	°F	
	temperature		temperature		
Illuminat	tion				
lx	lux	0.0929	foot-candles	fc	
cd/m <sup>2</sup>	candela/m <sup>2</sup>	0.2919	foot-Lamberts	fl	
Force an	d Pressure or Stress				
N	newtons	0.225	poundforce	lbf	
kPa	kilopascals	0.145	pound-force per square inch	psi	

**Approximate Conversions to SI Units** 

Approximate Conversions to SI Units					
<b>Symbol</b>	When You Know	<b>Multiply By</b>	To Find	Symbol	
Length					
in	inches	25.4	millimeters	mm	
ft	feet	0.305	meters	m	
yd	yards	0.914	meters	m	
mi	miles	1.61	kilometers	km	
Area					
$in^2$	square inches	645.2	square millimeters	$mm^2$	
$ft^2$	square feet	0.093	square meters	$m^2$	
$yd^2$	square yards	0.836	square meters	$m^2$	
ac	acres	0.405	hectares	ha	
$mi^2$	square miles	2.59	square kilometers	$km^2$	
Volume					
fl oz	fluid ounces	29.57	milliliters	ml	
gal	gallons	3.785	liters	1	
$ft^3$	cubic feet	0.028	cubic meters	$m^3$	
$yd^3$	cubic yards	0.765	cubic meters	$m^3$	
Mass					
OZ	ounces	28.35	grams	g	
lb	pounds	0.454	kilograms	kg	
T	short tons (2000 lbs)	0.907	megagrams	Mg	
Temper	ature (exact)				
°F	Fahrenheit	5(F-32)/9	Celsius	°C	
	temperature	or (F-32)/1.8	temperature		
Illumina	ation				
fc	foot-candles	10.76	lux	lx	
fl	foot-Lamberts	3.426	candela/m <sup>2</sup>	cd/m <sup>2</sup>	
Force an	nd Pressure or Stress				
lbf	pound-force	4.45	newtons	N	
psi	pound-force per square inch	6.89	kilopascals	kPa	

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#### CHAPTER 1

#### INTRODUCTION

Business owners and communities are often concerned when a highway construction project is proposed in their town or on the main highway accessing their community. While construction projects are temporary in nature, business owners and the community may worry about the impact the project will have on the economic well-being of their town. From this concern raises questions about the level of impact and the magnitude and length of the recovery period. Information that quantifies the estimated business impacts for projects in Wyoming was explored in the Highway Construction Related Business Impacts Phase I (FHWA-WY-04/01F) and Phase II (FHWA-WY-05/04F) projects. These studies investigated the business-related impacts due to highway construction projects in Wyoming and provided project managers at the Wyoming Department of Transportation (WYDOT) with case studies and impact estimates to better address business owners' concerns.

Currently, one of the most high profile transportation projects in that state of Wyoming is the proposed reconstruction of US 26/287 over Togwotee Pass between Dubois and Moran Junction. This project is scheduled to consist of four separate projects spread over seven years and includes resurfacing, widening, and minor realignment of curved roadway sections. The design and scope of the construction however is not what is causing the controversy, but rather it is the potential business impacts that the town of Dubois may face during the seven years of construction since Togwotee Pass is the route that connect Dubois with the Jackson Hole and Yellowstone National Park areas. The business owners and citizens in Dubois are very concerned that the construction along

this corridor will cause tourists to avoid the pass and therefore not pass through Dubois, causing a loss of important tourism revenue for the town.

With the negative press that the Togwotee Pass projects have been receiving and WYDOT's desire to fully understand the implications of construction related business impacts, this project is a perfect opportunity to continue the research effort that was started with Phase I and Phase II of the Business Impacts Study. The Phase III effort will build on the Phase I and II results and will link business impacts to public involvement and impact mitigations efforts to be implemented by WYDOT, citizens, and the business community. This project will monitor business impacts and provide continuous feedback concerning the mitigation efforts. The results of this study are two-fold. One will be a proactive effort to maintain the viability of Dubois businesses during construction and second will be to measure the effectiveness of various efforts. This information provides valuable information to WYDOT and other DOTs on the effectiveness of various efforts and will aid in selecting efforts on future projects.

#### 1.1 Study Objectives

The intent of this study is to investigate the business-related impacts in the town of Dubois, Wyoming due to four highway construction projects on Togwotee Pass scheduled for the next seven years. The main objective of the research effort is to address the concerns of the business owners and to measure the effectiveness of mitigation and public involvement techniques undertaken by WYDOT, business owners, and the community. Research on the relationship between highway construction projects and business impacts in Dubious will provide WYDOT's project managers the information on what types of businesses benefit from various mitigation and public involvement efforts.

The findings from this research effort will result in the following tools for the Wyoming Department of Transportation:

- 1. Recommendations on mitigation and public involvement efforts specific to Dubois.
  - 2. General recommendations on mitigation and public involvement efforts to aid in future projects.

#### 1.2 Previous Research

The Phase I and II reports included a substantial literature review and a survey of the state DOTs on issues related to business impacts (8,12). The results of these efforts will be briefly summarized for this report. The literature review's primary goal was to investigate the state of the practice concerning the quantification of actual impacts and the mitigation techniques employed to minimize these impacts.

A series of studies conducted in Texas show that the actual impacts experienced by businesses can vary as much as the nature of the businesses (2, 3, 5). Some generalities can be drawn from these studies such as the fact that travel-related businesses such as restaurants and gas stations that service a largely tourist customer base have been found to incur the greatest impacts and that sales usually rebound within two years of the completion of the construction project. Additionally, the studies found views of economic impacts to be more pessimistic than actual measured impacts.

A follow-up study on the business types that previous reports had deemed to be most vulnerable (retail other, retail food, retail auto, and services) was conducted by the Center for Transportation Research at the University of Austin. This study found that construction did not significantly affect these types of businesses in the construction

corridor (4). Another study that was conducted by Wisconsin Department of Transportation found that detours caused by construction resulted in the decline of total sales ranging from 2 to 17%. The level of impact was once again dependent on the type of business (10).

Mitigation techniques were studied in reports from Nebraska and Wisconsin. These studies emphasized the need for businesses and construction parties to work together and maintain open lines of communication starting at the planning phase and continuing throughout the entire construction project. This can be accomplished by holding regularly scheduled public information meetings. Additionally, Nebraska and Wisconsin have enacted programs to deal with concerned business owners and to encourage their involvement throughout the construction process. This program is entitled "In this Together" and consists of sending businesses a workbook and a video describing methods that can help businesses lessen impacts and even thrive during highway construction projects. Some of the methods include holding special construction-themed sales, barbeques with free food for their customers, or parties and street dances (7, 11).

Similarly, studies in New Mexico show positive results when the DOT encourages the whole community to "own" the project. This includes businesses sponsoring parties and celebrations related to various milestones in the construction. Furthermore, these studies demonstrate that when the business owners and the community are educated about the construction project and understand the reasons behind the effort, they are more likely to accept the project and the impacts can be minimized (1).

Although the Phase I literature review found very little published information on construction impacts on businesses and the mitigation techniques employed to minimize these impacts, it was believed that there was a large body of knowledge that remained undocumented (12). With that in mind, during the Phase I project a survey was sent to the 50 state Departments of Transportation (DOTs) to determine the current state of the practice. The survey contained only two questions that asked of each state DOT the following:

- 1. How does your agency address business owners' concerns during project development?
- 2. How does your agency mitigate impacts to business owners during construction? (E.g. special signing, force account items in the contract to provide a higher level of property access, advertisement campaigns)

The results from this Phase I survey, which received a 100% response rate, showed that most of the DOT's are in agreement with the Nebraska and Wisconsin studies that encourage open communication starting in the development phase and continuing through the project. The survey found that DOTs often use local television and radio stations, as well as newspapers and internet sites to keep businesses informed about construction schedules, upcoming closures, and other construction-related information. Additionally, many states have public information specialists responsible for providing the construction information to these local media sources. As can be expected given the federal planning requirements regarding public involvement and impact analysis, all states have some form of a public involvement forum, although the level of involvement varied greatly from state to state

The survey also discovered that the main mitigation issue among the DOTs was property access during construction. Most DOTs tried to provide unabated access to businesses by providing detour access points or creating a new access points. If access could not be provided, businesses were generally paid for temporary closure. Other mitigation techniques associated with business access include special signing for business accesses and different colored directional cones. An example of this would be Oregon's use of special blue cones to point out entrances to businesses. These blue cones stand out in the sea of orange cones in the construction zone and clearly indicate where the business access points can be found.

The responses to the survey also show that DOTs are divided on the issue of placing business names on access signing. The MUTCD states that construction signs can not be used as advertisements for businesses. Some of the DOTs felt that placing business names on the access signing constituted an advertisement for the business and should be avoided while other DOTs felt that placing the business name on the access sign was not advertisement and was extremely beneficial in minimizing impacts to the businesses. Some middle ground can be found with some of the DOTs putting the business names on a single sign at the entrance to the construction zone.

The survey also demonstrated that many DOTs believe that larger construction impacts for shorter periods of time lessen the overall impacts when compared to smaller construction impacts for longer periods of time. With this in mind, many DOTs use incentives and disincentives in an attempt to complete the construction project in a timely manner.

### 1.3 Report Structure

Chapter 1 introduces the topic and defines the research objectives, and Chapter 2 details the data collection efforts and analysis techniques associated with the report.

Chapter 3 provides a background on the Dubois area and the Togwotee Pass projects including a description of the extensive mitigation efforts that were undertaken. Chapter 4 provides the results of the data analysis and Chapter 5 contains the summary of results and conclusions.

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#### **CHAPTER 2**

#### **PROJECT HISTORY**

#### 2.1 General Characteristics

Dubois, which is located in the western region of the state, has a population of 962 according to the 2000 census (9). Dubois is in Fremont County and is located between the Wind River and Absaroka mountain ranges at an elevation of 6940 feet. US 26/287 is the major highway connecting Dubois; it runs directly through the middle of town and connects the community with Jackson Hole to the west and Riverton and Lander to the east (Figure 2-1). The economy of Fremont County is strongly based on government services and retail trade. Figure 2-2 is a photo of US 26/287 running through the center of Dubois.



Figure 2-1: Map of Dubois and Vicinity



Figure 2-2: View of Dubois Main Street

Figure 2-3 shows the sales tax revenue collections for Fremont County for the fiscal years of 2001 through 2006 (13). The figure also breaks the total sales revenue down into the retail, accommodation, and food service industries since these represent the types of businesses typically impacted by construction projects and therefore of concern to this research effort. As can been seen from the graph, the retail, accommodation, and food service sales revenue trends are all positive during this period. Overall sales revenue decreased for 2003 but has since been growing at higher rate than the service industries.

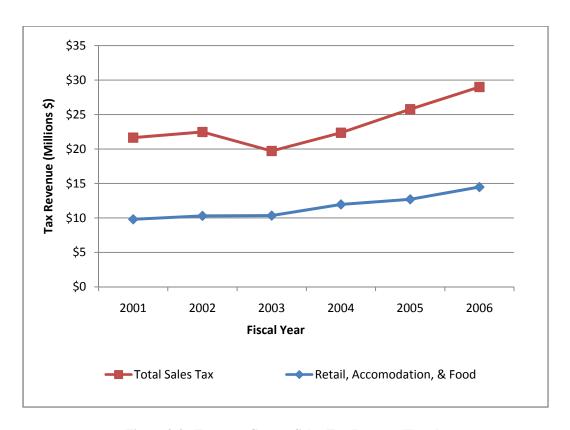
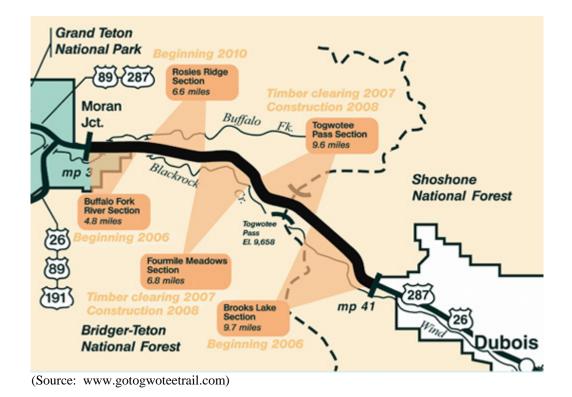


Figure 2-3: Fremont County Sales Tax Revenue Trends

#### 2.2 Construction Project

The construction project over Togwotee Pass has been divided into five different phases and contracted out as four projects (See Figure 2-4). Work on two of the phases, the Brooks Lake Section and the Buffalo Fork River Section, began in 2006. Drivers headed towards Yellowstone National Park were greeted with their first construction queue of the job at the beginning of the Brooks Lake Section.

U.S. Highway 26/287 over Togwotee Pass has not been updated for 50 years. The Wyoming Department of Transportation (WYDOT) began work along the 38-mile-long section in the summer of 2006. This project includes resurfacing, widening, and minor realignment of curved roadway sections.



**Figure 2-4: Togwotee Trail Road Improvement Project** 

Lyle Lamb, WYDOT's resident engineer in Dubois, said that delays are required to be limited to fifteen minutes. The contractor will also be allowed to close the road between 11 pm - 2 am and 2:30 am - 5:30 am if necessary. Mr. Lamb said that the contractor may only need to use this special condition on rare occasions, such as replacing pipes buried deep beneath the road.

The first construction queues and pilot lines began on May 17<sup>th</sup>, 2006. This first pilot line ran for approximately 3 miles and involved one or two pilot cars, depending on traffic levels. Mr. Lamb said that the pilot cars would be used throughout the 2006 construction season.

Figure 2-5 is a photo of a dynamic message board on the northern city limits of Dubois that is used to provide motorists with construction information and delay estimates.



Figure 2-5: Photo of message board outside Dubois

#### 2.3 Mitigation Techniques

The work over Togwotee Pass and WYDOT's efforts to mitigate any business impacts involves many agencies. Cooperation with these agencies is vital to the success of this research project.

Cameron Christopher Thomas Advertising of Denver, Colorado was selected by WYDOT to design & operate their marketing campaign for Togwotee Pass and the town of Dubois. Emily Onstot, of CCT Advertising, is managing the project. Cody Beers, WYDOT's District Public Involvement Specialist, supplied a copy of the company's marketing plan and a pamphlet that promotes the Togwotee Trail as a destination and favored route to Yellowstone.

Ms. Onstot summarized her company's overall marketing strategy:

- Reach travelers early on in their decision-making process as they are forming
  opinions about what areas to visit and which routes to take to the
  Yellowstone/Grand Teton area. Tactics are designed to maintain high levels of
  awareness and interest in the area, and also to keep The Togwotee Trail in mind.
- 2. Keep travelers informed as they approach the actual project and change their opinions about what the typical road construction project is all about. Innovative tactics will focus on the positive, by highlighting the unique attributes of the project and the area, while minimizing the inconveniences people may experience.
- 3. Work with Wyoming residents, business owners and front-line service employees (our "ambassadors") to keep them well aware of what's happening with the project. Tactics are designed to help ambassadors understand construction progress and to encourage positive and informative communication with travelers.

CCT is also operating the gotogwoteetrail.com website. They provided a username and password that allows access to the website's business-only section.

Businesses will be able to use this portion of the website to find information on business building tips (provided by WYDOT, local chambers of commerce, the Riverton Small Business Development committee, and the contractor) and the Togwotee Trail marketing campaign in general. The company has also agreed to post a small summary of this research project on their website.

