DEVELOPING SYSTEM FOR CONSISTENT MESSAGING ON INTERSTATE 80'S DYNAMIC MESSAGE SIGNS

PHASE I

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ABSTRACT

Traveler Information Systems, a part of the larger field of Intelligent Transportation Systems (ITS), were originally utilized in urban areas to reduce congestion. Traveler information has become increasingly important in rural areas, especially in areas with adverse weather conditions, such as Wyoming. Dynamic message signs (DMSs) are often used to provide information during a traveler's trip. Current research literature does not contain much guidance for the rural use of DMSs.

This report will analyze the effectiveness of traveler information, with a focus on the use of DMSs on the I-80 corridor between Laramie and Cheyenne in southeast Wyoming, using several methods including evaluation of the consistency of past DMS messages, surveys of both frequent and random travelers, and statistical analyses of the correlation between speed, weather, and DMS data. The current message decision system utilized by the Wyoming Department of Transportation (WYDOT) will also be described and evaluated. A framework for future development of an advanced decision support system using real-time speed and weather data will be discussed along with suggested modifications to the current traveler information system to improve its effectiveness in the short term.

This report describes a research effort conducted at the University of Wyoming by Dr. Rhonda Young, associate professor, and graduate student Michelle Edwards.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

Information is often needed for people to make decisions, particularly for complex decisions. The information must be accurate and helpful. Although the need for information applies to most types of decisions, it is very important when it comes to making decisions about travel. The majority of travelers have a specific reason for each trip they make, and they are concerned about reaching their destination as safely and efficiently as possible. These factors come into play when travelers are deciding what type of transportation to utilize, the best time to make the trip, and the best route for the trips. It is important for travelers to be able to gather information before starting their trips and also during their trips.

Traveler Information Systems are part of the larger field of Intelligent Transportation Systems (ITS) and were originally utilized in urban areas. The main application for traveler information systems was to reduce congestion by informing drivers of upcoming delays and possibly encouraging a change in drivers' route choices. However, providing traveler information has become increasingly important in rural areas, especially in areas with adverse weather conditions. These adverse weather conditions often demand a different, more cautious type of driving. If the driver is well-informed of the weather and road conditions, he or she can be more prepared to execute these cautious techniques and improve the safety of the trip, or even choose to delay the trip until the conditions improve.

There are two times in which traveler information can be provided to the travelers: before trip and during the trip. Before trip information and during trip information is furnished to drivers by various methods. Before trip information can be communicated via websites containing current road conditions or weather forecasts, telephone hotlines, television broadcasts, and radio broadcasts. Some of these methods can also be utilized to provide during trip information, including the telephone hotlines and radio broadcasts. Other forms of presenting during trip information to drivers are highway advisory radio stations, flashing caution signs, variable speed limit signs, and dynamic message signs (DMSs).[1]

The accuracy and clarity of the traveler information is extremely important to the success of the system. If the information is not fully understood and inaccurate, travelers will not trust the information, and the main objective of providing information will be lost. It should also be noted that the actual conditions drivers encounter while driving are extremely important in their decision making processes.

Of the numerous methods of traveler information presentation mentioned above, DMSs are the some of the most visible and widely utilized. A DMS is an electronic sign, either adjacent to or above the roadway, that delivers a message read-out to drivers. DMSs do not require travelers to make extra effort in addition to the driving task, such as turning on the radio or calling a hotline. As long as the drivers are paying attention, they will see the DMS and read its message. The types of information that can be displayed on a DMS are countless, thus allowing agencies a great deal of flexibility in communicating with drivers in both urban and rural settings. Messages can relay road closures, road conditions related to congestion and weather, detours, and travel advisories to drivers. Other messages that can be placed on DMSs are public service announcements and Amber Alerts.

The Interstate 80 (I-80) corridor located between Laramie, Wyoming, and Cheyenne, Wyoming, contains 12 DMSs. This is a 40-mile stretch of rural, four-lane interstate that crosses over the Laramie Mountains in southeast Wyoming and is known for its extreme weather and frequent adverse driving conditions. Along this section, the roadway reaches an elevation of 8,640 feet, which is the highest point on

[1] Dynamic messages signs are also known as changeable message signs (CMSs) or variable message signs (VMSs) in some publications and may be referred to by these names in the references for this paper.

Transcontinental I-80 (Wyoming Department of Transportation, 2007). This high elevation and severe winter driving conditions result in a considerable need for providing accurate road and weather information to travelers during their trips.

1.1 Problem Statement

Current procedures do not contain much guidance for the rural use of DMSs and other sources of traveler information. There is a lack of information concerning the correlation of forecast and current weather condition information with the traveler information that is being presented to the drivers. This research is aimed at developing a decision-support system utilizing real-time weather and speed variables to improve the consistency, quality, and timeliness of rural travel information in the I-80 corridor between Laramie and Cheyenne. Procedures developed in this research effort will be applicable to other rural areas.

1.2 Research Objectives

The above problem statement can be broken down into the following research objectives:

- Analysis of the effect of traveler information on driver behavior on the I-80 corridor between Laramie and Cheyenne in southeast Wyoming.
- Analysis of the current decision system utilized by the Wyoming Department of Transportation (WYDOT) to determine its effectiveness.
- Development of improved practices for the operation of the traveler information system.
- Implementation of new practices into a decision-support system for the operation of the DMSs in the corridor.

1.3 Research Tasks

This report represents the first phase of the research project described in the previous section and involves three main tasks to evaluate the effect of the traveler information on driver behavior: 1) analysis of the current message sets used on the DMSs in southeast Wyoming, 2) completion and analysis of surveys of random and frequent drivers of the corridor, and 3) exploration of the correlation of roadway conditions and observed speeds with weather and DMS. The results from the three tasks will provide the following:

- Interim conclusions about the consistency of DMS messages.
- Recommendations on improved practices to be implemented by WYDOT in the short term.
- Framework for future research to develop the decision-support system for operating DMSs on this corridor.

1.4 Report Format

This research is broken down into the following sections:

1. Introduction
2. Literature Review
3. Project Description
4. DMS Data and Analysis
5. Survey Data and Analysis
6. Statistical Modeling of Speed, Weather, and DMS Data: Analysis and Results
7. Summary and Conclusions

The Literature Review in Section 2 contains highlights of the current practices and operation of existing DMS systems. Section 3 contains a description of the project location in southeast Wyoming and describes the current travel information procedures followed by WYDOT for this corridor. Section 4 includes data collected about the DMS message sets and the analysis of this data. Section 5 includes survey data collected from random and frequent travelers and the analysis of the findings. Section 6 describes the statistical modeling methods of speed, weather, and DMS data used to determine the effects on the speeds of vehicles. Section 7 concludes the findings from the three research tasks and provides recommendations for the continued use of the DMSs as well as a summary of the recommendations for the next step in the research effort.

2. LITERATURE REVIEW

This section explores current practices and methods for managing dynamic message signs (DMSs). The first section takes an in-depth look into existing applications of DMSs, mostly in urban areas. The second section analyzes DMS message sets and explores the common principles that are followed when agencies choose which message sets are to be displayed. Factors included in selecting message sets include message length, content, and format. The third section explores decision support systems that are used to select which message set to display for certain road conditions based on predetermined criteria. The fourth section gives an overview of a previous study completed on the project corridor. The final section summarizes the literature review chapter with regard to the impact previous work has on this research effort.

2.1 DMS Applications

All road signs serve to communicate information to travelers. However, static road signs are limited to displaying one message. As time passes, this message could become out-of-date or incorrect. As a result, DMSs were developed to utilize electronic technology to present up-to-date information to drivers. These signs are especially important in areas where conditions change often due to congestion, accidents, construction, or weather. DMSs are a significant part of the traveler information system because they can be used in situations where the information presented to the traveler changes constantly. The information that is presented to drivers by these methods encourages them to take certain actions such as slowing down or taking a different route due to the current road conditions. This information can also mandate certain actions or place restrictions upon drivers, such as specifying a lower speed limit or requiring a route change due to road closure.

According to the Federal Highway Administration's *Changeable Message Sign Operation and Messaging Handbook*, DMSs use three types of messages to manage traffic and communicate with drivers: early warning messages, advisory messages, and alternative route messages (Dudek 2004). Early warning messages inform drivers of an approaching problem they will encounter if they continue on a particular route. By giving drivers advance notice of a crash, for example, the likelihood of secondary crashes is reduced. Advisory messages also give drivers helpful information concerning what action to take in response to a specific problem that is occurring along their route. These messages may inform them to change their speed or encourage them to take a different route. Alternative route messages inform drivers of mandatory route changes due to road closures (Dudek 2004).