CCT is interested in the results of this research project and will be kept in contact throughout the life of the project. They were contacted for their comments on the survey

before it was sent, and are interested in participating in the design of future surveys. The company has yet to finalize their media plan, which includes a schedule of planned events, but will furnish a copy to the University of Wyoming (UW) when it becomes available.

The Wyoming Department of Transportation is ultimately responsible for the success of the Togwotee Pass project. Lyle Lamb, the resident engineer in Dubois, supplied a copy of the contractor's detailed schedule and a set of construction plans for the project. Cody Beers, mentioned earlier, has been in contact regarding the department's marketing campaign. Mark Eisenhart, the State Engineer, has been helpful in directing questions to the appropriate people.

Contact with the contractor, E.H. Oftedal & Sons, has been limited. Jeff McDonald, a representative of the company, has directed questions about the project to WYDOT's Cody Beers.

The Wyoming Department of Transportation (WYDOT) and CCT teamed together to promote the Togwotee Trail, keep locals informed of changes, and prevent economic damage caused by the construction project.

As of September, 2006, and the end of the 2006 summer tourist season, Sheri Howe, WYDOT's public involvement specialist for the project, reports that the following has been completed:

- Create a brand identity for the Togwotee Trail.
- Develop a crisis communication plan.
- Create a website loaded with information for travelers, locals, business owners,
   and everyone affected by the project.

- Run radio ads targeted at ambassadors.
- Run newspaper ads targeted at ambassadors.
- Hire an on-the-ground public involvement specialist.
- Hire a spokesperson for the project.
- Coordinate with internet search engines to increase the website's visibility.
- Create & hand out a Togwotee Pass trail map brochure.
- Develop a system of proactive media outreach.
- Create & hand out an Audio CD promoting the Trail to travelers.
- Host a construction kick-off party for locals.
- Continuously release news about the project.
- Send "blast emails" to ambassadors.
- Write a newsletter with information for ambassadors.
- Create a press kit for the project.
- Place an ad in the Wyoming Vacation Directory.
- Develop tactics to advertise & coordinate with the American Automobile Association (AAA).
- Conduct weekly public meetings for construction updates.

All of the above should continue for the remainder of the construction project.

Regarding AAA, the marketing firm has completed the following:

• Established partnerships at the national AAA office.

- Worked with the online AAA TripTik system managers to highlight and give information on the Togwotee Trail as a route to Yellowstone from key travel origins.
- Placed an ad in the AAA Idaho / Montana / Wyoming Tour Book.
- Create a trade show graphic for potential use at future AAA travel counselor trade shows and conferences.

Unfortunately, AAA does not accept marketing materials, such as trail maps, brochures, and other graphics, that promote a particular destination. They do accept information on road conditions and other concerns that would affect route recommendations from AAA trip counselors. The marketing team would like to use the partnerships that they have created within the organization to focus on the improvements that have already been completed rather than the construction that is currently on-going.

The same technique of promoting the project's benefits has been carried through to many aspects of the marketing campaign. Figure 2-6 shows Roamin' Wyomin' visited travelers waiting in the construction queue several times throughout the summer of 2006 construction season. He handed out brochures, audio CD's, and stickers with a happy, friendly face. Figure 2-7 is an example of one of Roamin' Wyomin's handouts. The handouts emphasized the positive aspects of the Togwotee Pass reconstruction project as well as highlights along the entirety of the Togwotee Trail.



Figure 2-6: Roamin' Wyomin' greeting travelers stopped at the construction queue

Many of the marketing tactics have been designed to target locals. The marketing campaign focuses heavily on "ambassadors". These are people who live in Casper, Dubois, Jackson, Lander, Rawlins, Riverton, Shoshoni, the Wind River Indian Reservation, and employees of Yellowstone and Grand Teton National Park. Whenever tourists stop anywhere within the area, such as a gas station or a hotel, they are likely to interact with employees of the business and other locals to the area. The information that these locals give to tourists can have a serious effect on the tourists' perception of the Togwotee Pass construction project. By supplying information directly to these ambassadors, they can paint a more accurate and positive picture of the construction project to passers-by.

Ambassadors have been targeted using newspaper ads, radio ads, a party to kickoff the construction project, newsletters, regular emails with helpful information, a newsletter, and weekly public meetings. Fifteen-second-long radio ads ran on Wyoming Public Radio and sixty-second ad spots were purchased on three stations in Casper, one in Rawlins, two in Jackson, two in Riverton, and two in Lander. A total of 1166 radio ad spots were bought and played, with about 150 played every other week, for the entirety of the 2006 summer construction season.

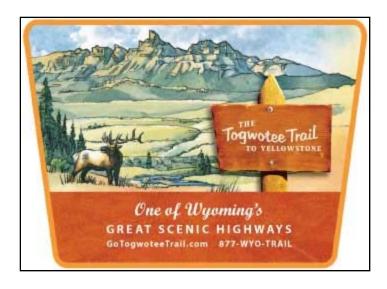


Figure 2-7: Example of a sticker handed out by Roamin' Wyomin'

Newspaper ads were purchased in the *Riverton Ranger, Lander Journal, Wind River News, Dubois Frontier, and the Jackson Hole News and Guide*. The ads ran eight times in each paper between May and August, 2006. Depending on the newspaper, the ads were sized to be a quarter of a page or 3 columns wide and 10 inches tall.

About 100 people attended the party to kick-off the construction project. The party was held at the Headwaters Conference Center in Dubois on May 19<sup>th</sup>, 2006. The celebration was mostly informal, with food and music. WYDOT supplied brochures, audio CD's, and other Togwotee Trail marketing materials to interested guests.

Sheri Howe, WYDOT's public involvement specialist for the project, has sent emails to area business owners and chambers of commerce with weekly updates about the construction project and contact information should the recipients have any questions. She has also visited with local business owners and local chambers of commerce on a regular basis. She began meeting with business owners in June of 2006. Businesses in Dubois and Riverton appeared to appreciate the visits the most; businesses in Lander in Jackson did not seem to think that the visits were necessary, according to Ms. Howe. She now visits with only the chambers of commerce in Lander and Jackson and the Visitor's Center in Jackson instead of visiting with individual businesses in these towns. These organizations pass out Togwotee Trail marketing materials to their constituent businesses.

#### 2.3.1 Newsletter

Dubois business owners are understandably concerned about the future of their business with the threat of highway construction and possibly fewer tourist dollars looming on the horizon. Fortunately, Phase I and II of this research project involved a comprehensive analysis of how businesses are affected by highway improvement projects. Local business owners can use this information to bring the true nature of their situation into focus, calm their fears, and relax in the fact that UW and WYDOT are concerned about their plight.

Three projects from the earlier phases were chosen for their relevance to the crisis in Dubois and the significance of the results. These projects occurred in Cody, Saratoga, and Buffalo within the last decade. The project in Buffalo will be especially important to Dubois because it dealt with highway construction that occurred outside the city. People

were concerned with the loss of tourist traffic over the Big Horn Mountains – concerns similar to those in Dubois. Summaries of the results of the above projects and their impacts on local businesses were assembled into a newsletter format.

#### 2.3.2 Other Techniques

There were several mitigation techniques employed by WYDOT both before and during the course of the project. WYDOT representatives spent approximately eight weeks prior to construction talking to business about the upcoming project and possible mitigation techniques that they could implement. The techniques suggested included item such as discounts to construction workers for food sales at the restaurants and advertising campaigns to help draw in customers to the area during the construction season.

One mitigation effort used by WYDOT was to provide business access twentyfour hours a day, seven days a week unless written permission was obtained from the
business owner for closure. This meant that some temporary access points had to be
constructed and maintained throughout the construction period. WYDOT also provided
special signing displaying the name of the business at all access points. This measure was
thought to be beneficial to the tourist traffic and also appeared some of the business
owners concerns.

#### 2.4 Dubois Businesses

A list of 174 businesses in Dubois was compiled from various sources at the beginning of the project. (More details on this process can be found in Chapter 3.) The list is very diverse: it includes artists, plumbers, electricians, restaurants, motels, guest ranches, video stores, and much more. The business list was verified during on-site visits

to Dubois during the summer. The list of businesses reflected the type of businesses you would expect to find in a small, rural community with a tourist-based economy.

Figure 2.8 shows the Dubois businesses customer base as reported by the business owners. The graph reveals Dubois businesses are highly dependent on out-of-town customers with over 60% of businesses reporting that 75% or more of their customers are from out of town.

# Approximately what percentage of your customers comes from out of town?

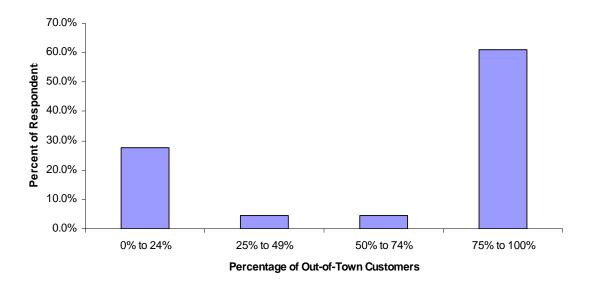


Figure 2-8: Dubois Customer Base

#### **CHAPTER 3**

#### DATA COLLECTION AND ANALYSIS METHODS

The data collection methods for Phase 3 of the business impacts study were similar to the methods employed in Phases 1 and 2. This was done to allow for compatibility of results between all of the phases. The first step in the data collection was the forming of a business list for Dubois. The next step was to categorize the businesses and determine their customer bases. After that was completed, Wyoming Department of Revenue (DOR) tax data was used to examine the estimated sales data before, and during construction in order to establish the actual impacts businesses incurred during construction. Next, surveys of businesses were used to evaluate the perceived impacts due to construction.

#### 3.1 Business Lists

A list of business names, their addresses, phone numbers, and their type of business was gathered using several yellow page directories available online (Yahoo, Qwest, etc). The entire directory for Dubois was mined for this information and manually entered into an Excel spreadsheet for each of the online directories. Businesses that obviously would not be concerned with a loss in tourist traffic, such as construction contractors and attorneys, were eliminated from the list. A company was included in the list if there was any doubt about the nature of its business.

This process resulted in a list of 174 businesses. The list is very diverse: it includes artists, plumbers, electricians, restaurants, motels, guest ranches, video stores, and much more. A survey, described later, was sent to each business.

The Dubois Chamber of Commerce was contacted for an official list of local businesses. Unfortunately, poor communication and several failed attempts to receive the list resulted in a decision to forgo their assistance and use the aforementioned yellow-page-based list. The business list was verified during on-site visits to Dubois during the summer.

#### 3.2 Business Categorization

When sales tax revenue data is collected from the DOR, strict confidentiality is required before any information can be presented to the public. Because of this confidentiality, standard industrial classification (SIC) codes are used in place of individual business names when reporting tax revenues. These SIC codes protect the identities of the individual businesses. For this research effort, the 1987 SIC code was used due to the fact that it is the code that is currently being used by the DOR. A business can be classified by primary activity into one of nine categories. These categories are determined by principal product or group of products produced, distributed, and/or services rendered. The categories include apparel, automobile, building and hardware, food stores, furniture, general merchandise, miscellaneous stores, traveler accommodation, and restaurants.

Apparel stores consist of retail stores chiefly engaged in selling new clothing and other related articles of personal wear and adornment. The automobile category includes retail dealers selling new and used automobiles, boats, recreational vehicles, utility trailers, and motorcycles. Gasoline service stations and new automobile part sellers are also in the automobile category. The businesses included in the building and hardware category include establishments selling lumber and other building materials, paint, glass, wallpaper, hardware, nursery stock, lawn and garden supplies, and mobile homes. Food

stores include retail stores which primarily sell food for home preparation and consumptions like grocery stores.

The furniture category includes retail stores selling goods used for furnishing the home such as furniture, floor coverings, draperies, glass and chinaware, domestic stoves, refrigerators, and other household electrical and gas appliances. The general merchandise group includes retail outlets such as department stores, variety stores, and general merchandise stores. Miscellaneous stores include establishments not classified elsewhere like drug stores, liquor stores, and used merchandise stores. Traveler accommodation includes establishments that offer a place for travelers or workers to stay while they are in Dubois. Restaurants include retail establishments that sell prepared foods and drinks for consumption on the premises. Lunch counters and refreshment stands, which sell food and drink for immediate consumption, also fall under this category.

#### 3.3 Customer Base of Businesses

The customer base of businesses for this report will be categorized into local, tourist, or mixed businesses. Local businesses will include retail sales, retail service, and professional services in the project zone, which attract customers primarily from that town or region. Local businesses can include a grocery store, an inner city gas station, a sports gear store, and a variety of other businesses.

Tourist businesses will include businesses oriented toward the tourism industry or businesses that provide retail sales, retail service, and professional service to out-of-town customers. Tourist based businesses can include, hotels, fast food restaurants, automobile repair shops, and other businesses located near major travel routes.

Naturally, the mixed business category includes businesses that provide retail sales, retail service, and professional service to both tourist and local customer bases.

#### 3.4 Tax Revenues and DOR Data

The Wyoming Department of Revenue is the source of all sales tax data used for this study. The sales tax history supplied by the DOR contains information for 110 businesses in and around the town of Dubois for the period between January, 2001, and October, 2007. Many businesses did not exist for the entire period. Elimination of these short-lived businesses from the list results in a list of 60 businesses that existed for the entire study period.

Businesses reported their taxes either monthly or quarterly. For ease of analysis, the monthly data was reduced to quarterly data. Quarters end in January, April, July, and October. Each quarter is representative of the sales tax collected during the preceding three months. Quarterly data for April, for example, is the sum of the sales tax collected during January, February, and March for that year. Quarterly data for January is the sum of the sales tax collected during October, November, and December of the preceding year. However, to maintain consistency, all data was aggregated into quarterly and yearly sales figures. Some businesses (like chain restaurants and gas stations) report their tax information in one sum per city instead of breaking up the revenue by individual store. When this was the case, it was requested that the sum of revenues be reported.

The sales tax rate for Fremont County is 4%. There is an additional 2% tax on lodging, and special considerations for food items. The tax revenue data was converted into estimated sales by dividing the tax revenue value obtained from the DOR by the tax rate for that type of business.

The DOR data was then used to examine the before and during construction trends in sales.

The raw data from the Department of Revenue can be found in the report

Appendix A. Sales revenue in the appendix are shown at a quarterly aggregation level.

For confidentiality the SIC codes have been removed from this public document since it is possible for businesses in small towns such as Dubois to be identified by their business type. The unique business number shown in the appendix corresponds to business numbers used throughout the report and in instances where multiple businesses exist of the same type these SIC codes are provided in the report.

#### 3.5 Traffic Volume Data

Tourist traffic is the primary concern of this project. Whether traffic bound for Yellowstone National Park will detour around the project and the town of Dubois determines the severity of the damage to the area's economy.

Due to the fact that US 26/287 is the only state route from Dubois to points west, such as Jackson, local traffic across the pass is likely to be unaffected by delays caused by road construction. Any decrease in traffic volumes, therefore, must be caused by long-distance or tourist traffic. This traffic is capable of selecting a different route to Yellowstone National Park, such as the route through Cody or the route from Rock Springs to Jackson, besides Togwotee Pass. It is therefore necessary to determine the volume of local traffic and the volume of long-distance traffic to better gauge the disparity between before-construction traffic volumes and during-construction traffic volumes. If the percentage of non-local or long-distance traffic is high and the change in traffic volumes from 2006 to earlier years is great, for example, then the change in tourist traffic levels can be assumed to be high. If the traffic is comprised of mostly local drivers,

then the change in tourist traffic levels will not be as great and the damage to the local economy will be less.