Specific conditions that may warrant a message on a DMS can include the following: road and ramp closures, emergency situations, an incident or crash, construction or maintenance operations, adverse weather or environmental conditions, Amber Alerts, traffic operations information associated with special events, travel time information, special public safety messages, travel-related information, or some types of public service announcements. These types of messages can be placed into five categories reflecting the purposes for which DMSs are used.

One application is non-recurrent problems that are caused by random, unpredictable events or temporary, preplanned activities. Examples of these events are crashes and construction, maintenance, or utility work. Environmental problems resulting from acts of nature and weather events are a second application in which permanent DMSs are used. A third application is traffic problems resulting from special occasions such as sporting events or parades. Special operational situations make up the fourth application. These situations include certain operations associated with roadway features such as

drawbridges, tunnels, and high-occupancy and reversible lanes. The fifth application is the use of DMSs for recurrent problems. These problems could be caused by daily peak periods in which traffic demands exceed capacity. In these cases, messages could notify travelers either of limits-of-congestion or of travel times (Dudek 2004).

It is important that DMSs are used in the correct manner and are not mistaken as advertisements. The *Manual on Uniform Traffic Control Devices* states, "When a changeable message sign is used to display a safety or transportation related message, the display format shall not be of a type that could be considered similar to advertising displays. The display format shall not include animation, rapid flashing, or other dynamic elements that are characteristic of sports scoreboards or advertising displays." (Federal Highway Administration 2003)

There is division among current Traffic Management Centers (TMCs) concerning messages during non-incident, non-road work periods. Many TMCs leave the DMSs blank during these times because they believe that drivers will pay more attention when a message is displayed. These TMCs fear that frequent display of non-essential message may cause drivers to ignore the DMSs when there is an important message. However, other TMCs feel the exact opposite and have received adverse public reaction to blank message signs. In this case, the public feels that the expensive signs are not worthwhile if they are sitting idle. Studies show that 55% of responding TMCs leave their DMSs blank during non-incident time periods, whereas 45% display messages (Transportation Research Board 2008). The most common types of messages displayed during non-incident, non-road-work periods other than travel time are congestion, speed, public service announcement, safety campaign, and traffic law or ordinance. A significant number of these TMCs do not know the opinion of the public concerning these messages (Transportation Research Board 2008).

There are two types of DMSs, those that are permanently installed above or adjacent to the roadway, or portable signs that can be moved from location to location. The signs that are permanently installed above the roadway are commonly referred to as overhead DMSs. **Figure** Figure 2.1 shows an example of an overhead dynamic message sign that is located on Interstate 295 and U.S. 40 eastbound at the Delaware Memorial Bridge (Delaware Highways 2007).

Figure 2.1 Overhead dynamic message sign

Signs located on the side of the roadway are often known as roadside DMSs. An example of a roadside DMS can be seen in Figure 2.2. This DMS is located in southeast Wyoming on Interstate 80. There are specifications similar to those used for static roadside signs that determine the actual placement of the sign with respect to the roadway.

Figure 2.2 Roadside dynamic message sign

The portable signs are used when local conditions require temporary information to be passed to the travelers. An example of a portable dynamic message sign can be seen in Figure 2.3.

Figure 2.3 Portable dynamic message sign (Scriba & Seplow 2006)

Some agencies have specific guidelines concerning the use of portable signs. One example is the Oregon Department of Transportation, which has restrictions regarding placing public service announcements on portable DMSs (Oregon Department of Transportation 2006).

2.2 DMS Message Sets

To be effective, DMSs must clearly convey the correct information drivers. Drivers must be given all the information needed to make logical driving decisions. The objective is to keep messages concise, yet complete. Many factors play into the effectiveness of DMSs. Location of the sign and accuracy and clarity of the messages are all very important when utilizing DMSs.

As mentioned earlier, the location of the sign depends on the type of sign that is installed, either overhead or on the side of the roadway. If the sign is not accurate, travelers will be led astray and may make the decision to ignore the message the next time they take a trip or come across a DMS. This creates event expectancy with drivers where they may conclude that the information "has always been wrong, and therefore will continue to be wrong" (Wilson & Pouliot 1992). Thus, accuracy becomes a trust issue between the travelers and the agency managing the sign. Drivers must be able to clearly read and understand the message. Factors that affect clarity are letter height, message length, message format, and message selection. If the message is not properly understood, its objective is not achieved.

Various guidelines assist agencies in deciding how to display certain information and selecting effective message sets. Many of these guidelines are found in the *Changeable Message Sign Operation and Messaging Handbook* (Dudek 2004), as well as in the *Variable Message Sign Operations Manual* (Dudek & Ullman 2001). The guidelines in these handbooks primarily cover situations in which DMSs are located in urban areas to deal with congestion.

2.2.1 Message Length

There is only a certain time frame in which information can be effectively presented to drivers as they pass a DMS. The amount of information that can be presented to drivers depends on how well the drivers can view the message from their vehicles, the perception of the message by the drivers, and the capability of the drivers to process the information and make decisions based on this information. This decision may require the driver to initiate a response and complete a maneuver. All these factors must be taken into account when determining the viewing distance that is required.

The viewing of the message is affected by many things including sun position, geometry of the roadway (e.g., sight distance restrictions), type of sign, environmental conditions (e.g., weather conditions that may reduce sight distance), and the speed of the vehicles. Once each of these conditions has been determined, a decision can be made about the number of units of information that can be placed on a certain sign. A unit of information is typically one to three words and represents each data item in a message that drivers could use to make decisions. Units of information are often referred to as the answers to questions that travelers might ask, with each answer being one unit of information (Dudek & Ullman 2001).

To determine how many units of information can be displayed to drivers, the reading time must be evaluated. The reading time is the time that drivers have available to read the entire message (Dudek 2004). This reading time is affected by the actual distance over which the sign is legible to drivers, the amount of activity that is required of drivers along that stretch of roadway, and the familiarity of drivers with the message. If drivers must attend to numerous driving activities while trying to read the DMS, the required reading time is longer. Longer reading times are also necessary if the message being displayed is unfamiliar to drivers because they will need more time to process the information.

The distance at which the sign becomes legible to drivers decreases in certain lighting conditions and can also be affected by the type of display technology that is used in the sign. In theory, drivers should be able to glance at the sign multiple times to read and comprehend it, while continuing to focus on the driving situation. The more units of information that are displayed on a sign, the longer the required viewing distance becomes. As can be seen in Figure 2.4, this required viewing distance also increases with the travel speed of the vehicles.

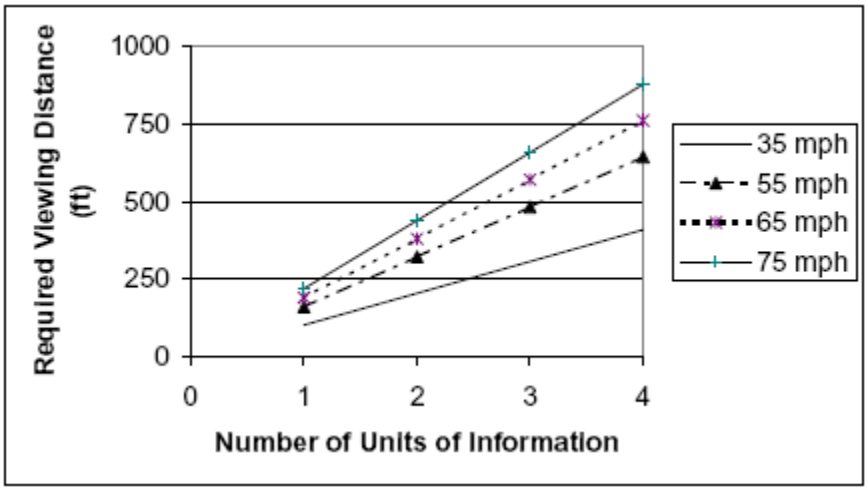

Figure 2.4 Required viewing distances to a VMS (Dudek & Ullman 2001)

Message length is also dependent on the type of sign that is installed. If the sign is permanently located above the driving lanes, less viewing distance is required. Additional sight distance is required for DMSs that are located on the side of the roadway. When analyzing required viewing distance for signs on the side of the roadway, the density of trucks must be considered. Trucks can become sight obstructions that limit the ability of drivers in left lanes to adequately view a sign located on the right side of the roadway. Other obstructions that may limit the ability of drivers to view a sign are overpasses, vertical or horizontal curvature, or adverse weather conditions such as rain, fog, or snow. These circumstances can restrict the number of units of information on a DMS, which can result in shorter messages. The reduction in message depends on the surrounding conditions and changes for each obstacle or combination of obstacles (Dudek 2004).

2.2.2 Message Content and Format

The content and format of a message on a DMS is important to the clarity and comprehension of the message. In order for a message to be clear and comprehensible, six questions should be answered for each situation, according to the *Changeable Message Sign Operation and Messaging Handbook* (Dudek 2004):

1. What is the problem I am trying to address?
2. What verified information do I have?
3. Who is the audience that I am trying reach with the CMS message?
4. What type of motorist response is required?
5. Where should the response take place?
6. What degree of response is required?

By answering these questions, the correct message content can be chosen to provide the best information to travelers. Using the information from these questions, three main elements that make up a base DMS message can be developed. These elements include the problem, the location of the problem, and the recommended driver action. It may not always be possible to provide each of these three elements in every message, and there are variations of the elements that may be more effective.

When describing the location of the problem, the message designer should determine whether or not the roadway is utilized mainly by commuters, who are familiar with the area. If the drivers are familiar with the area, it is most effective to describe the location of the problem by giving the nearest cross street or exit ramp in the message. However, if the drivers are not local commuters, they will not know the names of these cross streets, and the location should be described by giving distances or exit ramp numbers. If the make-up of the traffic is unknown or mixed between commuters and unfamiliar drivers, it is most effective to use exit ramp numbers, so that all travelers will understand the location. If possible, it is also important to inform the drivers of the location where the problem ends (such as a lane closure). This way, if the drivers choose to exit the freeway, they will know when it is safe to return (Dudek 2004).

If drivers are not given a recommended action, there will be uncertainty about what they should do concerning the problem. The action element can be broken down into three categories: no diversion, soft diversion, and diversion. If there is no need to divert the drivers from the roadway, then a no diversion action element such as PREPARE TO STOP or REDUCE SPEED can be used (Dudek 2004). A soft diversion action element is used to advise drivers to take an alternate route, but a specific route is not given. A diversion action element provides drivers with a specific alternate route; however, it is rarely used in practice. An action element requires an action verb such as USE, TAKE, FOLLOW, or EXIT (Dudek 2004).

The order in which all these pieces of information are given in a message set is extremely important. Even with the proper information, drivers can be confused if the elements are not given in the appropriate and expected order. By keeping the format of messages consistent, driver expectations will be met and the time required to read and understand the message will be decreased (Dudek 2004). Messages should be designed so the problem is listed first; the location of the problem is given next; and the action to be taken is last. If there are other pieces of information, such as a reason for drivers to carry out the recommended action, it should be listed after the problem, location, and action.

Flashing messages and the use of graphics are other aspects of DMS messages that are also being studied. In Finland, it was found that drivers reduced their speed by a greater amount when the DMS was flashing a warning about slippery road conditions than when the message was displayed continuously (Pedic & Ezrakhovich 1999). However, the reading time is increased when the message is flashed, and it may take longer for drivers to comprehend the blinking message (Dudek 2004).

Another study in Finland found that adding a graphic to a text message increased the comprehension of the message by drivers. In Europe, graphics are extremely important to the clarity of the message due to the language differences (Pedic & Ezrakhovich 1999). However, research in the United States has shown that the graphics used in Europe are not commonly understood by Americans. With typical DMSs used by most DOTs today, graphics and symbols cannot be shown large enough for drivers to fully comprehend them (Dudek 2004).

Because numerous factors must be considered when creating a message set, a considerable amount of time is required to design an effective, safe message set. However, agencies are often faced with similar situations for which the same message set can be used. Ideally, an agency should have fixed message sets

to be applied by DMS operators in certain situations. In this case, the operator would simply be required to verify that the location and other identifying pieces of information in a fixed message set are correct. In some cases, a general template could be used in which an operator only needs to change one or two pieces of the message. This could require the operator to modify the location of the problem or the action that drivers should take.

The more changes that are required, the higher the possibility that errors will be made as the operator workload increases. In extreme and rare situations, it may be necessary for an operator to carry out the whole design process to develop a new message set. However, this is a time-consuming procedure that requires a high level of reasoning, decision making, and training, and it is not recommended (Dudek 2004). To enhance the consistency of messages selected by different operators, the best method is to utilize fixed message sets that have been predetermined for certain situations.

2.3 Decision Support Systems

DMS operators have a large amount of responsibility when managing groups of DMS signs. They must analyze large amounts of road and weather information and convert it to traveler information. In a study of Traffic Management Centers (TMCs) across the country, it was found that TMC operators are better informed and more prepared for traffic operations and incident management when they are provided with advanced, detailed, and route-specific weather and road condition information (Cluett, Kitchener, Shank, Osborne, & Conger 2006). They have numerous responsibilities and must be well trained in order to maintain consistency among all operators. If operators are given the authority to create message sets without supervision or adequate training, negative credibility consequences can occur (Dudek 2004).

However, Decision Support Systems (DSSs) were created so that a computer system can be utilized to aid the operators in making appropriate and consistent decisions. Software has been developed that will suggest a certain message or generic message set to the operator based on specified input (Dudek 2004). The use of DSSs to manage traveler information systems makes the decision making process for the operator much simpler and creates more consistency between operators.

One example of a DSS is the automatic control of variable message signs in the interurban Scottish highway network. With this system, a link flow model and a queuing model are used to predict route travel times. The link flow model determines the current flow on each link with real-time flow measurements at the beginning of the routes and historical data. The queuing model determines the current queue length in each link by utilizing simple queue detectors and the link flow estimation. With the information from these two models, the control system chooses the delay information or route recommendation to display on each DMS. Depending on the location of the incident, the percentage of total saved delay reached approximately 30%. Using driver questionnaires, it was found that the information displayed on the DMSs was perceived as accurate and assisted drivers in making more informed decisions about their route choice (Messmer, Papageorgiou, & Mackenzie 1998).

A DSS that handles weather-related situations rather than congestion-related is located in the San Joaquin Valley in California. The California Department of Transportation (Caltrans) started using an automated fog warning system in 1995 and has reduced the number of fog-related accidents by approximately 70% on two stretches of Interstate 5 and Highway 120. This system utilizes 9 roadside weather and visibility monitoring stations and 36 pavement detectors that measure vehicle speeds and traffic volumes. Each weather station measures wind speed and direction, visibility, temperature, atmospheric pressure, humidity, and the amount of rainfall. The data from these devices are sent to a computer that determines

when a critical, dense fog has formed. This information is then announced on overhead DMSs to warn travelers and alerts a Caltrans and Highway Patrol traffic center where operators pass the information along to the media, highway advisory radio, and a traffic condition hotline (Cabanatuan 2005). Another example of a DSS that has been applied to weather conditions is located along Finland's southern coast. Because of its northern location, many accidents occur in this area due to the adverse weather and road conditions with rain, snow, or ice. Variable message signs and road weather stations on the weather-controlled E18 road are used to provide information to drivers (Rama 2001). On this roadway, information from the road weather station is collected every five minutes. The road conditions are analyzed, and, based on this information, a speed limit is recommended by the DSS. The recommended speed limits and messages regarding slippery conditions and information about air and road temperatures are sent to variable message signs and variable speed limit signs on the roadway.

The main objective of this weather-controlled system is to prevent accidents in fog, but it is also intended to decrease speeds in slippery conditions (Rama 2001). It was found through this study that the safety effects were greater when variable speed limits were used in conjunction with the variable message signs. Studies showed that speeds were reduced when the system was in effect, with the results being more significant at night. It was also found that the proportion of short headways was decreased. Interviewed drivers indicated they were more comfortable driving through the area knowing that all drivers had been informed about slippery road conditions (Rama 2001).

2.4 Previous Research

In 1992, a study was completed at the University of Wyoming on this project corridor regarding motorist information needs (Wilson & Pouliot 1992). This study was completed after the implementation of drum-type changeable message signs at each end of the corridor. The purpose of the study was to assess motorist information needs during adverse weather conditions and apply this information to CMSs procedures. Using laboratory studies, field surveys, and supplemental surveys, local commuters and interstate truck drivers were the primary source of information. During poor conditions, surveyed drivers were asked to evaluate the road conditions and give indications as to what travel information would help them make proper decisions.

Results found that motorists find CMSs an important information source when facing severe weather conditions. They consistently requested information regarding wind, visibility, and pavement conditions, with pavement conditions being the highest priority and visibility being the second highest. Because these CMSs are located on high speed roadways, the most important information should be displayed first since there are only seconds of sign viewing time available.

Specific messages were evaluated by the motorists to determine if they are beneficial. Key messages found were ICY ROAD AHEAD, HEAVY FOG AHEAD, DRIFTING SNOW AHEAD, WIND GUSTS TO XX MPH, and REDUCED VISIBILITY AHEAD. Messages that received negative results were WINTER DRIVING CONDITIONS and STRONG WINDS POSSIBLE. The information needs analysis uncovered consistencies in the types and forms of the information provided. It was also determined that local commuters obtain information primarily from at-home sources, and they desire to travel regardless of road conditions (Wilson & Pouliot 1992).