To measure the local driver composition of traffic, two graduate students from the University of Wyoming recorded the license plates of vehicles at two sites along US 26 / 287 during August, 2006. The out-of-state vehicles were recorded by state and the Wyoming vehicles were recorded by county. The first location is located near the northern city limits of Dubois and Automatic Traffic Recorder #21 at milepost 53 where the speed limit changes from 65 mph to 35 mph. The students recorded for two hours beginning at 2:00 pm on August 17, 2006. A total of 405 vehicles were observed.

The Wyoming Department of Transportation maintains two permanent traffic counters on US 26/287 near the town of Dubois. ATR #21 is located just west of Dubois at milepost 52.6. ATR #24 is located at the top of Togwotee Pass, near milepost 12.9. Historical data is available for both of these counters, although records from ATR #24 only go back to June, 2004.

If traffic across Togwotee Pass decreases then, logically, there should be an equivalent increase in traffic among other routes that serve the same area. US Highway 14, through Cody, Wyoming, for example, is a logical detour for Yellowstone-bound traffic originating from east or south of the park. ATR #35 is located at milepost 48 on US 14, just west of Cody. Another logical detour for traffic that would normally cross Togwotee Pass is the route from Rock Springs, Wyoming through Jackson.

Unfortunately, WYDOT has not installed a permanent counter between Jackson and Moran Junction that would only record only Yellowstone-bound traffic. The only ATR available for comparison, therefore, is ATR #35.

Yellowstone National Park records the volume through each entrance and makes this information available to the public (6). If Yellowstone-bound traffic is detouring around Togwotee Pass, then there should be a decrease in the volume of traffic entering the park through the Southern Gate, although this gate is also served by the route from Jackson. There should be an equivalent increase in the traffic volume entering the park through the park's other gates, specifically the Eastern Gate. However; since the only way to access the Eastern Gate is through Cody and US 14, this increase should be seen in the data recorded by ATR #35.

### 3.6 Business Surveys

The preliminary business survey was designed to gather basic information about each business, their concerns about the upcoming construction project, and introduce the owners to this research project. Comments were solicited, and have been included later in this report.

Surveys from the first two research phases were used as guides for design of the survey. Questions regarding the expected degree of change in the number of customers, sales, and net profit; comments on WYDOT's performance; and basic information about each business were the same as these earlier surveys. This should allow for simple comparison between information gathered in each phase and for continuity across all phases of the project.

The third phase of this project, unlike the past two, focused on the impact of mitigation techniques employed by WYDOT and the contractor in addition to a gauge of the impacts felt by individual businesses. Several more questions concerning these mitigation techniques needed to be added to the surveys from the first two phases.

Respondents were asked, first, whether they had been directly contacted by anyone

regarding the upcoming construction project and how they had been contacted. Every business owner was asked to list the sources of their information regarding Togwotee Pass and rate how this information has prepared them for possible business problems.

The questions regarding WYDOT's mitigation techniques and the source of owners' information were not designed to be overly specific and critical of particular techniques. Rather, they were meant to answer the questions "Are WYDOT's efforts reaching business owners? Are these efforts having the desired effect?" and serve as an introduction to future surveys, which will cover specific techniques much more thoroughly.

All 174 businesses on the list were sent a survey, personalized cover letter, and a pre-paid return envelope. A numeric code was placed on each survey to keep track of who was sent a survey and ensure that a particular business was not bothered by follow-up calls or letters. The code allowed UW and WYDOT to analyze the data without violating the privacy of the survey in any way. A copy of the survey and an example cover letter has been included with this report.

Fifteen surveys were returned by the Postal Service as undeliverable. These businesses have not been contacted. Due to the large number of surveys sent and the variability in business type of these fifteen, the loss of these potential responses was not deemed threatening to the validity of the results. One business owner reported on their survey that their business no longer exists. That business was removed from the list.

A copy of the cover letter and sample business survey can be found in the appendix of this report.

# 3.7 Postcard Traveler Surveys

Any problems that the Togwotee Pass area experiences as a result of decreased traffic volumes were resultant of a change in driver behavior. WYDOT and CCT hope to reach drivers *before* they have even left home. They have designed their marketing campaign to advertise the Togwotee Trail as a destination in itself, rather than merely a path for northbound tourists to reach Yellowstone National Park (YNP).

A small, postcard-sized survey was designed to determine the effectiveness of the marketing team's efforts to educate drivers of the Togwotee Pass construction project and highlights along the way. A copy of the postcard survey and the raw data can be found in Appendix C.

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## **CHAPTER 4**

### DATA ANALYSIS

The following chapter analyzes the data that was collected as described in the previous chapter.

### **4.1** Sales Tax Revenues

Sales tax collected in Dubois for the period between January, 2001, and April, 2006 can be seen in Figure 4-1. As shown in this figure, sales tax revenues peak for the October quarter, which represents the summer months of July, August, and September. A simple linear trendline with an R<sup>2</sup> equal to 0.975, indicating an excellent fit, was created for the months of October each year. Based on this trendline, the sales tax collected in each quarter ending in October should increase every year by approximately \$32,348. Therefore, the data from October 2006 can be compared to the estimated values generated by this trendline to determine whether the Dubois economy is performing as expected.

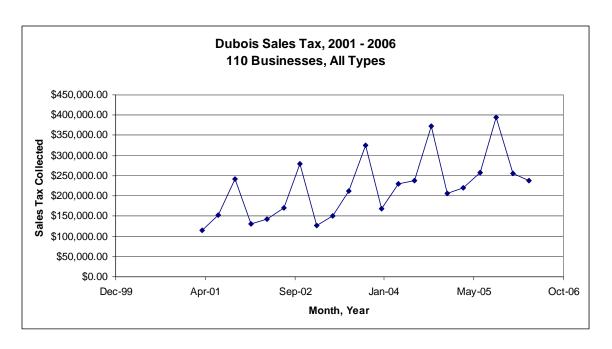
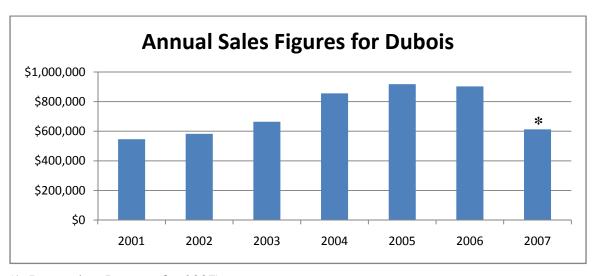


Figure 4-1: Sales Tax Collected for Dubois Businesses (Jan 2001-April 2006)

The sales tax receipts were converted into annual sales estimates based on the tax rate and the type of business. These estimates are shown in Figure 4-2. The tax data for 2007 was incomplete and only accounted for sales reported from January through October. It can been seen from this figure that 2006 sales were slightly lower than 2005.



(\* Incomplete Data set for 2007)

Figure 4-2: Annual Sales Estimates for Dubois

Figure 4-3 shows the annual sales broken down into quarterly sales estimates. It should be noted that there may be businesses who had not filed their quarterly sales taxes by November when the data was queried so the dramatically lower quarterly sales for 2007 should be questioned, although the sales show a declining trend for all other quarters.

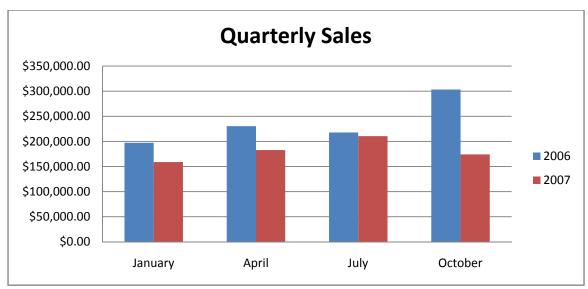


Figure 4-3: Quarterly Sales Estimates from 2006 and 2007

The data was also analyzed by looking at the percent change in estimated sales for each business for each year. The average was calculated for all quarters, for each subsequent quarters. This weights each business equally so that small sales volume businesses are not overshadowed by large sales volume businesses. The results of this analysis are shown in Figure 4-4. These values can be used as an indicator of the overall health of the business community in Dubois.

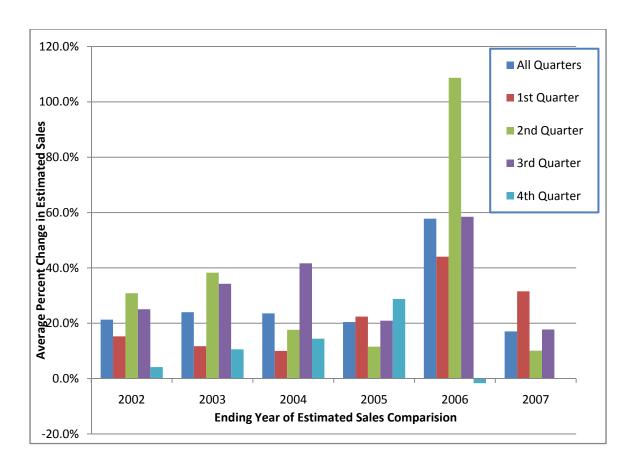


Figure 4-4: Average Change in Sales by Individual Businesses

For the quarterly averages, the quarterly sales were compared against the same quarter for the previous year. For example, the first quarter sales of 2003 for a particular business was compared against the first quarter of 2002 for that same business to determine a percent change. This was done for all businesses over the entire time period and average on an annual basis.

From this figure, it can be seen that the average percent change in sales for Dubois businesses is overwhelmingly positive, particularly for the year 2006. The only negative average value is for the fourth quarters of 2006. (Note 2007 fourth quarter values were not available at this time.)

Figure 4-5 used the same approach but only considers the tourist based businesses. This figure shows that these businesses have more modest sales increases than the total business population but in general appear to be healthy. (Note that the 4<sup>th</sup> Quarter of 2006 is close to zero so it does not appear in the figure.)

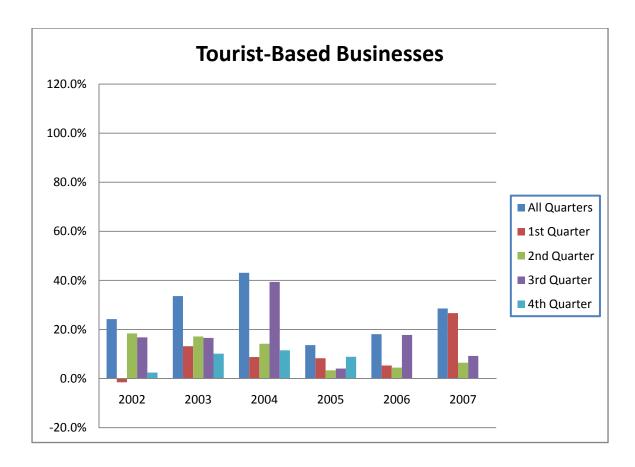


Figure 4-5: Tourist-Based Businesses

### 4.2 Traffic Volume Data

Figure 4-6 shows the number of vehicles that entered Yellowstone National Park through the South Gate and East Gate back through the year 2000. When the entrance statistics from 2005 are compared to the figures from 2006, the South Gate saw a 2.7% decrease in

the number of vehicles. The East Gate, however, saw a 5.5% increase in vehicles. In addition, compared to the average number of vehicles that entered each gate between 2000 and 2005, the 2006 figures are 2.4% lower for the South Gate and 8.5% higher for the East Gate. Since the south gate entrance is of importance to tourism in the Dubois this data suggests that there might be a slight diversion of tourism traffic from the south gate to the east gate.

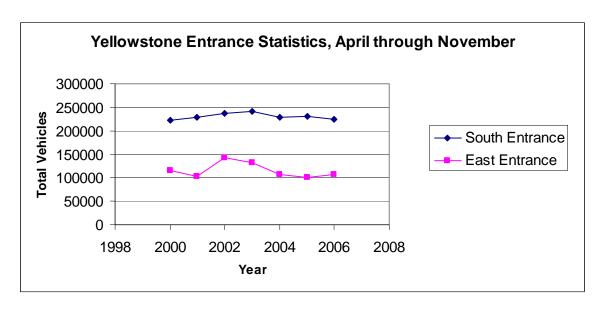


Figure 4-6: Number of Vehicles Entering Yellowstone, April - November

Figure 4-7 shows the average daily traffic recorded by US26/287 MP 52.6 (ATR #21) for May, June, July, August, and September for each year beginning with 2002. Visually, the trend for each year appears to be the same both in the time and magnitude of the peak volume, with the peak summer traffic occurring during the months of July and August. If traffic is detouring around Togwotee Pass, then the difference in traffic volumes should be most apparent during these two peak months.

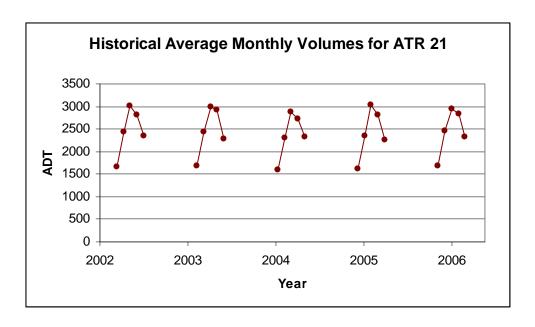


Figure 4-7: Historical Monthly ADT for US26/287 MP 52.6 (ATR #21)

Figure 4-8 shows the average daily traffic for all three traffic recorders during the month of July. Figure 4-9 shows the average daily traffic for all three traffic recorders during the month of August. As mentioned in Chapter 3 the traffic counter numbers correspond to the following roadways and mileposts:

- ATR #21 = US 26/287, Milepost 52.6, West of Dubois
- ATR #24 = US 26/287, Milepost 12.9, Top of Togwotee Pass
- ATR#35 = US 14, Milepost 48, West of Cody

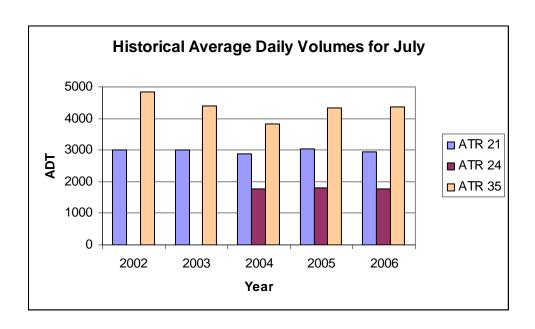


Figure 4-8: Historical Average Daily Volumes for July

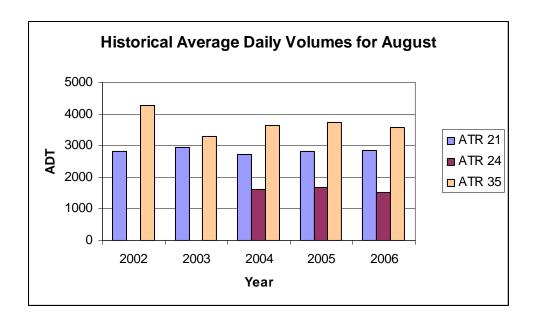


Figure 4-9: Historical Average Daily Volumes for August

Traffic volumes appear to vary little for US 26/287 west of Dubois (ATR #21 and ATR #24) between 2002 and 2006. The average daily traffic for July, 2006 for both

automatic traffic recorders is only 1% less than the average of the average daily traffic for the July of the last four years for ATR #21 and the last two years for ATR #24.