2.5 Summary

Dynamic message signs are a common way for agencies to provide information to travelers during their trips. DMSs are most often used in high traffic volume, urban areas to mitigate congestion by informing drivers of upcoming accidents, road closures, and alternative routes.

DMSs are becoming more common in rural areas that experience severe weather conditions because they allow agencies to inform drivers of road and weather conditions. By utilizing various types of collected data from speed sensors, weather stations, pavement sensors, and weather forecasts, traveler information can be accurately and efficiently supplied to drivers both before and during their trip through technologies such as DMSs. Decision support systems are used to support and assist the operators who are providing the traveler information via DMSs.

3. PROJECT DESCRIPTION

3.1 Project Location

The Interstate 80 (I-80) corridor analyzed in this research effort lies between the capital city of Cheyenne and Laramie, Wyoming. The Wyoming Department of Transportation (WYDOT) divides the state into five districts. The entire project corridor is located in District 1. The corridor is a 40-mile stretch of roadway extending from milepost 317 to 357 that crosses over the Laramie Mountains in the southeast corner of the state. The majority of the roadway is four-lane interstate. However, in a section approximately five miles in length on the western end of the corridor, the roadway has a fifth lane, which is a climbing lane up Telephone Canyon. A map of the project location can be seen in Figure 3.1.

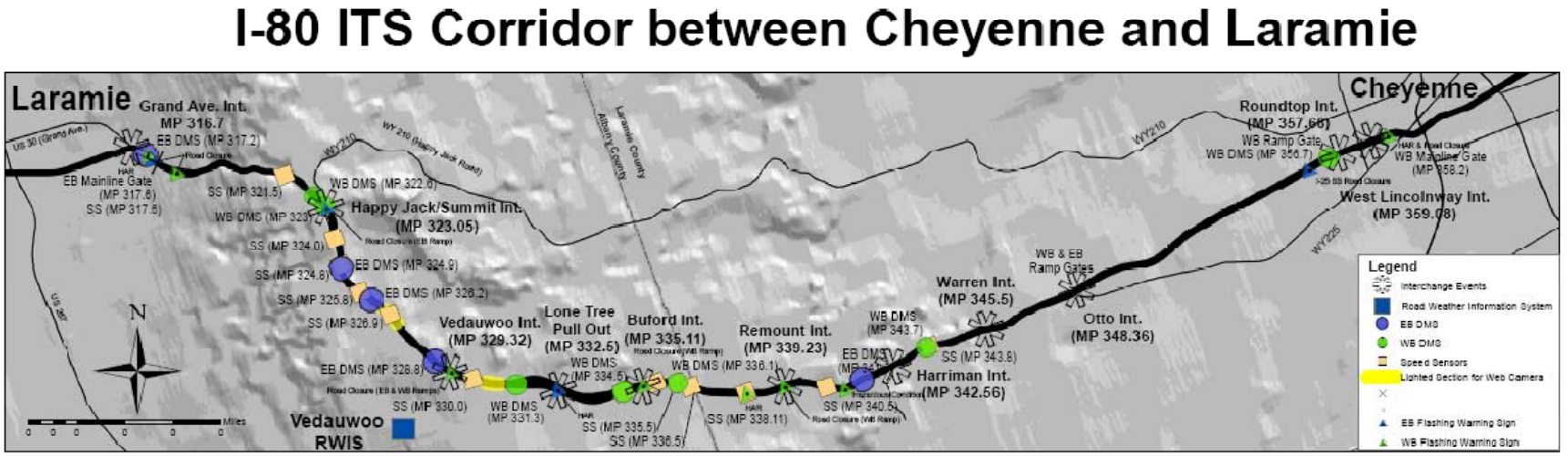

Figure 3.1 Project corridor map

According to the WYDOT Fact Book from 2007, approximately 60% of the traffic on I-80 is heavy truck traffic (Wyoming Department of Transporation 2007). I-80 is a critical transportation corridor for freight movement between the central and western portions of the United States. Along the stretch between Cheyenne and Laramie, the roadway reaches an elevation of 8,640 feet, which the highest point on transcontinental I-80. This corridor is known for its extreme weather that results in frequent adverse driving conditions, including high winds in excess of 65 miles per hour, heavy snow, ice, and fog. These conditions give rise to numerous road closures and crashes, especially during the winter months. In the period from 1998 to 2008, there were over 180 closures, with an average closure time of over six hours. Each directional closure is counted as one closure. It is estimated that an eight-hour closure has an economic impact of $8 to $12 million in delay costs (Young & Liesman 2007). Approximately 87% of these closures took place during the seven-month winter driving season (determined to be October through April). Closures were attributed to weather 47% of the time, weather and accident 29% of the time, and accident only 17% of the time. Figure 3.2 shows the breakdown of road closure cause by year.

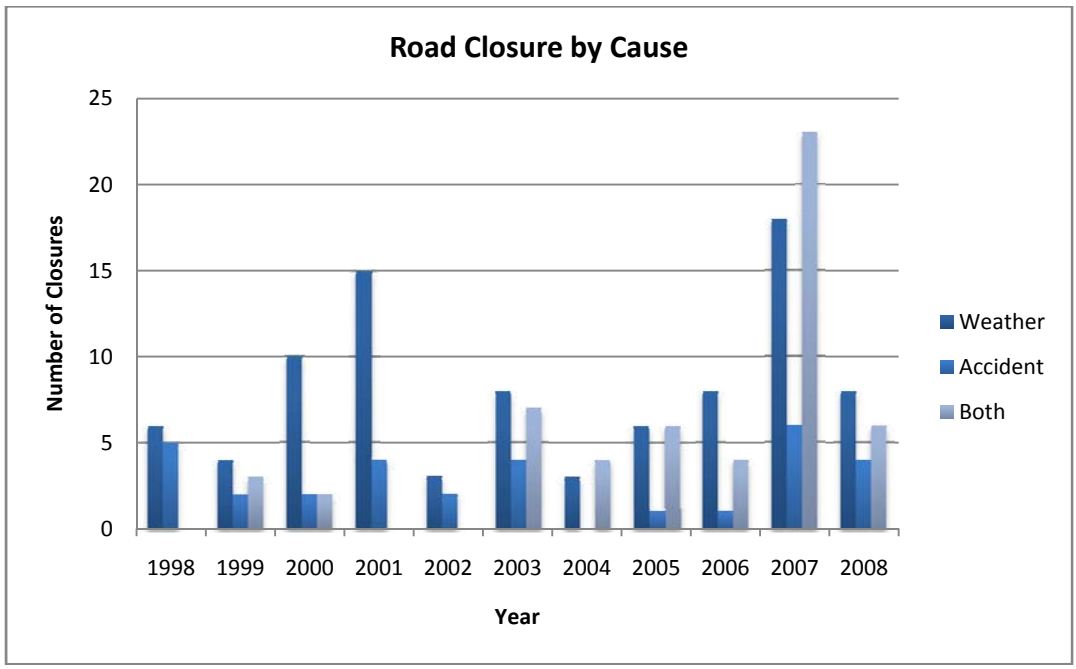

Figure 3.2 Number of road closures by cause

Between 1999 and 2005, a total of 2,019 crashes were reported on this corridor. The winter driving season resulted in approximately 57% of these crashes. The most common condition was ice, and 70% of the total crashes occurred when the road surface was not dry. The majority of these crashes occurred between mileposts 320 and 332, where the weather is most severe (Sanchez, Carter, & Mitchell 2007).

3.2 Current Procedures

With the high elevation and severe winter driving conditions, there is considerable need for providing accurate road and weather information to travelers before and during their trips. There are many different methods and technologies that can be utilized to present information to travelers. To provide information to travelers, numerous ITS components have been installed by WYDOT along this portion of I-80 in recent years. Each district in the state of Wyoming is currently in control of the traveler information communication systems that are utilized within that district. The WYDOT District 1 Dispatch Office, located in Laramie uses ITS components to deliver information to travelers along the I-80 corridor

between Laramie and Cheyenne. The ITS components utilized include DMSs, speed sensors, a Road and Weather Information System (RWIS) station, flashing caution signs, closure gates, web cameras, Highway Advisory Radio (HAR), local broadcast media, the WYDOT website, and the 511 telephone hotline. The locations of these ITS components are shown in the project map in Figure 3.1.