As expected, therefore, there has also been little change in summer traffic volumes across US Highway 14 through Cody (ATR #35). July 2006 does not appear to be significantly different from prior months of July.

The data does not suggest that the construction project has caused drivers to detour around Togwotee Pass or that tourism levels are down based on information from WYDOT's permanent traffic counters, despite slightly conflicting information from Yellowstone National Park's gates.

## 4.3 Business Surveys

Business surveys were performed during the Spring of 2006 and the Spring of 2007. Each of these surveys are described below.

# **4.3.1** Spring 2006 Survey

The first business survey was performed in early 2006 and 72 surveys were returned.

Accounting for the 15 that were returned with incorrect addresses, this represents a 45% response rate. The following is a summary of the responses for each question.

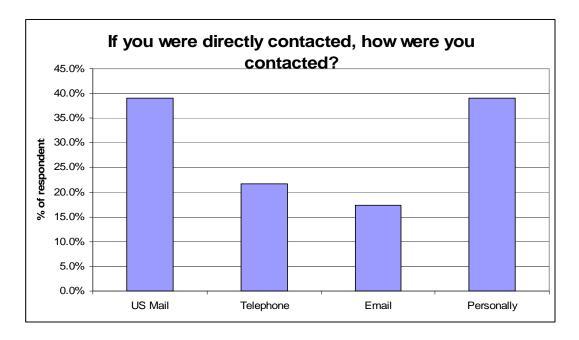
1) Have you been directly contacted, beside this survey, about the upcoming construction project?

Of the respondents, 32.9% replied, "Yes, I have been contacted".

2) How were you contacted? Please check all that apply.

Owners were given the choices of US Mail, Telephone, Email, and Personal contact. Several reported attending public meetings and having inside information through friends or second jobs with the contractor.

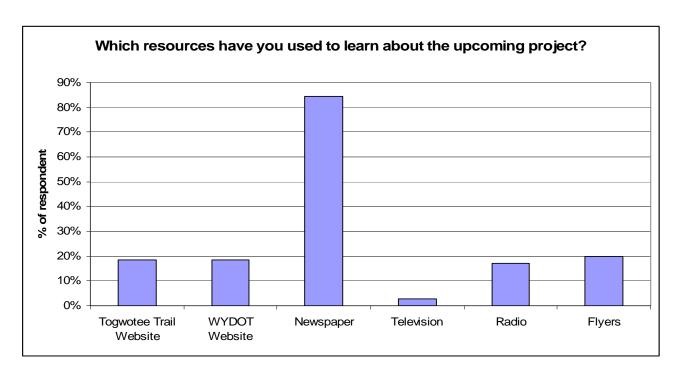
Figure 4-10 shows the breakdown of the results. Only the businesses that responded "Yes" to question one are included in these results.



**Figure 4-10: Method of Previous Contact** 

3) Which of the following resources have you used to learn about the upcoming construction project? Please check all that apply.

Owners were given the choices of the Togwotee Trail website, WYDOT's website, newspaper, television, radio, and flyers. Many reported attending public meetings. "Word of mouth" was also reported as a source of information for many business owners. Figure 4-11 shows the breakdown of the results:



**Figure 4-11: Resources for Project Information** 

4) How prepared for construction complications has this information left you?

Business owners were also asked to provide additional comments about their preparedness. Figure 4-12 shows the breakdown of the results. In addition, a sample of their written responses is provided below:

- Summer is such a variable to our business that until it is on us who knows?
- I appreciate the efforts of WYDOT. I feel their communication to the Dubois community has been very good.
- The businesses have had plenty of time to do additional advertising. And if tourists want to come to Dubois they will construction or no construction.
- Its pretty difficult to change the unknown, as the project hasn't begun yet. We have mailed numerous letters to subcontractors in hopes that some of them may

stay with us. Overall I believe that this project has gotten way to much publicity which will hurt us the most, if at all.

You have to be kidding the state doesn't do anything properly or timely nor do
they prepare the public nor are they ever accountable for their negative efforts.

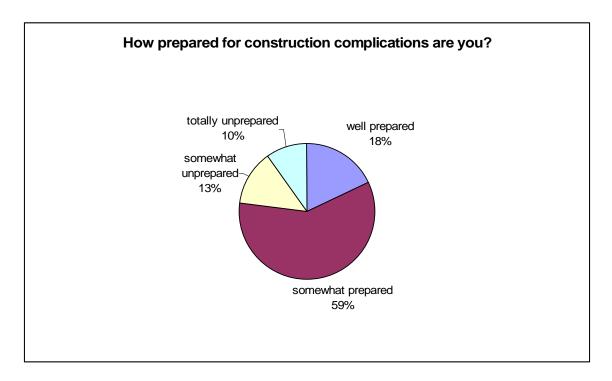


Figure 4-12: Level of Preparation

5) How do you expect the following to change this summer when compared to an average summer as a result of construction of Togwotee Pass?

The survey asked that business owners rate the degree of change they expect to experience with respect to their daily number of customers, gross sales, and net profit.

Unfortunately, there appears to be some confusion by respondents regarding the layout of this portion of the survey. The "positive change" is to the left of the "no change" column and some may assume that positive changes would be to the right

of zero. In a few cases how the survey response and the accompanying comments seems to conflict with each other indicating there was some confusion. This will be clarified in follow-up surveys. The results of the survey are summarized in Figure 4-13.

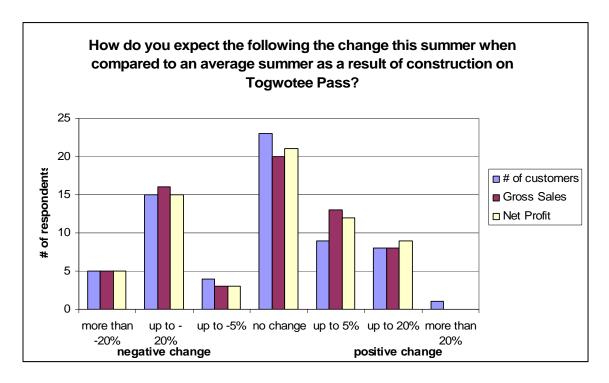


Figure 4-13: Expectations for Change in Summer Business Levels

- 6) What plans do you have to mitigate possible construction-related complications?

  This question is open-ended and required that respondents write out their answer.

  A sample of their responses is provided below:
  - Take advantage of change which usually means greater opportunities.
     Complications are unknown at this time.
  - Join with other businesses in Dubois Destination advertising effort.

- We plan to try to attract the construction workers to our restaurant to make up for the minor loss of tourists that is anticipated. We will operate 24/7 if the worker trade for double shifts is justified.
- I DO NOT KNOW what to expect therefore we will address complications as they come.
- Be positive when communicating with visitors & possible visitors to the area.
- Implement and improve a website 2) advertise more 3) more business out of Dubois (project is a 7-10 year project).
- I rely on tourist walk in for a large part of my summer business. If the
  construction cut the amount of people driving through Dubois I will have less
  customer. So I really don't know what I'll do.
- Contacting the contractor, and sub-contractors in hopes of getting some to stay
  at our motel. What else can we possibly do, besides cut our rates to maximize
  occupancy potential. Our advertising dollars are on a fixed budget with very
  little extra to spare.
- I am currently trying to contract with the construction company to have workers stay at Chinook Winds - we just took over last year and need this contract in order to insure we can pay for the mortgage payments over the next 3-5 years.
- The more businesses are informed the more positive attitude. It's wonderful to involve everyone who will be affected by the road construction. I plan to inform my employees to handle questions by tourist.

7) What can WYDOT or the Contractor do to alleviate your concerns?

This is another open-ended question that requires respondents to write out their answer. A sample of their responses is provided below:

- Keep the traffic stops to less than 15 minutes.
- Keep their promise to maintain marketing program for duration of reconstruction project.
- Target travelers at visitor center in Jackson Hole and GTN Park to let them know delay will total no more than 30 minutes.
- WYDOT has done an exceptional job so far. Continue to publicize the short road
  closure times anticipated and the scenery. Check AAA and other travel services
  weekly to make sure that they are not routing travelers north or south.
- I feel you are handling this whole project most admirably!
- Keep delays over construction area to a bare minimum do a lot of work during off-peak times, like at night.
- They are not in charge of any business should have been preparing on their own.
   When roads are finished it will bring in even more people.
- WYDOT can condense construction period to three years which makes avoidance of bankruptcy a possibility.
- Construction could be done at night to shorten overall project and to avoid traffic flow impediments during the day.
- Both are addressing MY issues well. However, restaurants & catering need full
  cooperation from forest service so that meals can be brought to workers and
  rubbish quickly removed. (to avoid bears).

- Do not work on Sunday.
- Make sure traffic counts stay above previous years, make construction a positive experience, help make this area a destination, keep local businesses informed about traffic #'s and help them plan and understand consequences.
- Short-term, low-interest business loan to offset the shortfall. No red tape.
- Maintain traffic flow, keep AAA posted of minimal traffic delays, help us promote the Dubois area as a destination.
- Disseminate all information known to those businesses to be impacted via flyer, email, website.
- Make sure things go as smoothly as we are told.
- 8) How would you classify your business? Please check all that apply.

Business owners were given the choices of "Professional Service, Retail Sales, and Retail Service" and asked to breakdown how much of their income comes from service and sales. Unfortunately, many of these businesses misunderstood the difference between "professional service" and "retail service". Many businesses failed to respond to the question at all. This question is confusing and the results are as useful as they could be. This question will be clarified in future surveys.

9) Approximately what percentage of your customers come from out of town?

Clarification needs to be made on future surveys – the difference between "out of town" and "tourist" is important but not clear. A customer from nearby Lander who visits a plumber, for example, would qualify as "out of town" but not be as

affected by the construction or WYDOT's mitigation efforts as a tourist would.

Figure 4-14 illustrates a breakdown of the results.

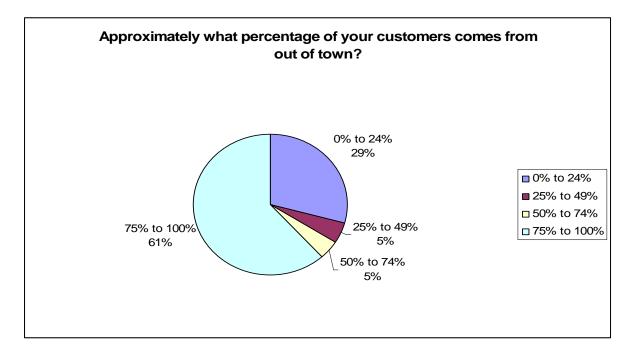


Figure 4-14: Percentage of Out-of-Town Customers

## 10) How many years has your business been in Dubois?

This question broke up the result into six categories to allow for a more simple analysis. An approximate age of the business and how it weathers a poor business climate may be significant. The exact age of the business is unimportant. Figure 4-15 summarizes the results.

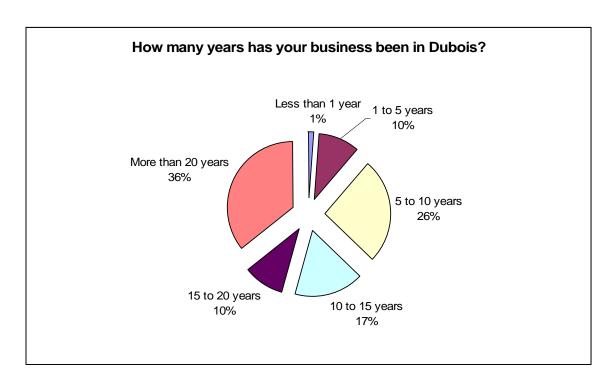


Figure 4-15: Years in Business

11) How many people does your business employ during a typical summer?

Owners were asked to count the number of full-time employees and part-time employees. A total of 252 full-time and 136 part-time employees were recorded in the 69 businesses that responded to this question. This results in an average of 3.7 full-time and 2.0 part-time employees per business.

The results of the Spring 2006 generally show an optimistic attitude from business owners and clearly indicate that the increased mitigation efforts through the marketing and information campaigns were well received by the community. Particularly of interest is the response to Question #5 regarding the businesses expectations regarding the upcoming summer tourism season. Over 20% of the respondents felt that there would be no change in number of customers, gross sales, and net profit. The next highest response was up to a 20% decrease in customers, gross sale, and net profit with approximately

15% responding in this category. While this is a significant percentage, it is less than the typical response from other communities in the previous phases of this research.

### **4.3.2** Spring 2007 Survey

A follow-up survey was sent to the same list of Dubois businesses in the spring of 2007. By the end of 2007, 60 surveys had been returned representing a 38% response rate, down slightly from the 45% response rate of the previous survey. The purpose of this survey was to gauge the effect that business owners felt the 2006 construction season had on their businesses, the effectiveness of any plans they had to counter lower tourist traffic levels, and their feelings on WYDOT's and CCT's marketing/ public relations efforts. It was also designed to determine what business owners were prepared to do for the 2007 construction season and gauge the severity of concern that owners have for the coming summer.

There were variations in the order of some of the questions based on feedback from the respondents of the earlier survey. The following is a summary of the responses to each question:

1) How did your business fare during summer 2006 as compared to previous summers?

The business owners could choose from five options; much worse, worse, no change, better, and much better. Figure 4-16 shows the breakdown of the responses.

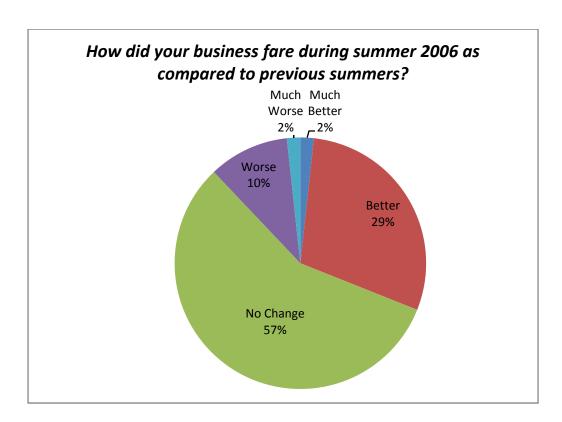


Figure 4-16: How the Businesses Fared

2) Did your business have Togwotee Trail marketing material handouts readily available for interested customers?

The majority of businesses did not have the Togwotee Trail marketing materials on hand for their customers. Figure 4-17 shows the breakdown of the responses.

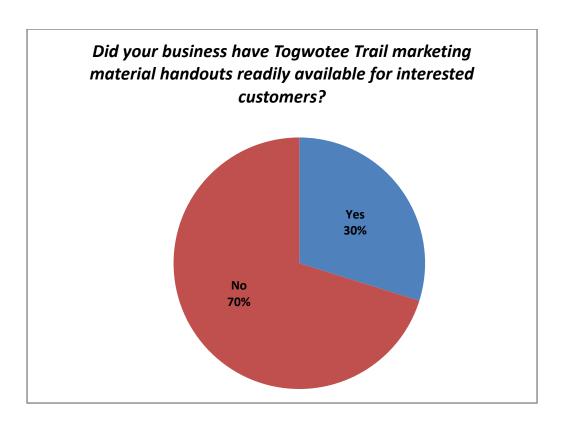


Figure 4-17: Availability of Togwotee Trail Marking Materials

3) Have you visited the official Togwotee Trail website

http://www.gotowoteetrail.com?