There are twelve DMSs located throughout the corridor: five in the eastbound direction and seven in the westbound direction. Four of these signs are three-line overhead signs, and one sign is a one-line, blank-out sign. Pictures of these signs can be seen in Figure 3.3 and Figure 3.4. The remaining DMSs are side-mounted, two-line signs located adjacent to the roadway on the right side, as shown in Figure 3.5.

Figure 3.3 Three-line Overhead DMS at milepost 356.7, westbound

Figure 3.4 One-line Blank-Out DMS at milepost 322.6, westbound

Figure 3.5 Two-line Sidemount DMS at milepost 343.7, westbound

The messages that are displayed on the DMSs are generally selected by the plow operators working on the corridor. They report the conditions to the dispatch office, and the DMS messages are updated by the dispatch operators. The plow drivers are trained on how to read and report the weather and road conditions and have specific guidelines about the proper reporting procedures.

A predetermined list of message sets is used when selecting the specific messages to be displayed on the sign. However, the dispatch operators most often find it easier and quicker to type the message in by hand, rather than using the predetermined list.

One common procedure relates to the presence of wind. If the road condition is dry, wind conditions are not placed on the sign until velocities reach 45 miles per hour or greater. If the road conditions are icy, wind conditions are placed on the sign whenever wind speeds have reached 35 miles per hour or greater.

There are 14 speed sensors situated over the length of the corridor that collect speed data, as well as traffic volumes and vehicle classifications. A picture of one of the speed sensors is shown in Figure 3.6. One RWIS station on this corridor measures and stores weather information such as air and surface temperatures, humidity, dew point, and wind speed and direction, including gust speed. This station is located at the southeast corner of the Vedauwoo Interchange and can be seen in Figure 3.7.

Figure 3.6 Speed sensor at milepost 330

Figure 3.7 RWIS station at milepost 329.4

Fifteen flashing caution signs are located on the corridor. These are static signs with flashing beacons that are activated by the dispatch office at the advice of the plow drivers. Five of the signs are located on entrance ramps adjacent to the mainline roadway to relay one of the following messages to travelers: I-80 EB CLOSED WHEN FLASHING or I-80 WB CLOSED WHEN FLASHING. At these locations, there are no gates to prevent vehicles from entering the mainline; there is only a flashing caution sign. Five of the flashing signs located on the mainline inform the traveler to tune to the local Highway Advisory Radio station with one of the following messages: TUNE TO 1610 AM WHEN FLASHING or TUNE

TO 530 AM WHEN FLASHING. An example of one of these signs is shown in Figure 3.8. The remaining signs are also located on the mainline of I-80. They inform the traveler of hazardous conditions ahead or of upcoming road closures with one of the following messages: HAZARDOUS CONDITIONS AHEAD WHEN FLASHING, I-80 WB CLOSED WHEN FLASHING USE NEXT 4 EXITS, or I-25 SOUTH CLOSED 4 MILES AHEAD WHEN FLASHING.

Figure 3.8 Flashing caution sign at milepost 338.11, westbound

There are five road closure gates installed along this corridor. Two are located on the mainline roadway, to stop traffic at each end of the corridor, either in Laramie or Cheyenne. The remaining three gates are positioned on various entrance ramps, preventing vehicles from entering the interstate when conditions warrant a road closure.

Along this corridor, six locations with cameras provide travelers with 20 different images of the road and weather conditions. These camera images are posted on the WYDOT website and are updated every couple of minutes. Many of the cameras have pan, tilt, and zoom (PTZ) functions that can be utilized by the operators in the dispatch office to examine the full extent of the road and weather conditions. Overhead lights have been installed along two short sections of the roadway, from milepost 326.7 to 327.2 and from milepost 330.4 to 330.8. These lights were installed to illuminate the section of roadway that is shown in the web camera image. This lighting allows two of the web cameras to be utilized at night, when the rest of them are unable to provide the traveler with useful information. Figure 3.9 shows an image posted on the website from the camera at the Happy Jack Interchange.

Figure 3.9 Web camera image from milepost 323.05

There are three Highway Advisory Radio (HAR) stations located between Laramie and Cheyenne that service the I-80 corridor. They are located at Laramie (milepost 317), Buford (milepost 335), and Cheyenne (milepost 357). The Laramie station covers the area from the city of Laramie to the Happy Jack Interchange at milepost 323, located at the top of the Summit canyon. The Buford station covers the section from milepost 326 (locally known as the Tavern) to the Harriman Interchange at milepost 343. The Cheyenne station covers the section from the Otto Road Interchange at milepost 348 to the city of Cheyenne.

During peak traffic times, the messages on these HAR stations are updated hourly. The common peak traffic times are Monday through Friday, 5 AM to 8 AM and 4 PM to 6 PM. At other times, the HAR stations are updated as necessary, often depending upon how busy the dispatch operator is. The messages broadcast over the HAR stations are also selected by the plow drivers with input from the dispatch operators. The messages on the HAR stations and the DMSs are intended to be the same. However, if the dispatch office gets busy, the DMSs take higher priority over the HAR stations. It is assumed that more people see the DMSs than listen to the HAR stations.

The local broadcast radio stations and television stations are contacted when one or more of the following three conditions occur: Road Closure, No Unnecessary Travel, or High Wind Warnings (gusts of 50 miles per hour or greater). When one of these conditions occurs, an email is sent out from the dispatch office informing the recipients of the current weather or road conditions. This email is sent to all the local radio and television stations, reaching as far west as Rawlins, WY, as far north as Casper, WY, and as far south as Denver, CO. It is then up to each individual station to disseminate the traveler and weather information as it sees fit.

The information on the WYDOT website (www.wyoroad.info) and the 511 telephone hotline (1-888-WYO-ROAD or 511) are directly correlated to one another. When the plow drivers report the road and weather conditions, they use signal coding, which will be explained below. The dispatch office inputs this code into the website/511 software. This software then outputs the road conditions to the website and the 511 system. The plow drivers are still the main source for this information. However, other sources are also used, including the RWIS data and the cameras located along the corridor.

The signal coding used by the plow drivers is accepted and utilized through all of WYDOT (highway patrol, etc.). The first code informs the receiver of the type of report to follow. For weather and road reporting, plow drivers report a '10-13' to the dispatcher and relay which section of which road they are reporting on. The code that follows is a description code that gives more detail about the road and weather conditions. The first half of the description code will be either an 8 or a 9. An 8 describes the conditions on the road surface, while a 9 describes the surrounding weather conditions. The second half of the description code gives the exact condition and its severity. All the road and weather codes and their meanings can be found in Table 3.1. An example of a code called in by a plow operator could be 8-3, 9-7. This would mean the corridor on which the operator is traveling is slippery, and there is poor visibility.

Table 3.1 Road and weather codes

Code	Meaning	Code	Meaning
8-1	Dry	9-1	Favorable
8-2	Wet	9-2	Snowing
8-3	Slippery	9-3	Rain
8-4	Slippery in Spots	9-4	Strong Winds
8-5	Drifted Snow	9-5	Fog
8-6	Closed	9-6	Blowing Snow
		9-7	Visibility Poor
		9-8	No Report

4. DMS DATA AND ANALYSIS

4.1 Data Collection

Several forms of data were collected to fully analyze the consistency and effectiveness of messages displayed on the DMSs. This section will focus on the DMS message event log. The extent of this data set is described in the following paragraphs. The time period covered by this data set is the winter season of 2007-2008, from September through April. Within this time period, all types of winter weather storms occurred and were incorporated into the analysis, including spring storms, which are commonly severe in the project area.

The DMS message event log is an electronic database maintained by WYDOT that stores the message sets for each of the 12 DMSs along the project corridor (together with the rest of the signs around the state). The database includes the messages along with the time and date each message was placed on the sign.

Data were obtained for the time period from September 2007 to April 2008, and were broken down into individual months. The duration that each message was displayed was then calculated. Many times over the study period, similar messages were displayed. For these messages, the frequency and average durations were calculated both for the entire time period and for each individual month within the study period. This process produced the number of times a certain message was placed on the sign in a month and how long it remained on the sign. This complete data set for each sign, broken into individual months, can be found in Appendix A.

Many times, certain signs did not display a message, either because a message was not necessary or because of a sign malfunction. The amount of time that the signs were without messages was not calculated, but could easily be determined if desired.

4.2 Data Analysis

The data from the message event log are processed to determine the duration and frequency of each type of message, for each sign and for the corridor as a whole. Messages are also analyzed through a break-down process, splitting up the information by condition or event.