The majority of businesses had not visited the Togwotee Tail website. Figure 4-18 shows the breakdown of the responses.

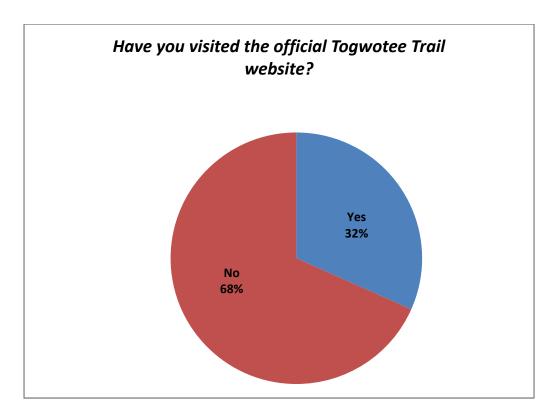


Figure 4-18: Use of Togwotee Trail Website

4) How often did you visit the website during construction season?Of those that did visit the website the most common response was that they visited the website only once. Figure 4-19 shows the breakdown of the responses.



Figure 4-19: Frequency of Website Use

- 5) Have you visited the "Business Center" portion of the website?

  Of the business owners who had visited the website 11 (58%) had used the "Business Center" portion of the website.
- 6) Did you make plans to combat construction-related business loss before construction began in 2006?
  - Fourteen (22%) of the businesses owners made plans to combat the construction-related business loss before it began; the other 49 (78%) did nothing.
- 7) How often did you drive over Togwotee Pass during the summer construction season in 2006?

The business owners responded almost equally to weekly, monthly, and rarely when asked how often they drove over Togwotee Pass the previous summer. Figure 4-20 shows the breakdown of the responses.

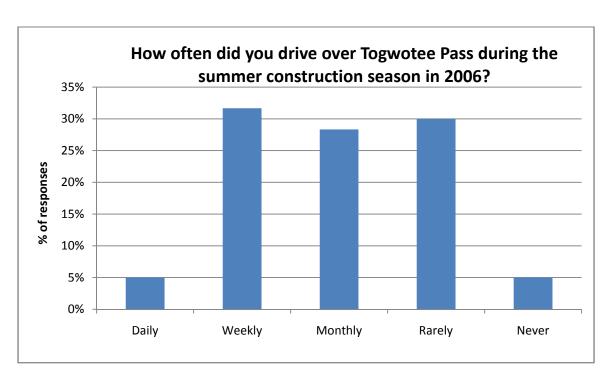


Figure 4-20: Frequency of Togwotee Pass Trips During Summer 2006

8) How much longer did it take, on average, to complete a one-way trip over the pass during the summer of 2006 compared to previous summers?
The majority of business owners responded that their Togwotee Pass trips took between 10 and 30 minutes longer last summer. Figure 4-21 shows the breakdown of the responses.

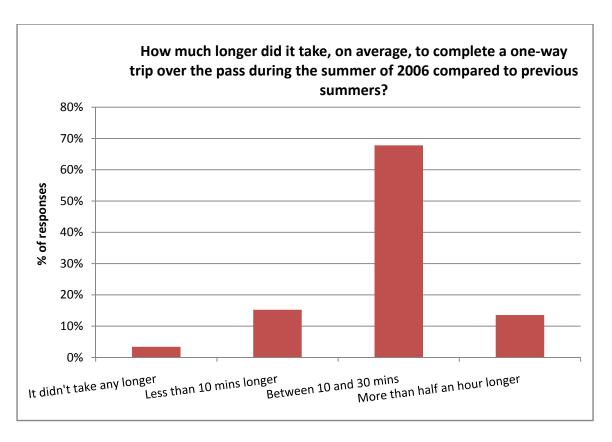


Figure 4-21: Average Delay on Togwotee Pass during Summer 2006

- 9) Did you make specific plans to combat construction-related business loss before construction began in 2006?
  - Fifteen (26%) of the business owners responded that they made specific plans to combat construction-related business loss before the construction season.
- 10) Which of the following best describes the plan you used in summer 2006? Please check all that apply.
  - Of those that responded that they had specific plans to combat construction-related business loss, the most common response was that they would leave earlier to avoid the impacts that delays would have on their business. Figure 4-22 shows the breakdown of the responses.

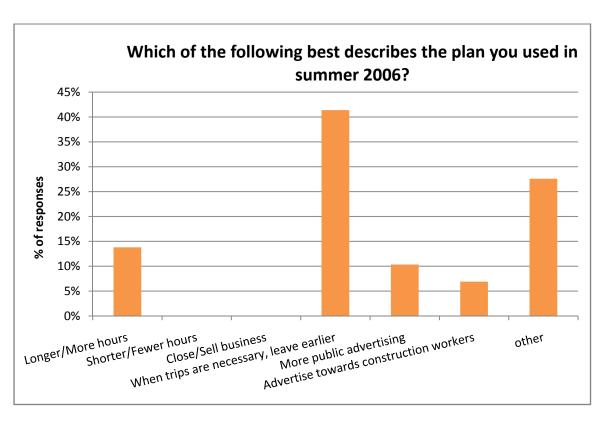


Figure 4-22: Methods to Combat Anticipated Business Losses

The things listed in the other category included:

- Letting customers know.
- More security.
- Get involved with project.
- Work with crews.
- Advise guests of delays.
- Allow hotels to discount rates for workers, making tourists main customers.

11) What plans do you have to mitigate possible construction-related complications for this upcoming summer? Please check all that apply.

This question was similar to number ten except it asked what their future plans were. The responses were similar to the question 10 responses. Figure 4-23 shows the breakdown of the responses.

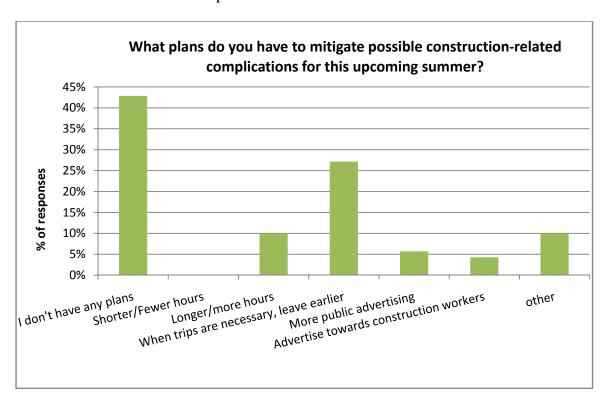


Figure 4-23: Future Methods to Combat Anticipated Business Losses

12) How many years years has your business been in Dubois?

This question broke up the result into six categories to allow for a more simple analysis. An approximate age of the business and how it weathers a poor business climate may be significant. The exact age of the business is unimportant. Figure 4-24 summarizes the results.

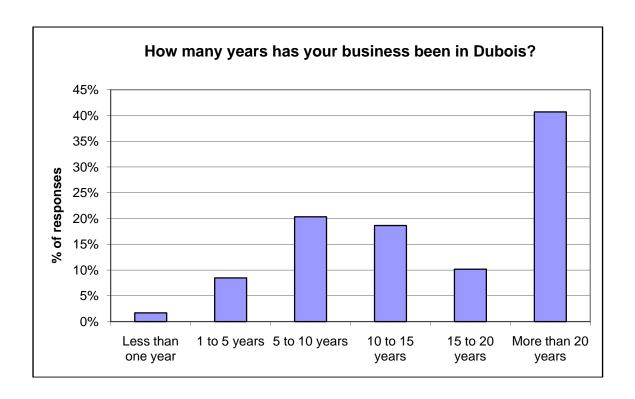


Figure 4-24: Years in Business

- 13) Approximately what percentage of your customers comes from out of town?

  Since this was not a categorical question the responses varied greatly. The average value from the responses was 58% with a maximum value of 100% and a minimum value of 0%. The complete list of responses can be found in the report appendix.
- 14) How did the following change <u>LAST summer</u> when compared to the summer before as a result of construction on Togwotee Pass?
  The majority of business owners responded that no change was seen in the number of customers, gross sales, and net profit for the summer of 2006. Figure 4-25 summarizes the results.

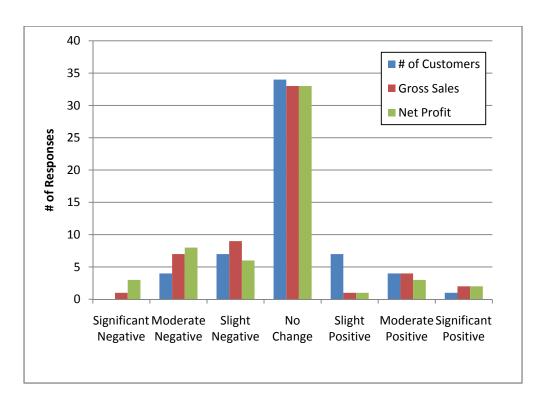


Figure 4-25: Perception of Change in Summer Business Levels for Summer 2006

15) How did the following change <u>THIS summer</u> when compared to the summer before as a result of construction on Togwotee Pass?

Similar to question number 14, the majority of business owners responded that no change was anticipated in the number of customers, gross sales, and net profit for the summer of 2007. Figure 4-26 summarizes the results.

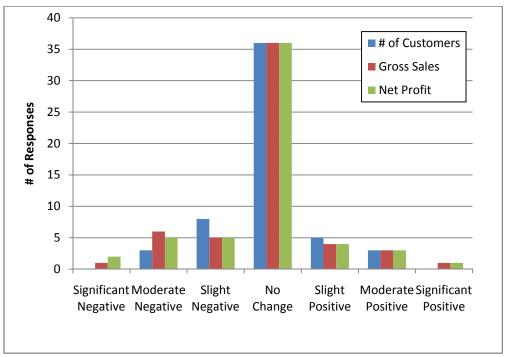


Figure 4-26: Expectations for Change in Summer Business Levels for Summer 2007

#### 4.3.3 Comparison of Spring 2006 and Spring 2007 Surveys

After both surveys had been collected and analyzed separately, they were compared to see how much the business owners thought things had changed overall. There were 36 businesses that responded to both surveys. Two questions of these surveys were of particular importance to this project.

- How do you expect the following to change THIS summer when compared to the summer before as a result of construction on Togwotee Pass?
- What percentage of their customers was from out of town.
  - How do you expect the following to change this summer when compared to
    an average summer as a result of construction on Togwotee Pass?
     Twelve business owners responded the exact same way on both surveys.
     Fourteen business owners reported a positive change in their response. Their initial prediction in the preliminary survey was not accurate because their

business did better than they thought it would. The other ten business owners reported a negative change in their response. They predicted that their business would do better than it actually did during the construction season.

2) Approximately what percentage of your customers comes from out of town?

Five of the businesses did not initially report a percent of out of town customers, but answered the second survey. Since there was no initial number to use for comparison, the numbers were not used for analysis.

Thirteen businesses reported that their out-of-town customer base had not changed from the preliminary survey. Nine businesses reported an increase in out-of-town customers. For seven businesses, the change was less than fifteen percent. One business saw an increase of twenty percent in their business, and another saw a forty percent change in their business. Nine businesses reported a decrease in out-of-town customers. Five businesses saw a change that was less than fifteen percent. Three businesses saw a change from 15-25%, and one business reported a change of forty percent.

From the surveys we can tell that each business is reacting to the construction a little differently. Many of the businesses are seeing no change in their business, but about twenty businesses have seen changes, either positive or negative, that are affecting their business.

### 4.4 Traveler Postcard Surveys

Postcard surveys for Togwotee Pass travelers were performed during both the Summer of 2006 and the summer of 2007.

### 4.4.1 2006 Postcard Surveys

One hundred and fifty postcard surveys were printed off for the summer 2006 survey.

Drivers would simply need to fill out the survey and drop it in the nearest U.S. Postal

Service mailbox, where it would be returned to the University of Wyoming in Laramie.

The survey was designed to be short and succinct to maximize the return rate.

Approximately 100 postcard surveys were handed out to drivers in late August, 2006 as they sat in the southernmost construction queue. Roamin' Wyomin' handed out the survey among the audio CD's, brochures, stickers, and other marketing materials that the character normally handed to drivers. 22 postcard surveys were returned, for a 22% return rate..

The raw data for the surveys can be found in the appendix. The following is a summary of the responses to each question:

1) What is the zip code of your primary residence?

Six respondents (27%) were from Wyoming; two were residents of Jackson, one was a resident of Riverton, two were residents of Casper, and one was a resident of Dubois. The remaining 16 respondents were spread evenly across the country.

2) What is the primary purpose of your trip today?

Of the respondents, 23% percent replied with "business", 77% replied with "pleasure". Three of the five "business" responses were from residents of Wyoming, the remaining two were from Montana and Idaho.

3) Were you aware of construction delays **before** choosing to travel through Dubois?

Responses were split almost evenly, with 55% indicating that yes, they were aware of delays, and 45% indicating that no, they were not aware of delays.

# 4) Where did you learn about the delays?

Drivers could choose from nine options, including an "other" category.

Respondents were allowed to check multiple options. Only three of these options were actually used. Of the respondents, 82% replied that they learned of the delays from roadside signs, 32% read about the delays in a newspaper, and 18% had other sources. Figure 4-27 shows the results of this question.

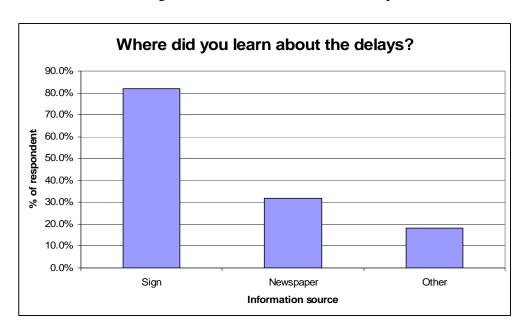


Figure 4-27: Source of Delay Information (2006)

5) Did you stop or do you plan on stopping in the town of Dubois?

Of the respondents, 64% replied that they had stopped or would stop in the town of Dubois, 36% did not stop in Dubois.

### *6) What is / was the purpose of your stop in Dubois?*

Drivers could choose from nine options, including the "other" category.

Respondents were allowed to check multiple options. Seven of these options were actually used. No one responded that they had stopped in Dubois for lodging or auto repair. The results of the survey question are shown in Figure 4-28. The percentages shown are of the 14 respondents that indicated "yes" to question five.

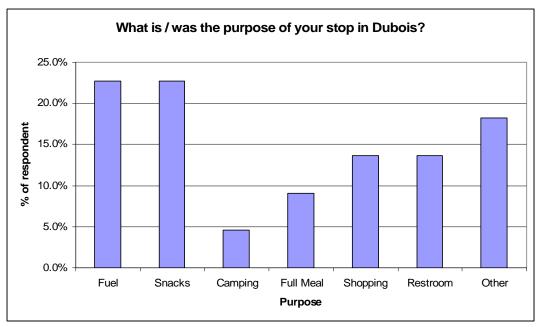


Figure 4-28: Purpose of Dubois Stop (2006)

7) How did you learn about the amenities available in Dubois?

Drivers could choose from eight options, including an "other" category.

Respondents were allowed to check multiple options. Six of these options were actually used. No one learned about Dubois from the Dubois Chamber of Commerce or from a hotel or gas station attendant. The results of the survey question are shown in Figure 4-29. The percentages shown are of the 14 respondents that indicated "yes" to question five.