Message sets are made up of roadway and weather conditions occurring on the portion of roadway covered by each sign. If multiple conditions were reported, they were all placed on the sign. Conditions that were displayed on the signs along the project corridor include the following: fog, ice/icy, visibility, snow/snowfall, wind, wet, road closures, wrecks, road work, and other advisory warnings such as light trailer restrictions, speed restrictions/advisories, wildlife warnings, etc. The two most common conditions were ice and wind. There were many different message forms used to describe icy conditions: ICY, ICY ROAD, ICY ROADS, ICY SPOTS, ICY IN SPOTS, SLICK IN SPOTS, BLACK ICE, and ROUGH ICE. To give an idea of the variability of the messages, Table 4.1 shows a list of all the messages that referred to icy conditions during the month of January in 2008. This list only contains the message from one overhead sign, located at milepost 324.9 in the eastbound direction. Some of the message sets in this table may seem rather long; however, it must be noted that this is a three-line sign with scrolling capabilities. Similar lists for each month in the study period and each of the twelve message signs can be found in Appendix A.

Table 4.1 Messages posted in January 2008

ICY IN SPOTS BLOWING SNOW
ICY IN SPOTS SNOWFALL
ICY ROAD BLOWING SNOW SLOW DOWN
ICY ROAD SNOWFALL
ICY ROAD SNOWFALL BLOWING SNOW STRONG WIND GUSTS 40+MPH
ICY ROAD SNOWFALL SLOW DOWN
ICY ROAD SNOWFALL SLOW DOWN I-25 SOUTH TO COLORADO IS CLOSED
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL
ICY ROAD STRONG WIND GUSTS 50+ MPH BLOWING SNOW
ICY ROAD STRONG WIND GUSTS 60+ MPH BLOWING SNOW
ICY ROAD STRONG WIND GUSTS 50+ MPH BLOWING SNOW SLOW DOWN
ICY ROAD STRONG WIND GUSTS 50+MPH BLOWING SNOW I-80 WESTBOUND CLOSED
ICY ROAD STRONG WIND GUSTS 55+ MPH BLOWING SNOW LIMITED VISIBILITY SLOW
ICY SPOTS BLOWING SNOW
ICY SPOTS BLOWING SNOW AHEAD TURN OFF CRUISE CONTROL
ICY SPOTS BLOWING SNOW SLOW DOWN
ICY SPOTS BLOWING SNOW SLOW DOWN TURN OFF CRUISE CONTROL
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 45+ MPH TURN OFF CRUISE CONTROL
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS SLOW DOWN
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND POOR VISIBILITY
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS SNOWFALL SLOW DOWN
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW LIMITED VISIBILITY
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS SNOWFALL STRONG WIND TURN OFF CRUISE CONTROL
ICY SPOTS STRONG WIND BLOWING SNOW
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX SPEED
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY SLOW DOWN
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE
ICY SPOTS STRONG WIND BLOWING SNOW ROAD WORK AHEAD BE PREPARED TO STOP
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS STRONG WIND GUSTS 55+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW
ICY SPOTS STRONG WIND LIMITED VISIBILITY BLOWING SNOW TURN OFF CRUISE
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL
ICY SPOTS STRONG WINDS BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL
ICY SPOTS TURN OFF CRUISE CONTROL
ICY SPOTS TURN OFF CRUISE CONTROL FOG LIMITED VISIBILITY

In a similar fashion, strong winds were also portrayed in various ways on the signs. Some of the descriptions were: STRONG WIND, STRONG WINDS, and STRONG WIND GUSTS "XX" + MPH. Wind gusts were also often described simply as GUSTS "XX" + MPH. At times, the warning of ADVISE NO LIGHT OR EMPTY TRAILERS was also included with the wind information. These variations in wind warnings can be seen in Table 4.1.

Another common message was CAUTION WATCH FOR WILDLIFE ON ROAD and it did not have any variations. The common messages dealing with ice, wind, and wildlife, along with their frequencies and durations for the study period can be seen in Table 4.2. Most often, these message portions were displayed along with other conditions (as seen in Table 4.3) that were simultaneously taking place.

Table 4.2 Common messages with frequency and duration

Main Message Portion	Month	Frequency	Average Duration (hours:min)	Total Duration (hours:min)	Standard Deviation (hours:min)
ICY SPOTS	October 2007	98	3:18	324:11	5:36
	November 2007	126	4:34	573:14	5:35
	December 2007	637	4:37	2944:31	6:05
	January 2008	328	4:45	1563:07	7:00
	February 2008	341	4:00	1368:47	5:28
	March 2008	402	3:13	1295:21	4:24
	April 2008	300	2:53	867:57	4:04
STRONG WIND	September 2007	22	3:44	82:08	3:05
	October 2007	85	4:20	369:15	5:11
	November 2007	124	4:25	549:20	5:26
	December 2007	148	3:02	450:45	3:09
	January 2008	140	3:31	493:02	4:45
	February 2008	63	7:14	456:21	8:50
	March 2008	107	4:13	452:25	4:23
	April 2008	94	4:57	466:46	4:51
CAUTION WATCH FOR WILDLIFE ON ROAD	September 2007	66	12:41	837:06	6:53
	October 2007	113	7:02	795:55	6:58
	November 2007	4	1:59	7:58	0
	March 2008	1	3:49	3:49	0

The durations from this analysis indicate that messages are often left on the signs for extended periods of time. There are occasions where the message is not changed for over 24 hours. This could be the result of a communication problem between the dispatch office and the sign itself. If the message is not changed, drivers could be led to believe that the signs are not functioning or that they are not being updated, lessening their credibility.

Messages are also broken down for further analysis. Each message is split into sections, depending on the information that it contains. The sections are determined by condition or event. Tables of these sections of messages have been created, omitting any duplicate pieces of information and grouping them according to

type. This method is used to investigate the variation in message selection for specific conditions. Each of these tables can be found in Appendix B.

Categories are created to rank the message sets according to severity. Each message is given a ranking from 0 to 3, with 0 being the least severe. Messages are categorized as 0 if there is no message present, or if the message is simply a test or public service announcement. If one or multiple low severity conditions are present, the message is categorized as a 1. If a message set contains at least one severe condition, the whole message is categorized as a 2, even if there is also category 1 conditions present. Similarly, if a message set contains at least one extremely severe condition, the whole message is categorized as a 3, even if there is also category 1 and/or 2 conditions present. Table 4.3 shows the messages in each severity category.

Table 4.3 Message category breakdown

Category	Examples
0 – No message; public service announcements	Amber Alert system test Test
1 – Condition/s present	Blowing snow Fog Icy Lane closures Limited/poor visibility Max/advisory speed > 55 mph Road work Snowfall Slow down/reduce speed Turn off cruise control Wet Wildlife/livestock on road Wind with gusts < 50 mph
2 – Severe condition/s present	Black ice Drifted snow Heavy snow Max/advisory speed ≤ 55 mph No passing Road closed (other than I-80 Project corridor) Rough ice Wind with gusts ≥ 50 mph Wreck ahead
3 – Extremely severe condition/s present	Road closed (I-80 project corridor) No unnecessary travel

Another reason for concern that arose during the evaluation of the signs relates to public service announcements. There are several occasions in which a message contained both a weather warning and a public service announcement. This is not a recommended message set selection practice. If there is a weather condition that needs to be reported to the travelers, it should take first priority, and the public service announcement should be removed. Otherwise, drivers may see the public service announcement and stop reading, thereby missing the weather and road condition information that may affect the safety of the trip.

It is apparent from the various analysis methods that some inconsistencies are present in the current message selection process. The majority of these consistencies are apparent when the messages are broken down into sections (the breakdown can be found in Appendix B). The inclusion of certain words such as AND and WITH seems to vary frequently when there were numerous conditions. At times, the conditions are just listed one after the next, and sometimes one or both of these aforementioned words is placed between the conditions. For example, a message might say ICY SPOTS AND SNOWFALL, ICY SPOTS WITH SNOWFALL, or ICY SPOTS SNOWFALL. Similarly, the word AHEAD is sometimes included at the end of message, and other times not. However, it should be noted that because this breakdown is for all signs and the whole study period, there may have been times in which AHEAD is warranted by the conditions, and other times in which it is not.

When analyzing the message breakdown of messages regarding closures, the inconsistencies are frequent. The use of symbols, such as dashes and "&" signs is assorted. The dashes are sometimes placed in the description of the closed roadway. For example, messages analyzed include I-80 CLOSED, US 30 & I80 WEST OF LARAMIE CLOSED, I-80 AND US-30 CLOSED, WY-210 CLOSED, WYO 210 CLOSED. As can be seen in the last two examples, the road description also varies between WY and WYO. Another common source of diversity is the direction description with some of these closure messages. Examples of differences are I-25 SOUTH IS CLOSED and I-25 SOUTHBOUND IS CLOSED. It should be noted that the directions of travel are never abbreviated to "SB." One last section of messages that varies pertains to the prevention of vehicles parking on the roadway when it is closed. Messages show the following variations: NO PARKING ON ROADWAY, NO STOPPING ON ROADWAY, and NO STOPPING OR PARKING ON ROADWAY. The last message is redundant and does not give the driver any additional information by including both STOPPING and PARKING. The reasoning for these inconsistencies may be due to the intermittent occurrence of road closure messages being placed on the signs. The practices surrounding the closure message selection are not as uniform as those for commonly occurring weather conditions.