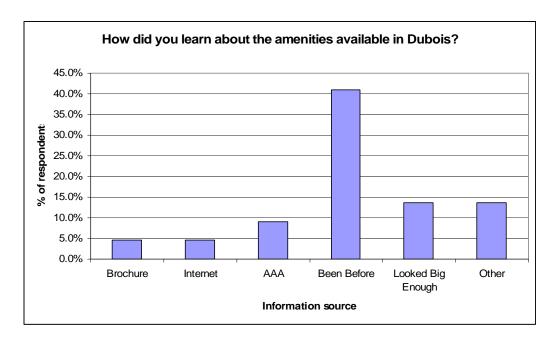


Figure 4-29: Information Source for Dubois Amenities (2006)

### 8) How many times have you traveled through Dubois, including this trip?

The results of this question were very much two-sided, with 41% of drivers indicating that this was their first trip through Dubois and 46% indicating that they had traveled through Dubois more than five times. The remaining 13% was spread among the "twice", and "three times" categories. No one indicated that they had traveled through Dubois four or five times.

## 4.4.2 2007 Postcard Surveys

The same number of postcard surveys were distributed in the summer of 2007 as in the summer of 2006. Twenty-nine surveys were returned for the 2007 period. The following is a summary of the responses to each question:

1) What is the zip code of your primary residence?

Four respondents (14%) were from Wyoming, including two residents of Dubois, 1 resident of Casper, and 1 resident of Cheyenne. Of the remaining respondents, 3 (10%) were from Idaho, 2 (7%) were from Montana, and 2 (7%) from Minnesota. The other 20 respondents came from places across the country.

2) What is the primary purpose of your trip today?

Of the respondents, 14 % responded with "business", 86% responded with "pleasure". Two of the four "business" responses were from Montana; the remaining two were from Wyoming and Utah.

3) Were you aware of construction delays **before** choosing to travel through Dubois?

Of the respondents, 37% indicated that yes, they were aware of the delays, and 53% indicated no, they weren't aware of the delays.

## 4) Where did you learn about the delays?

Just like the 2006 surveys, drivers could choose from nine options; this included an "other" category. Respondents were allowed to check multiple options. This time, six options were actually used. Of the twenty-nine respondents, 51% replied that they learned of the delays from roadside signs, 14% read about the delays in a newspaper, 3% had learned about the delays from the WYDOT website, 4% had learned from the radio, 6% from a hotel or gas station, and 34% had other sources. The other sources included hearing about the delays from someone else, and visiting Dubois before while construction was underway. Figure 4-30 shows the results of this question.

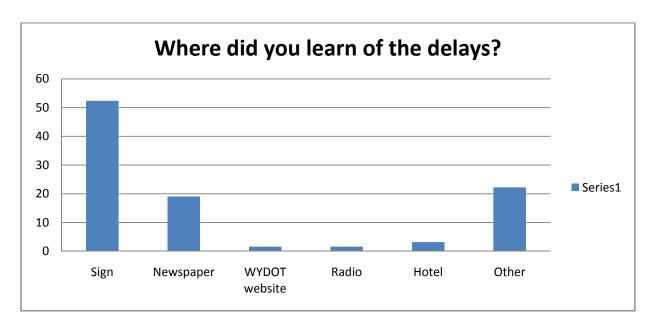


Figure 4-30: Source of Delay Information (2007)

5) Did you stop or do you plan on stopping in the town of Dubois?Eighty-seven percent replied that they had stopped or would stop in the town of Dubois, and 13% did not stop in Dubois.

# 6) What is / was the purpose of your stop in Dubois?

Just like the 2006 surveys, drivers could choose from nine options; this also included an "other" category. Respondents were allowed to check multiple options. Eight of these options were actually used in the 2007 surveys. No one responded that they had stopped in Dubois for auto repair. The results of the survey question are shown in Figure 4-31. The percentages shown are of the 25 respondents that indicated "yes" to question five.

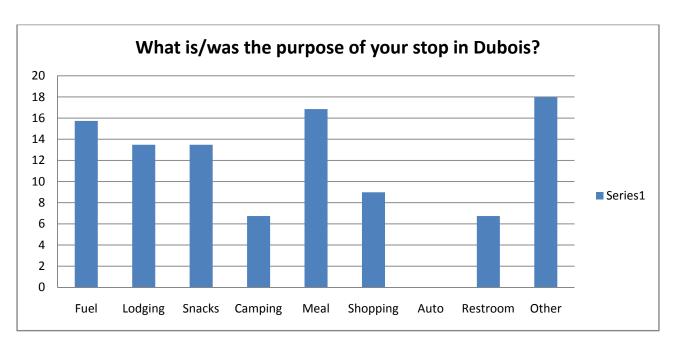


Figure 4-31: Purpose of Dubois Stop (2007)

## 7) How did you learn about the amenities available in Dubois?

Just like the 2006 surveys, drivers could choose from eight options; this included an "other" category. Respondents were allowed to check multiple options. Six of these options were actually used. No one learned about Dubois from a hotel or gas station attendant. The results of the survey question are shown in Figure 4-32. The percentages shown are of the 25 respondents that indicated "yes" to question five.

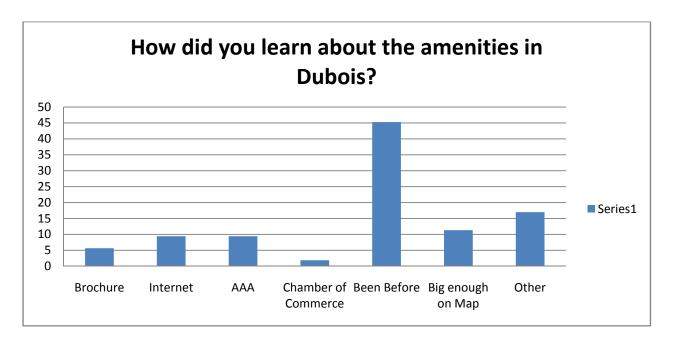


Figure 4-32: Information Source for Dubois Amenities (2007)

#### 8) How many times have you traveled through Dubois, including this trip?

The results of this question were different than the first survey: 44% of drivers indicating that this was their first trip through Dubois and 34% indicating that they had traveled through Dubois more than five times. No one responded that this was their second or fourth time in Dubois; 18% said that this was their third time in Dubois, and 4% said they had been through Dubois five times.

# 4.4.3 Overall Results of Postcard Traveler Surveys

Based on the postcard survey question 1, travelers on Togwotee pass are coming from across the United States which means that Dubois doesn't just attract people from the states neighboring Wyoming. The primary purpose for people's trips in Dubois appears to be pleasure.

The 2006 survey had more people respond that they knew about the delays caused by the construction than the 2007 survey. However, the people surveyed in 2007 are learning about the delays from different sources. The 2006 survey participants only listed their sources of information as signs, newspapers, and other; whereas the 2007 group listed the signs, the newspaper, the WYDOT website, radio, their hotel/gas stations, and other. This means that the different resources are being utilized, just not by as many people.

The number of people that were stopping in Dubois despite the delays increased in 2007. In 2006, many people stated that Dubois was not a destination on their stop, whereas in 2007 more people stopped in Dubois. This shows that Dubois is attracting more people to stop now than in previous years.

People in 2007 were stopping to eat meals and were finding lodging; they were not just stopping to use the restroom. The survey also showed that people were learning about amenities in Dubois from the same places both years, so the information that was advertising stops in Dubois had not changed much.

The one question that did not have a significant difference between the 2006 survey and the 2007 survey was the question that asked how many times the traveler had

been through Dubois. The most popular answers were either that people were first time visitors, or that they had been there more than five times.

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## **CHAPTER 5**

#### SUMMARY AND CONCLUSIONS

## 5.1 Summary

The general feeling within the Dubois business community appears to be that the construction project is a necessary evil that is having only minor effects on the town of Dubois. This feeling may have been fostered without outside help, but also may have been a result of the meetings hosted by WYDOT in recent years to address business owners' concerns. Therefore, it is recommended that the marketing campaign continue to focus significant effort towards keeping the business public informed of progress made with the construction project and information on individual mitigation techniques.

The Department of Revenue data shows that the businesses in the town were not doing as well during 2007 than they had been in the previous years but that appears to be the effect of several large-sales-volume businesses. When individual businesses were equally weighted the health of the businesses was very positive. The 2007 business survey showed that over half of the business owners felt that their business is continuing to do as well as the previous years. Only 13 of the 63 surveyed business owners felt that their business was being negatively impacted by the construction.

Based on the results from the preliminary survey, more than 80% of Dubois business owners use the newspaper as their primary source for information regarding the construction project. The next most-popular information source is printed flyers, at 20% popularity among business owners. It is recommended that WYDOT increase advertisement in local newspapers.

The results of the postcard survey show that tourists are no longer just stopping for fuel and snacks like they were the previous summer. Lodging, camping, and shopping, tasks that require a much larger time investment in Dubois, are were being listed as reason to stop. The roadside signs are still the most popular source of delay information for travelers. A single dynamic message board on the outskirts of Dubois was used to warn drivers of delays mere miles away. In 2007, travelers were getting their delay information from more resources than in 2006; however, not as many people knew about the delays. This indicates that the marketing techniques employed by WYDOT are not reaching the majority of tourist drivers. Marketing efforts must be increased to ensure that drivers are aware of delays before even choosing to travel over Togwotee Pass.

Unfortunately, more public-awareness of construction delays may cause more drivers to detour around Dubois. Traffic counts from the summer of 2006 indicate that no fewer drivers crossed the pass than earlier years, however; this may be a result of poor driver awareness of construction delays rather than an indication of successful advertising. Monitoring of the traffic volumes should be an ongoing effort.

Marketing efforts must promote the Togwotee Trail as a destination but be cautious not to frighten drivers by warnings of construction delays. The marketing plan proposed by CCT is aware of this fact, but public exposure appears to be low.

### 5.2 Conclusions and Recommendations

From the summary discussed above and the detailed results from the previous chapters, the following conclusions and recommendations are made:

- The overall level of estimated sales revenue in Dubois is holding steady with minor declines in the last year.
- The overall health of the businesses in Dubois is strong when considering the average change in sales revenue from year to year.
- The overall health of tourist-based businesses is also strong when considering
  average change in sales revenue, although the magnitude of sales growth is
  lower for this sector than the overall average.
- Traffic does not appear to be diverting away from Togwotee Pass to other routes, even given a slight decrease in the number of visitors entering the south gate of Yellowstone.
- The level of optimism among business owners is higher than what was seen in the previous two phases of this research, even given the magnitude and duration of the Togwotee Pass projects.
- Business owners want to see the marketing campaign continue and feel that it
  is helping, although few businesses are distributing the marketing material
  themselves.
- Travelers on Togwotee Pass are moderately aware of the delays before they make their route decisions.
- There is an increasing trend to make more extensive stops at Dubois, which may be a result of the increased marketing.

Based on the conclusions of this report, the following recommendations are being made in regards to addressing potential construction related business impacts:

- Continue to aggressively pursue public relations and marketing activities with the Dubois community.
- Monitor the traffic on US 26/287 to verify that the traffic is not decreasing.

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# APPENDIX A: DEPARTMENT OF REVENUE DATA

The data contained in this appendix was derived from a data set sent from the Department of Revenue. The original data contained monthly, and/or quarterly revenue data as well as business types by Standard Industrial Classification (SIC). The business types have been removed to protect confidentiality. The monthly and quarterly data has been condensed into the annual data used in the analyses. Business numbers (first column of data) are based on the original data so businesses that did not contain full years of data were excluded so some business numbers may not be represented.

		Quarterly			
#	Date Sales				
1	01/2006	\$1,570.26			
1	04/2006	\$679.29			
1	07/2006	\$817.13			
1	10/2006	\$599.64			
1	01/2007	\$466.31			
1	04/2007	\$1,336.77			
2	01/2006	\$1,042.94			
2	04/2006	\$477.37			
2	07/2006	\$558.64			
2	10/2006	\$517.62			
2	01/2007	\$633.06			
2	04/2007	\$523.44			
4	01/2006	\$100.00			
4	04/2006	\$13.02			
4	07/2006	\$66.22			
4	10/2006	\$0.00			
4	01/2007	\$11.28			
4	04/2007	\$30.65			
5	01/2006	\$473.29			
5	04/2006	\$342.22			
5	07/2006	\$744.29			
5	10/2006	\$991.56			
5	01/2007	\$643.66			
5	04/2007	\$294.39			
6	04/2007	\$167.76			
6	04/2006	\$87.37			
6	04/2006	\$221.40			
6	10/2006	\$107.43			
6	01/2007	\$107.43			
6	04/2007	\$75.75			
7	04/2007	\$75.75 \$512.07			
7					
7	04/2006	\$602.60			
7	07/2006	\$208.18			
7	10/2006	\$996.71 \$185.15			
7	01/2007 04/2007	\$185.15 \$272.40			
9	04/2007	\$373.49			
9	04/2006	\$0.00 \$789.72			
9	07/2006				
9	10/2006	\$590.53			
9		\$803.90 \$494.77			
9	01/2007	*			
10	04/2007	\$1,287.58			
10	01/2006	\$0.00			
	04/2006	\$8,372.03			
10	07/2006	\$13,150.16			
10	10/2006	\$16,250.04			

10	04/0007	<b>#0.00</b>
10	01/2007	\$0.00
10	04/2007	\$9,879.20
11	01/2006	\$102.80
11	04/2006	\$230.37
11	07/2006	\$0.00
11	10/2006	\$0.00
11	01/2007	\$76.40
11	04/2007	\$127.38
13	01/2006	\$2,565.14
13	04/2006	\$1,883.58
13	07/2006	\$3,113.84
13	10/2006	\$3,791.79
13	01/2007	\$2,009.16
13	04/2007	\$1,047.67
14	01/2006	\$302.28
14	04/2006	\$349.67
14	07/2006	\$1,169.73
14	10/2006	\$870.44
14	01/2007	\$295.18
14	04/2007	\$50.41
15	01/2006	\$778.40
15	04/2006	\$678.09
15	07/2006	\$1,037.68
15	10/2006	\$1,139.21
15	01/2007	\$911.81
15	04/2007	\$688.84
16	01/2006	\$294.56
16	04/2006	\$265.62
16	07/2006	\$285.95
16	10/2006	\$317.00
16	01/2007	\$338.62
16	04/2007	\$301.56
17	01/2006	\$0.00
17	04/2006	\$26,522.66
17	07/2006	\$12,550.95
17	10/2006	\$16,957.23
17	01/2007	\$26,989.21
17	04/2007	\$30,478.77
18	01/2006	\$0.00
18	04/2006	\$7,407.51
18	07/2006	\$6,469,387.00
18	10/2006	\$8,534.50
		. ,
18	01/2007	\$16,384.55
18	04/2007	\$9,290.48
20	01/2006	\$0.00
20	04/2006	\$1,532.98
20	07/2006	\$1,948.43