Advisory and caution message sections (in addition to condition statements) contain several dissimilarities, most often related to speed. The range of messages giving speed advisories includes the following:

- ADVISE 45 MPH
- ADVISE 45 MPH MAX
- ADVISE 45 MPH MAX SPEED
- ADVISE 45 MPH MAX SAFE SPEED
- REDUCE SPEED 45 MPH
- SLOW DOWN 45 MPH
- SPEED LIMIT 50 MPH IN AREAS OF FOG
- MAX 50 IN AREAS OF FOG

It can be seen that the messages listing speed advisories contain numerous variations. This list is just a sampling of the variations found on the speed-related messages, and the complete list can be found in Appendix B. There is much question surrounding these messages concerning their enforceability. The greatest public concern is whether the speeds listed on the message signs are enforced or not, while WYDOT's greatest concern is simply to get drivers to slow down during unfavorable conditions. The inequality of concern between these two stakeholders creates a problem when the dispatcher is selecting a message set for the sign. Until there is an agreement made with the highway patrol, these speed advisories or speed limits posted on the DMSs are currently not enforceable.

Another advisory message section that has common discrepancies are those pertaining to light and empty trailers. When high winds occur, the message sign will say ADVISE NO LIGHT TRAILERS, ADVISE NO LIGHT OR EMPTY TRAILERS, or ADVISE NO LIGHT OR EMPTY TRLRS. With this advisory, a gust wind speed is included nearly every time. It could be supposed that the inclusion of the word EMPTY is redundant and by stating LIGHT TRAILERS, it is implying also empty trailers. However, it is found that the combination of LIGHT AND EMPTY is the most common form of the message section, and it may be that it is more commonly understood by the average driver.

4.3 DMS Analysis Summary

The inconsistencies listed in this section may not have an extreme effect on the behaviors of the drivers because the messages are likely to still get their point across. However, if the messaging is as consistent as possible, it will be most effective. If drivers have seen a message previously, it will not take them as long to process the message and react to it. Therefore, keeping the message sets consistent is an important aspect of DMS practice. Recommendations to increase the effectiveness of the DMSs through message set selection are as follows:

- Remove messages from the signs after extended periods, especially if conditions have changed. Operators should be aware of the durations of each message.
- Refrain from placing weather warnings and public service announcements in the same message set. Weather warnings should take precedent.
- Keep consistent messaging procedures when providing weather and road closure information. Developing documented guidelines for message procedures for common conditions is recommended.

5. SURVEY DATA AND ANALYSIS

5.1 Data Collection

As mentioned previously, several forms of data were collected to fully analyze the consistency and effectiveness of the DMSs. This section focuses on the public surveys that were completed and analyzed. The makeup and extent of this data set will be described in the following paragraphs. The time period covered by this data set is the winter season of 2007-2008 — from November through May. Within this time period, all types of winter weather events were incorporated into the analysis, including spring storms, which are often severe in the project area.

Two types of travelers were surveyed for this project — frequent travelers and random travelers. Information from both types of travelers is important because some people are familiar with the road and usual conditions, while others are not. As a public agency, WYDOT must meet the informational needs of both traveler types.

5.1.1 Frequent Traveler Surveys

A frequent traveler panel of local drivers was recruited for this project. The panel was made up of members from the communities of Laramie and Cheyenne who travel the corridor on a regular basis. The majority of the panel members were commuters who lived in one city and worked in the other. The members joined the panel voluntarily and were recruited through several forms of media, such as local newspaper ads, employer email lists, and word of mouth.

Frequent traveler panel members registered through a web-based background survey, provided their weekly travel schedule, and were sent a survey link via email each time an incident occurred that may have affected their travel. An example of this survey can be found in Appendix C. An incident was defined as a road closure or inclement weather conditions. The survey consisted of two sections to analyze the information that travelers received BEFORE beginning their trip and the information received DURING their trip. For the purpose of this paper, only the DURING trip information concerning DMSs is analyzed.

There were two ‘intense’ periods in which surveys were sent out at high frequency, one in the fall of 2007 and one in the spring of 2008. For the fall period, there were 53 people on the frequent traveler panel, while there were 54 for the spring period.

Over the course of a three-week period from November 26, 2007 to December 17, 2007, five incidents were identified, and a total of 208 surveys were emailed. Of the surveys sent, 117 surveys (56%) were completed and returned. The full data set for these 117 surveys along with a sample survey can be found in Appendix C. The five incidents that occurred during the fall period were as follows:

- November 26, 2007 Survey
  Monday, November 26, 2007, between 6:45 a.m. and 9:00 a.m. on I-80 between milepost 324 (Summit) and milepost 356 (Cheyenne) for westbound and eastbound travel. Conditions included icy spots, snowfall, blowing snow, and strong wind.

- December 3, 2007 Survey
  Saturday, December 1, 2007 and Sunday, December 2, 2007. Weather conditions were reported for the I-80 corridor starting on Saturday morning. The road between Laramie and Cheyenne was

closed due to a wreck at approximately 8:00 p.m. on Saturday, December 1 until approximately 1:30 a.m. on Sunday, December 2. Weather conditions continued to be reported through Sunday, December 2. Conditions included icy road, snowfall, poor visibility, blowing snow, wind gusts from 50 to 80+ mph, black ice, fog, drifting snow, wreck ahead, speed advisory of 35 mph, and stopped traffic.

- December 7, 2007 Survey
  Friday, December 7, 2007, starting early in the morning for westbound and eastbound travel between Laramie and Cheyenne. Conditions included icy roads, snowfall, blowing snow, fog, poor visibility, and drifted snow.

- December 11, 2007 Survey
  Monday, December 10, 2007, beginning at approximately 7:00 p.m., to Tuesday, December 11, 2007 at approximately 10:00 a.m. on I-80 between Cheyenne and Laramie. Conditions included icy roads, strong wind, snowfall, blowing snow, drifted snow, poor visibility, fog, speed advisories of 40 and 55 mph, and wreck ahead.

- December 13, 2007 Survey
  Wednesday, December 12, 2007, beginning at approximately 9:00 a.m. until approximately 9:00 p.m. between Laramie and Cheyenne. Conditions included road closure, icy spots, strong wind, blowing snow, poor visibility, speed advisories of 35, 45, and 55 mph, crash ahead, drifting snow, fog, and a no unnecessary travel advisory.

The spring survey period took place over five weeks from March 27, 2008 to May 1, 2008. Six incidents were identified, and a total of 297 surveys were emailed. Of the surveys sent, 128 surveys (43%) were completed and returned. The full data sets for these 128 surveys can be found in Appendix C. The six incidents that occurred during the spring period were as follows:

- March 27, 2008 Survey
  Thursday, March 27, 2008, between 6:45 a.m. and 9:00 a.m., on I-80 between Laramie and Cheyenne. Conditions included icy roads, snowfall, poor visibility, blowing snow, strong wind, wreck ahead, and lane closures.

- March 30, 2008 Survey
  Sunday, March 30, 2008 at approximately 9:00 p.m. to Monday, March 31, 2008 at approximately 5:00 a.m., between Cheyenne and Laramie. A no unnecessary travel and road closure incident occurred. Conditions included icy roads, road closures, snowfall, fog, limited visibility, blowing snow, speed advisory of 35 and 45 mph, drifting snow, wreck ahead, and strong wind.

- April 7, 2008 Survey
  Monday, April 7, 2008 an all-day weather condition incident occurred. Conditions included fog, snowfall, icy road, blowing snow, limited visibility, fog, strong wind, speed advisory of 50 and 55 mph, and lane closures.

- April 9, 2008 Survey
  Wednesday, April 9, 2008 at 8:00 p.m. to Friday, April 11, 2008, 5:00 p.m. between Cheyenne and Laramie a severe storm event occurred. Because this storm lasted for such a long time period, there was a question added at the end of this survey asking for the approximate time of travel or

attempt to travel. Conditions included fog, snowfall, strong wind, limited visibility, drifting snow, rough ice, icy road, blowing snow, road closures, and a speed advisory of 45 mph.

- April 15, 2008 Survey
  Tuesday, April 15, 2008 from 8:00 a.m. to 12:00 p.m., between Cheyenne and Laramie. At this time, there was a high wind advisory in effect with gusts from 40 to 65+ miles per hour.