	ı	
20	10/2006	\$1,352.00
20	01/2007	\$3,272.30
20	04/2007	\$2,960.35
21	01/2006	\$1,161.33
21	04/2006	\$25.26
21	07/2006	\$60.69
21	10/2006	
		\$0.00
21	01/2007	\$91.34
21	04/2007	\$0.00
22	01/2006	\$452.79
22	04/2006	\$412.97
22	07/2006	\$566.87
22	10/2006	\$700.91
22	01/2007	\$623.78
22	04/2007	\$835.26
24	01/2006	\$0.80
24	04/2006	\$0.00
24	07/2006	\$6.00
24	10/2006	\$2.80
24		·
	01/2007	\$10.65
24	04/2007	\$10.85
29	01/2006	\$4,714.23
29	04/2006	\$4,503.88
29	07/2006	\$6,483.04
29	10/2006	\$13,002.29
29	01/2007	\$4,900.56
29	04/2007	\$4,721.02
31	01/2006	\$926.18
31	04/2006	\$808.31
31	07/2006	\$1,108.88
31	10/2006	\$1,983.78
31	01/2007	\$953.01
31	04/2007	\$836.97
32		
	01/2006	\$0.00
32	04/2006	\$15,295.14
32	07/2006	\$1,634.92
32	10/2006	\$4,624.84
32	01/2007	\$2,315.40
32	04/2007	\$9,906.95
34	01/2006	\$2,291.60
34	04/2006	\$2,177.00
34	07/2006	\$3,015.65
34	10/2006	\$3,440.02
34	01/2007	\$905.38
34	04/2007	\$929.64
35	01/2006	\$0.00
35	04/2006	\$1,558.37
33	04/2000	ψ1,000.31

35	07/2006	\$1,740.83
35	10/2006	\$2,175.56
35	01/2007	\$2,439.55
35	04/2007	\$1,528.86
37	01/2006	\$124,934.10
37	04/2006	\$90,607.07
37		
	07/2006	\$76,879.67
37	10/2006	\$82,885.53
37	01/2007	\$69,822.23
37	04/2007	\$61,450.97
40	01/2006	\$3,079.34
40	04/2006	\$728.98
40	07/2006	\$1,057.11
40	10/2006	\$346.01
40	01/2007	\$2,868.14
40	04/2007	\$178.90
41	01/2006	\$0.00
41	04/2006	\$455.18
41	07/2006	\$3,098.63
41	10/2006	\$306.59
41	01/2007	\$21.15
41	04/2007	\$687.76
42	01/2006	\$23,871.56
42	04/2006	
42		\$22,004.80
	07/2006	\$26,150.60
42	10/2006	\$8,700.28
42	01/2007	\$5,937.52
42	04/2007	\$5,379.00
43	01/2006	\$10.79
43	04/2006	\$16.86
43	07/2006	\$7.82
43	10/2006	\$37.45
43	01/2007	\$10.76
43	04/2007	\$8.28
44	01/2006	\$435.07
44	04/2006	\$549.68
44	07/2006	\$662.10
44	10/2006	\$1,107.73
44	01/2007	\$629.42
44	04/2007	\$874.68
45	01/2006	\$540.08
45	04/2006	\$328.97
45	07/2006	\$3,683.72
45	10/2006	\$1,786.00
45	01/2007	\$2,388.81
45	04/2007	\$476.40
46	04/2007	\$18.84
40	01/2000	φ10.04

	1	T
46	04/2006	\$100.90
46	07/2006	\$214.73
46	10/2006	\$142.41
46	01/2007	\$56.14
46	04/2007	\$125.38
48	01/2006	\$456.12
48	04/2006	\$386.25
48	07/2006	\$542.96
48	10/2006	\$560.89
48		\$392.46
-	01/2007	
48	04/2007	\$852.89
49	01/2006	\$1,054.56
49	04/2006	\$750.82
49	07/2006	\$686.16
49	10/2006	\$2,554.03
49	01/2007	\$1,213.22
49	04/2007	\$592.24
50	01/2006	\$0.00
50	04/2006	\$597.54
50	07/2006	\$1,580.28
50	10/2006	\$1,516.32
50	01/2007	\$589.26
50	04/2007	\$524.16
52	01/2006	\$2,088.17
52	04/2006	\$1,992.90
52	07/2006	
-		\$2,903.64
52	10/2006	\$4,971.32
52	01/2007	\$2,552.11
52	04/2007	\$2,162.65
53	01/2006	\$0.00
53	04/2006	\$6,695.86
53	07/2006	\$0.00
53	10/2006	\$0.00
53	01/2007	\$0.00
53	04/2007	\$6,695.86
54	01/2006	\$22.31
54	04/2006	\$78.07
54	07/2006	\$298.28
54	10/2006	\$62.23
54	01/2007	\$34.91
54	04/2007	\$164.00
55	01/2006	\$2,307.98
55	04/2006	\$933.39
55	07/2006	\$1,885.21
55	10/2006	\$3,772.80
55	01/2007	\$2,265.10
55	04/2007	\$932.06
აა	04/2007	Φઝ3Z.U0

56	01/2006	\$261.92
56	04/2006	\$80.16
56	07/2006	\$403.32
56	10/2006	\$1,333.00
56	01/2007	\$209.10
56	04/2007	\$74.78
57	01/2006	\$640.98
57	04/2006	\$173.10
57	07/2006	\$1,422.63
57	10/2006	\$3,232.40
57	01/2007	\$518.82
57	04/2007	\$170.78
58	01/2006	\$7.10
58	04/2006	\$25.24
58	07/2006	\$443.07
58	10/2006	\$108.71
58	01/2007	\$5.42
58		
59	04/2007	\$0.00
	01/2006	\$616.88
59	04/2006	\$0.00
59	07/2006	\$1,225.53
59	10/2006	\$8,764.72
59	01/2007	\$0.00
59	04/2007	\$0.00
61	01/2006	\$0.00
61	04/2006	\$0.00
61	07/2006	\$2,786.51
61	10/2006	\$4,853.49
61	01/2007	\$0.00
61	04/2007	\$0.00
62	01/2006	\$229.36
62	04/2006	\$464.96
62	07/2006	\$0.00
62	10/2006	\$0.00
62	01/2007	\$229.36
62	04/2007	\$464.96
63	01/2006	\$0.00
63	04/2006	\$10.13
63	07/2006	\$17.04
63	10/2006	\$0.00
63	01/2007	\$0.00
63	04/2007	\$17.14
64	01/2006	\$416.83
64	04/2006	\$157.62
64	07/2006	\$833.15
64	10/2006	\$2,993.36
64	01/2007	\$588.52
	•	

	1	1
64	04/2007	\$169.09
65	01/2006	\$419.88
65	04/2006	\$421.18
65	07/2006	\$424.94
65	10/2006	\$363.69
65	01/2007	\$463.90
65	04/2007	\$598.99
66	01/2006	\$295.32
66	04/2006	\$80.40
66	07/2006	\$177.04
66	10/2006	\$180.96
66	01/2007	\$175.49
66	04/2007	\$355.24
69	01/2006	\$99.50
69	04/2006	\$24.88
69	07/2006	\$192.06
69	10/2006	\$758.80
69	01/2007	\$76.54
69	04/2007	\$23.90
72	01/2006	\$0.00
72	04/2006	\$0.00
72	07/2006	\$0.00
72	10/2006	\$101.65
72	01/2007	\$0.23
72	04/2007	\$0.00
73	01/2006	\$0.00
73	04/2006	\$0.00
73	07/2006	\$0.00
73	10/2006	\$20.00
73	01/2007	\$0.00
73	04/2007	\$0.00
78	01/2006	\$602.59
78	04/2006	\$760.05
78	07/2006	\$946.08
78	10/2006	\$344.70
78	01/2007	\$550.90
78	04/2007	\$301.94
79	01/2006	\$8.72
79	04/2006	\$12.99
79	07/2006	\$15.05
79	10/2006	\$12.02
79	01/2007	
-		\$15.96
79	04/2007	\$11.37
80	01/2006	\$18.64
80	04/2006	\$23.54
80	07/2006	\$16.88
80	10/2006	\$15.48

	0.1/0.00	<b>A</b>
80	01/2007	\$15.73
80	04/2007	\$28.42
82	01/2006	\$0.00
82	04/2006	\$0.00
82	07/2006	\$594.68
82	10/2006	\$608.40
82	01/2007	\$0.00
82	04/2007	\$0.00
83	01/2006	\$643.92
83	04/2006	\$91.22
83	07/2006	\$377.14
83	10/2006	\$517.20
83	01/2007	\$866.08
83	04/2007	\$368.08
-		
84	01/2006	\$0.00
84	04/2006	\$3,454.74
84	07/2006	\$932.48
84	10/2006	\$9,007.03
84	01/2007	\$94.95
84	04/2007	\$764.60
85	01/2006	\$863.04
85	04/2006	\$0.00
85	07/2006	\$300.33
85	10/2006	\$3,069.00
85	01/2007	\$914.38
85	04/2007	\$0.00
88	01/2006	\$54.00
88	04/2006	\$84.00
88	07/2006	\$97.92
88	10/2006	\$129.00
88	01/2007	\$18.00
88	04/2007	\$98.25
90	01/2006	\$5.39
90	04/2006	\$11.14
90	07/2006	\$4.00
90	10/2006	\$2.76
90	01/2007	\$11.54
90	04/2007	\$0.00
92	04/2007	\$0.00
92	04/2006	\$45.27
92	07/2006	\$127.93
92	10/2006	\$0.00
92	01/2007	\$10.54
92	04/2007	\$36.88
95	01/2006	\$2,435.63
95	04/2006	\$3,119.48
95	07/2006	\$4,628.79

95	10/2006	\$3,548.89
95	01/2007	\$0.00
95	04/2007	\$0.00
96	01/2006	\$18.90
96	04/2006	\$0.00
96	07/2006	\$377.92
96	10/2006	\$5,889.39
96	01/2007	\$0.00
96	04/2007	\$0.00
100	01/2006	\$184.72
100	04/2006	\$28.94
100	07/2006	\$537.58
100	10/2006	\$1,446.58
100	01/2007	\$370.38
100	04/2007	\$0.00
101	01/2006	\$0.00
101	04/2006	\$995.42
101	07/2006	\$3,234.23
101	10/2006	\$86.13
101	01/2007	\$0.00
101	04/2007	\$0.00
102	01/2006	\$0.00
102	04/2006	\$122.10
102	07/2006	\$395.71
102	10/2006	\$4.20
102	01/2007	\$0.00
102	04/2007	\$166.25
104	01/2006	\$659.53
104	04/2006	\$197.48
108	04/2007	\$4,733.44

104	07/2006	\$1,568.55
104	10/2006	\$5,502.34
104	01/2007	\$773.94
104	04/2007	\$477.12
105	01/2006	\$457.98
105	04/2006	\$1,505.88
105	07/2006	\$4,656.59
105	10/2006	\$671.04
105	01/2007	\$390.35
105	04/2007	\$2,039.70
106	01/2006	\$2,650.36
106	04/2006	\$2,926.58
106	07/2006	\$4,158.08
106	10/2006	\$13,356.89
106	01/2007	\$3,390.26
106	04/2007	\$3,467.93
107	01/2006	\$2,849.56
107	04/2006	\$9,670.90
107	07/2006	\$6,415.35
107	10/2006	\$39,343.78
107	01/2007	\$3,742.53
107	04/2007	\$14,326.22
108	01/2006	\$1,474.14
108	04/2006	\$6,019.83
108	07/2006	\$1,409.26
108	10/2006	\$3,138.31
108	01/2007	\$1,695.25

# **APPENDIX B: BUSINESS SURVEY**

- Sample Business Survey
- Business Survey Results

# **BUSINESS SURVEY (Mailed Spring 2006)**

The Wyoming Department of Transportation (WYDOT) and the University of Wyoming are studying the impacts of the upcoming US 287/26 Togwotee Pass reconstruction project on Dubois businesses. WYDOT will use this information to address business concerns during subsequent years of this project as well as on future highway construction projects.

Please answer the following questions and return the survey in the enclosed, pre-paid anyologo Romambar, the information you provide in this curvey is for research nurposes only

	id will remain <u>strictly confidential</u> .
Th	nank you for your help!
cu	YDOT is employing several techniques to help local businesses stay notified of rrent events related to the project. They are also working to maintain the heavy ellowstone-bound tourist traffic that travels through the area every summer.
1)	Have you been directly contacted, beside this survey, about the upcoming construction project?
	Yes, I <i>have</i> been contacted. No, I <i>have not</i> been contacted. (Please skip to Question #3)
2)	How were you contacted? Please check all that apply.
	U.S. Mail Telephone
	☐ Email ☐ Personally
	Other (please specify)
3)	Which of the following resources have you used to learn about the upcoming construction project? Please check all that apply.
	Togwotee Trail Website (http://www.gotogwoteetrail.com) WYDOT Website (http://dot.state.wy.us)  Newspaper Television
	Radio Flyers
	Other (please specify)

		complication in the lines be		iniormatio	ii ieit you?	reel tree to
		Somewhat Unprepared			on't Know	
				]		
					compared t	to an averaç
the guidel	ines and	table below:				
Significant – change of 20% or more  Moderate – change between 5% and 20%  Slight – change of 5% or less  No Change – no noticeable increase or decrease						
			NO CHANGE			NGE Slight
Significant	IVIOGETALE	Siight		Significant	Moderate	Slight
	u expect the a result of the guidel cant — change — change — no result of the guidel cant — change of the guidel cant — change — no results — change — chang	u expect the following a result of construction of 20 ate — change of 20 ate — change of 5% or leading — no noticeable positive CH/	u expect the following to change a result of construction on To the the guidelines and table below:  cant – change of 20% or more ate – change between 5% and 20 – change of 5% or less ange – no noticeable increase or	u expect the following to change this summare are sult of construction on Togwotee is the guidelines and table below:  cant – change of 20% or more ate – change between 5% and 20% – change of 5% or less ange – no noticeable increase or decrease ange – no noticeable increase or decrease	u expect the following to change this summer when of a result of construction on Togwotee Pass?  the guidelines and table below:  cant – change of 20% or more ate – change between 5% and 20%  change of 5% or less ange – no noticeable increase or decrease	u expect the following to change this summer when compared to a result of construction on Togwotee Pass?  the guidelines and table below:  cant – change of 20% or more ate – change between 5% and 20% – change of 5% or less ange – no noticeable increase or decrease  POSITIVE CHANGE NO NEGATIVE CHAI

7) What can WYDOT or the Contractor do to alleviate your concerns?
8) How would you classify your business? Please check all that apply.
Professional Service Retail Sales Retail Service
Other (please specify)
If you answered both "Retail Sales" and "Retail Service", please estimate how both contribute to your overall profit:
+ = 100%
9) Approximately what percentage of your customers comes from out of town?
%
10)How many years has your business been in Dubois?
Less than 1 year 1 to 5 years
5 to 10 years 10 to 15 years
15 to 20 years More than 20 years
11)How many people does your business employ during a typical summer?
# of Full-time Employees # of Part-time Employees
If you have any questions or comments regarding this survey please contact

If you have any questions or comments regarding this survey please contact Steven Vander Giessen, Department of Civil & Architectural Engineering, University of Wyoming at (307) 766-3427 or <a href="mailto:zzyzx@uwyo.edu">zzyzx@uwyo.edu</a>

Please use the enclosed prepaid envelope to return the survey.

Thank you for your efforts!

# **BUSINESS SURVEY (Mailed Spring 2007)**

The Wyoming Department of Transportation (WYDOT) and the University of Wyoming are studying the impacts of the US 287/26 Togwotee Pass reconstruction project on Dubois businesses. WYDOT will use this information to address business concerns during subsequent years of this project as well as on future highway construction projects.

Please answer the following questions and return the survey in the enclosed, pre-paid envelope. Remember, the information you provide in this survey is for research purposes only and will remain <u>strictly confidential</u>.

Thank you for your help!

WYDOT is employing several techniques to help local businesses stay notified of current events related to the project. They are also working to maintain the heavy Yellowstone-bound tourist traffic that travels through the area every summer.

1) How did your business fare during summer 2006 as compared to previous summers?

Much Worse	Worse	No Change	Better	Much Better

2) Did your business have Togwotee Trail marketing material handouts, such as those shown below, *readily available* for interested customers?



Yes, we *did* have handouts. No, we *did not* have handouts.

3) Have you visited the official Togwotee Trail website, <a href="http://www.gotogwoteetrail.com">http://www.gotogwoteetrail.com</a>?

Yes, I *have* visited the site. No, I *have not* visited the site. (Please skip to Question #6)

4)	How often did yo	often did you visit the website during construction season? Please select only one.						
	Daily	Weekly						
	Monthly		l've	only visited	once.			
	Never							
5)	Have you visited	the "Business	s Center"	portion of the	e website?			
	Yes, I <i>have</i> v	risited it.	No	o, I <i>have no</i> s	<i>t</i> visited it.			
6)	How would you reconstruction over	•				or with regard	l to	
		Very Poor	Poor	Neutral	Good	Very Good		
	Timeliness of News Updates							
	Reliability of News Updates							
	Traffic Delays							
	Public Involvement							
7)	How often did you drive over Togwotee Pass during the summer construction season in 2006?  Daily  Monthly  Rarely  Never							
8)	How much longer did it take, on average, to complete a one-way trip over the pass during the summer of 2006 compared to previous summers?							
	It didn't take	any longer.	Less	than 10 minu	utes longer.			
	Between 10 a	and 30 min.	More	than half an	hour longer.			

9) Did you make specific plans to combat <i>construction-related</i> business loss <i>before</i> construction began in 2006?
Yes, I <i>did</i> make plans.  No, I <i>did not</i> make plans.  (Please skip to Question #11)
10) Which of the following best describes the plan you used in summer 2006? Please check all that apply.
Longer / More hours Shorter / Fewer hours
Close / Sell Business When trips are necessary, leave earlier
More Public Advertising Advertise towards construction workers
Other:
11)What plans do you have to mitigate possible construction-related complications for this upcoming summer? Please check all that apply.
I don't have any plans. Shorter / Fewer hours
Longer / More hours When trips are necessary, leave earlier
More Public Advertising Advertise towards construction workers
Other:
12)How many years has your business been in Dubois?
Less than 1 year 1 to 5 years
5 to 10 years 10 to 15 years
15 to 20 years More than 20 years
13) Approximately what percentage of your customers comes from out of town?
%

Please use the guidelines and table below for questions #14 & 15:

Significant – change of 20% or more

Moderate – change between 5% and 20%

Slight – change of 5% or less

No Change – no noticeable increase or decrease

14) How did the following change <u>LAST summer</u> when compared to the summer before *as a result of construction on Togwotee Pass*?

	NEGATIVE CHANGE		NEGATIVE CHANGE NO POSITIVE CHANGE		NGE		
	Significant	Moderate	Slight	CHANGE	Slight	Moderate	Significant
Daily # of Customers							
Gross Sales							
Net Profit							

15)How do you expect the following to change <u>THIS summer</u> when compared to the summer before *as a result of construction on Togwotee Pass*?

	NEGATIVE CHANGE		NEGATIVE CHANGE NO POSITIVE CHANGE		NGE		
	Significant	Moderate	Slight	CHANGE	Slight	Moderate	Significant
Daily # of Customers							
Gross Sales							
Net Profit							

If you have any questions or comments regarding this survey please contact Steven Vander Giessen, Department of Civil & Architectural Engineering, University of Wyoming at (307) 766-3427 or <a href="mailto:zzyzx@uwyo.edu">zzyzx@uwyo.edu</a>

Please use the enclosed prepaid envelope to return the survey.

Thank you for your help!

## **Business Survey Results**

# **Spring 2006**

Based on 72 returned surveys:

Question 1: Have you been directly contacted, beside this survey, about the upcoming construction project?

	Yes	No
Contacted	23	49

Question 2: How were you contacted? Please check all that apply.

	Number of people
U.S Mail	9
E-mail	5
Telephone	4
Personally	9

Question 3: Which of the following resources have you used to learn about the upcoming construction project? Please check all that apply.

Source	# of people
Togwotee	
Trail.com	13
WYDOT	31
Newspaper	61
Television	2
Radio	12
Flyers	14

Question 4: How prepared for construction complications has this information left you? Feel free to provide additional comments on the lines below.

Well Prepared	Somewhat Prepared	Somewhat Unprepared	Totally Unprepared
11	36	9	6

Question 5: How do you expect the following to change this summer when compared to an average summer *as a result of construction on Togwotee Pass* 

	POSITIVE CHANGE			NO	NEG	ATIVE CHAI	NGE
	Significant	Moderate	Slight	CHANGE	Significant	Moderate	Slight
Daily # of Customers	1	4	12	27	5	16	5
Gross Sales	0	6	13	23	4	17	6
Net Profit	0	6	16	23	5	17	5

Question 8: How would you classify your business? Please check all that apply.

Professional			
Service	Retail Service	Retail Sales	Other
23	32	21	19

Question 10: How many years has your business been in Dubois?

Years	Number of Businesses
Less than 1	1
1 to 5	8
5 to 10	18
10 to 15	13
15 to 20	7
More than 20	27

2007 Surveys

Based on 59 returned surveys:

1) How did your business fare during summer 2006 as compared to previous summers?

Much Worse	Worse	No Change	Better	Much Better
1	6	35	17	1

2) Did your business have Togwotee Trail marketing material handouts, such as those shown below, *readily available* for interested customers?



- 17 Yes, we *did* have handouts. 42 No, we *did not* have handouts.
- 3) Have you visited the official Togwotee Trail website, http://www.gotogwoteetrail.com?
  - 19 Yes, I *have* visited the site. 40 No, I *have not* visited the site.
- 4) How often did you visit the website during construction season? Please select only one.
  - 0 Daily 3 Weekly
  - 7 Monthly 9 I've only visited once.
  - 0 Never
- 5) Have you visited the "Business Center" portion of the website?
  - 11 Yes, I *have* visited it. 48 No, I *have not* visited it.
- 6) How would you rate the performance of WYDOT and the contractor with regard to construction over Togwotee Pass in the summer of 2006?

	Very Poor	Poor	Neutral	Good	Very Good
Timeliness of News Updates	0	0	14	27	9
Reliability of News Updates	0	0	14	27	0
Traffic Delays	0	6	19	21	10
Public Involvement	0	2	22	19	6

7) How often did you drive over season in 2006?	Togwotee Pass during the summer construction
3 Daily	19 Weekly
17 Monthly	18 Rarely
3 Never	
8) How much longer did it take, of the summer of 2006 compared	on average, to complete a one-way trip over the pass during d to previous summers?
2 It didn't take any longer.	9 Less than 10 minutes longer.
40 Between 10 and 30 min.	8 More than half an hour longer.
9) Did you make specific plans to construction began in 2006?	combat construction-related business loss before
15 Yes, I <i>did</i> make plans.	44 No, I <i>did not</i> make plans. (Please skip to Question #11)
10) Which of the following best de that apply.	escribes the plan you used in summer 2006? Please check all
4 Longer / More hours	0 Shorter / Fewer hours
0 Close / Sell Business	12 When trips are necessary, leave earlier
3 More Public Advertising	2 Advertise towards construction workers
8 Other	
11)What plans do you have to mi upcoming summer? Please ch	tigate possible construction-related complications for this neck all that apply.
30 I don't have any plans.	0 Shorter / Fewer hours
7 Longer / More hours	19 When trips are necessary, leave earlier
4 More Public Advertising	3 Advertise towards construction workers
7 Other	

12)How many years has your business been in Dubois?					
1 Less than 1 year	5 1 to 5 years				
12 5 to 10 years	11 10 to 15 years				

6 15 to 20 years

14)How did the following change <u>LAST summer</u> when compared to the summer before *as a result of construction on Togwotee Pass*?

	NEGATIVE CHANGE		NO	POSITIVE CHANGE		NGE	
	Significant	Moderate	Slight	CHANGE	Slight	Moderate	Significant
Daily # of Customers	1	4	6	34	7	4	0
Gross Sales	2	3	1	32	9	7	1
Net Profit	2	3	1	33	6	8	3

24 More than 20 years

15)How do you expect the following to change <u>THIS summer</u> when compared to the summer before *as a result of construction on Togwotee Pass*?

	NEGATIVE CHANGE		NO	POSITIVE CHANGE		NGE	
	Significant	Moderate	Slight	CHANGE	Slight	Moderate	Significant
Daily # of Customers	0	3	5	36	8	3	0
Gross Sales	1	3	4	36	5	6	1
Net Profit	1	3	4	36	4	6	2

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# APPENDIX C: POSTCARD SURVEY

- Sample Postcard Survey
- Postcard Survey Results

# **Sample Postcard Survey**

The Wyoming Department of Transportation (WYDOT) and the University of Wyoming are studying the impacts of the Togwotee Pass reconstruction project on the town of Dubois. Please answer the following questions and place this prepaid postcard in the mail to help us lessen the impacts of future highway construction projects! Thank you and have a safe trip!

1) What is the zip code of your primary residence?	6) What is / was the purpose of your stop in Dubois?  (check all that apply)
2) What is the primary purpose of your trip today?  ☐ Business ☐ Pleasure	☐ Snacks ☐ Camping ☐ Full Meal ☐ Shopping ☐ Auto Repair ☐ Restroom ☐ Other:
Were you aware of construction delays before	
choosing to travel through Dubois?  YES NO  4) Where did you learn about the delays?  (check all that apply) Roadside Sign Newspaper WYDOT Website GoTogwoteeTrail.com Television AAA / Travel Agency Radio At a Hotel / Gas Station	7) How did you learn about the amenities available in Dubois? (check all that apply)  Brochure Internet  AAA Book Idea   Hotel / Gas Station  Dubois Chamber of Commerce  I've been to Dubois before  The town looked big enough on the map  Other:
Other:  Other:  Yes No	8) How many times have you traveled through Dubois including this trip? (check only one)  This is my first  Twice  Three times  Four times  More than 5 Times

# **Postcard Survey Results**

Question 1: What is the zip code of your primary residence?

Summ	er 2006 Results	Summer	2007 Results
Zip Code	Location	Zip Code	Location
56001	Mankato, MN	82513	Dubois, WY
62298	Waterloo, IL	55303	Anoka, MN
60016	Des Plaines, IL	49449	Pentwater, MI
82609	Casper, WY	83801	Athol, ID
82637	Glenrock, WY	87505	Santa Fe, NM
82513	Dubois, WY	12308	Albany, NY
90479	Germany	33813	Lakeland, FL
57375	Stickney, SD	82003	Cheyenne, WY
83001	Jackson, WY	82604	Casper, WY
93036	Oxnard, CA	17754	Montoursville, PA
78730	Austin, TX	86405	Lake Havasu City, AZ
20815	Chevy Chase, MD	59102	Billings, MT
91360	Thousand Oaks,CA	93292	Visalia, CA
64836	Carthage, MO	83221	Blackfoot, ID
51250	Sioux Center, IA	55113/68516	St. Paul, MN/Lincoln, NE
29340	Gaffney, SC	33928	Estero, FL
59088	Worden, MT	74881	Wellston, OK
82604	Casper, WY	37215	Nashville, TN
82501	Riverton, WY	37436	
76012	Arlington, TX	42071	Murray, KY
83270		59802	Missoula, MT
83001	Jackson, WY	82513	Dubois, WY
85716	Tucson, AZ	V9P2P8	BC-Canada
		71913	Hot Springs Ntnl Park, AR
		35186	Wilsonville, AL
		84321	Logan, UT
		63365	New Melle, MO
		83714	Garden City, ID

Question 2: What is the primary purpose of your trip today?

	Summer 2006	Summer 2007	Total
Business	5	4	9
Pleasure	19	24	43

Question 3: Were you aware of construction delays before choosing to travel through Dubois?

	Summer 2006	Summer 2007	Total
Yes	13	11	24
No	9	17	26

Question 4: Where did you learn about the delays? (Check all that apply)

	Summer 2006	Summer 2007	Total
Roadside Sign	18	4	12
WYDOT Website	0	1	1
Television	0	0	0
Radio	0	1	1
Newspaper	8	4	12
GoTogwoteeTrail.com	0	0	0
AAA/Travel Agency	0	0	0
At a Hotel/Gas Station	0	2	2
Other	4	10	14

Question 5: Did you stop or do you plan on stopping in the town of Dubois?

	Summer 2006	Summer 2007	Total
Yes	15	23	38
No	8	4	12

Question 6: What is/was the purpose of your stop in Dubois? (Check all that apply)

	Summer 2006	Summer 2007	Total
Fuel	5	9	14
Snacks	6	6	12
Full Meal	3	12	15
Auto Repair	0	0	0
Lodging	0	12	12
Camping	1	5	6
Shopping	3	5	8
Restroom	3	3	6
Other	5	11	16

Question 7: How did you learn about the amenities available in Dubois? (Check all that apply)

	Summer 2006	Summer 2007	Total
Brochure	1	2	3
AAA Book			
Dubois Chamber of	0	1	1
Commerce			
I've been to Dubois	10	14	24
before			
The town looked big	3	3	6
enough on the map			
Internet	1	4	5
Hotel/Gas Station	0	0	0
Other	4	5	9

Question 8: How many times have you traveled through Dubois, including this trip? (check only one)

	Summer 2006	Summer 2007	Total
This is my first	9	12	21
Twice	2	0	2
Three times	3	3	6
Four times	0	0	0
Five times	0	1	0
More than 5 times	11	10	21

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# APPENDIX D: LICENSE PLATE SURVEY

• License Plate Survey Results

Date: 8/18/2006		
Begin Time: 10:12 am		
End Time: 12:12 pm		
Highway: US 287 / 26		
Location: MP 17, near th	e Forest	Service rest
area at the top of Togwo		
WYOMING		
COUNTIES	EB	WB
1	3	2
2	3	1
3	1	
4		2
5	1	
6		
7		
8		
9		
10	6	16
11	1	
12	2	
13		
14		
15	1	
16		
17	3	
18		
19		
20	1	1
21	_	4.4
22	5	11
23	1	-
Unknown WY	1	8
AMERICAN STATES		
AK		
AL AR		
AZ	2	1
CA	4	6
CO	17	7
СТ	17	
DE		
FL	3	2
GA	3	
HI		
I. ID	10	1
IL	5	1
• <b>-</b>		1 1

IN		
IA	4	4
KS	3	1
KY		
LA	1	1
ME		1
MD		-
MA	1	
MI		
MN	17	2
MS		
MO	1	1
MT	2	3
NE	4	
NV	<u>'</u>	
NH		
NJ		2
NM	2	
NY	4	3
NC	1	1
ND ND	'	
ОН	2	
OK		
OR	1	1
PA	'	
RI		
SC		
SD	2	
TN		1
TX	7	3
UT	5	9
VT		3
VA		
WA	4	2
WI	1	1
WV	'	'
Unknown	8	6
OHAHOWH		J J
Fire	1	
Highway Dept.	1	
US Government	3	
Forest Service	1	
1 OF COL OCT VICE	'	
Ontario		1
Unitario	1	<u> </u>