- May 1, 2008 Survey
  Thursday, May 1, 2008 at approximately 11:00 p.m. to Friday, May 2, 2008 at approximately 8:30 p.m., between Cheyenne and Laramie the road was closed due to a severe storm event. Conditions included snowfall, strong wind, icy spots, road closures, limited visibility, blowing snow, and, a speed advisory of 45 and 55 mph.

5.1.2 Dispatch Office Log Books

Each time a frequent traveler survey was sent out, the log books from the WYDOT District 1 Dispatch Office were obtained for the corresponding time period. The log books consist of two separate logs, the radio station log and the ITS log. The radio station log contains all information that goes through the dispatcher, most importantly, records of the plow drivers calling in with updates on the current road and weather conditions. As mentioned before, the conditions are called in by the plow driver and recorded in the radio station log by the dispatcher. The dispatcher then enters this information into the computer, and it is sent out via the WYDOT website and the 511 hotline. It is also utilized when determining the appropriate message sets to place on the DMSs.

The ITS log is where the dispatcher records all information dealing with the ITS components such as the DMSs, the flashing caution signs, the web cameras, the HAR stations, and the RWIS station. Each time a message is changed on a DMS or a HAR station, it is recorded in the ITS log. There are also set intervals at which the operator checks certain cameras and conditions and records this information in the ITS log. The dispatch logs are very extensive, so only a single day's sample is provided in Appendix D. There is no direct analysis completed on the dispatch logs; they are only used for reference in conjunction with frequent traveler survey data to verify the conditions of the roadway and the use of the ITS components on the corridor.

5.1.3 Focus Group

Members of the frequent traveler panel were asked to voluntarily participate in a focus group. Of the individuals who expressed interest in being involved, several were selected to participate, according to certain demographics. Five individuals participated in the focus group, two of which were commercial truck drivers (both male), and three of which were local commuters (two female and one male). Each of these participants was very familiar with driving this I-80 corridor, with individual experience ranging from 10 years to 40 years within the group.

The topics of the focus group covered all the components of ITS in southeast Wyoming and all the traveler information that is made available. Focus group members were asked about many different forms of traveler information in detail, including DMSs. For the purpose of this paper, only the information concerning DMSs is evaluated. The group was questioned about the accuracy and credibility of the signs, and feedback was also gathered concerning the clarity and effectiveness of certain types of message sets. Participants were also asked for their ideas on ways to improve the DMS system.

5.1.4 Random Traveler Surveys

To obtain the opinions of drivers who may not travel this section of roadway often, random traveler surveys were completed. Two types of random traveler surveys were completed, travel plaza surveys and rest area surveys. Examples of these two surveys can be found in Appendix E.

For the travel plaza surveys, a survey team made up of University of Wyoming students was created and put on-call for severe weather events. When an incident occurred, two or more members of the survey team were contacted and sent out to the Petro Truck Stop, located on the northwest corner of the I-80 and Curtis Street Interchange in Laramie. An incident was defined as a road advisory, as determined by the WYDOT District 1 Dispatch Office, or numerous reports of adverse conditions on the roadway from the DMSs.

Surveys were completed during the time period from the beginning of February 2008 to the end of March 2008. During this period, 42 surveys were completed. When members of the survey team were sent to the travel plaza, they were located in one of two spots. One entrance to the travel plaza was located near the commercial truck parking, and the other entrance was located near the parking for cars and RVs. Therefore, responses were obtained from both commercial truck drivers and non-truck drivers. Thirty-six of the 42 surveys (86%) were completed by drivers of commercial vehicles, while six were non-truck drivers. The full results for these 42 surveys can be found in Appendix E.

For the rest area surveys, an envelope of blank surveys was placed at the Summit Rest Area from mid-February 2008 through April 2008. The Summit Rest Area is located approximately six miles east of Laramie and is a common stopping place due to the presence of the Abraham Lincoln Memorial Monument at this location. These surveys included the same questions as the travel plaza surveys, with the addition of three questions concerning road closures. However, in this case, participants were filling out the surveys on their own, without the assistance or supervision of a survey team member. Because of this, a number of surveys were not completed in their entirety. During the study period, 151 surveys were filled out at the rest area. Four of these were eliminated because only the first few questions were filled out. The remaining 147 surveys were broken down into truck drivers and non-truck drivers, and analyzed question by question. The analysis results are summarized in the next section. Of the 147 participants, 29 (20%) were truck drivers and 118 (80%) were non-truck drivers. The full results of the analysis of these 147 surveys can be found in Appendix E.

5.2 Data Analysis

5.2.1 Frequent Traveler Surveys

In this study, the frequent traveler surveys are analyzed for each separate survey period (Fall 2007 and Spring 2008) to see if the travelers' views change from one period to the next. As mentioned previously, only the survey questions relating to the DMSs are analyzed here.

Participants were asked, 'How did you learn about the incident DURING your scheduled trip?' They were given the following options and asked to mark all options that applied to them:

- 511 telephone service
- Broadcast radio
- Encountered while driving
- Flashing caution signs
- Highway advisory radio (1610 AM)

- Roadside dynamic message sign
- Other

For the 'other' category, respondents were asked to list other sources they used. The breakdown of results for both periods is shown in Figure 5.1. The figure shows that DMSs are the second most common method for drivers to learn about the roadway conditions, second only to the drivers encountering the conditions on their trip. Spring 2008 survey respondents show much higher use of the DMS messages than the Fall 2007 respondents.

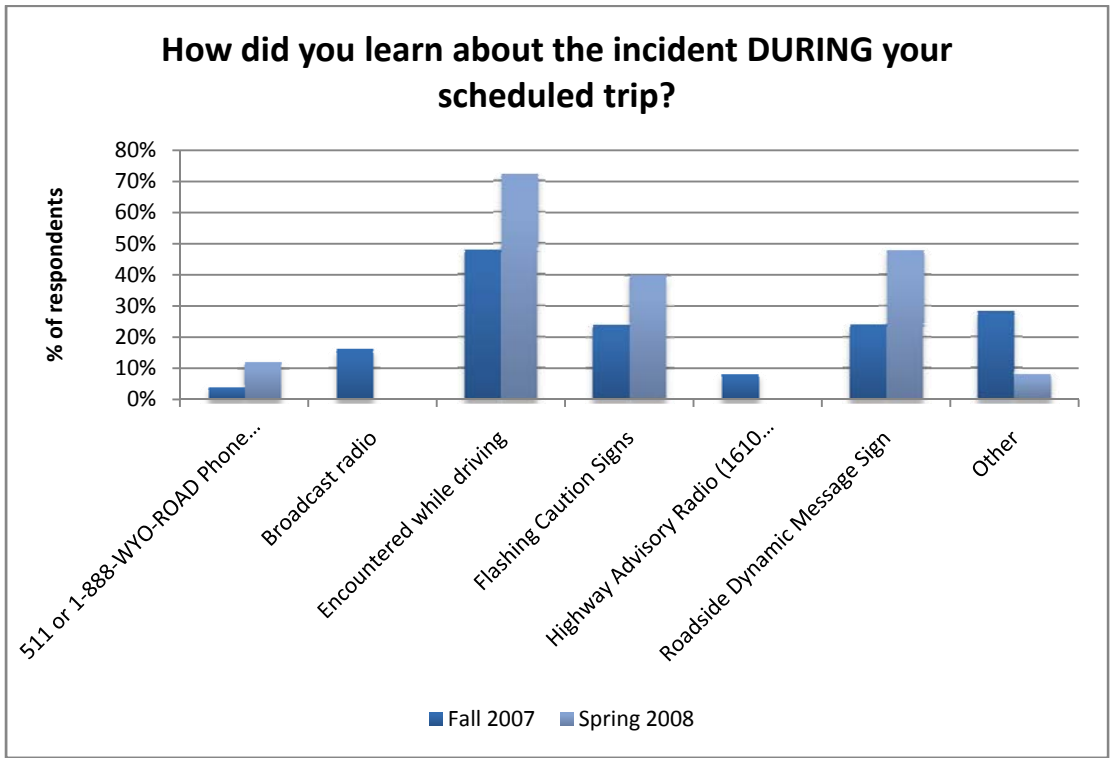

Figure 5.1 Sources of information during the trip

For all the aforementioned sources of information available, participants were asked to rank which source was the most important to them during their trip. The results for the responses ranking first are shown in Figure 5.2. For the fall time period, 35% of respondents who utilized during trip information rank DMSs as their most important source for information. For the spring period, this percentage is a comparable 41%. In both survey periods, the DMSs has the highest average ranking of all the information sources.

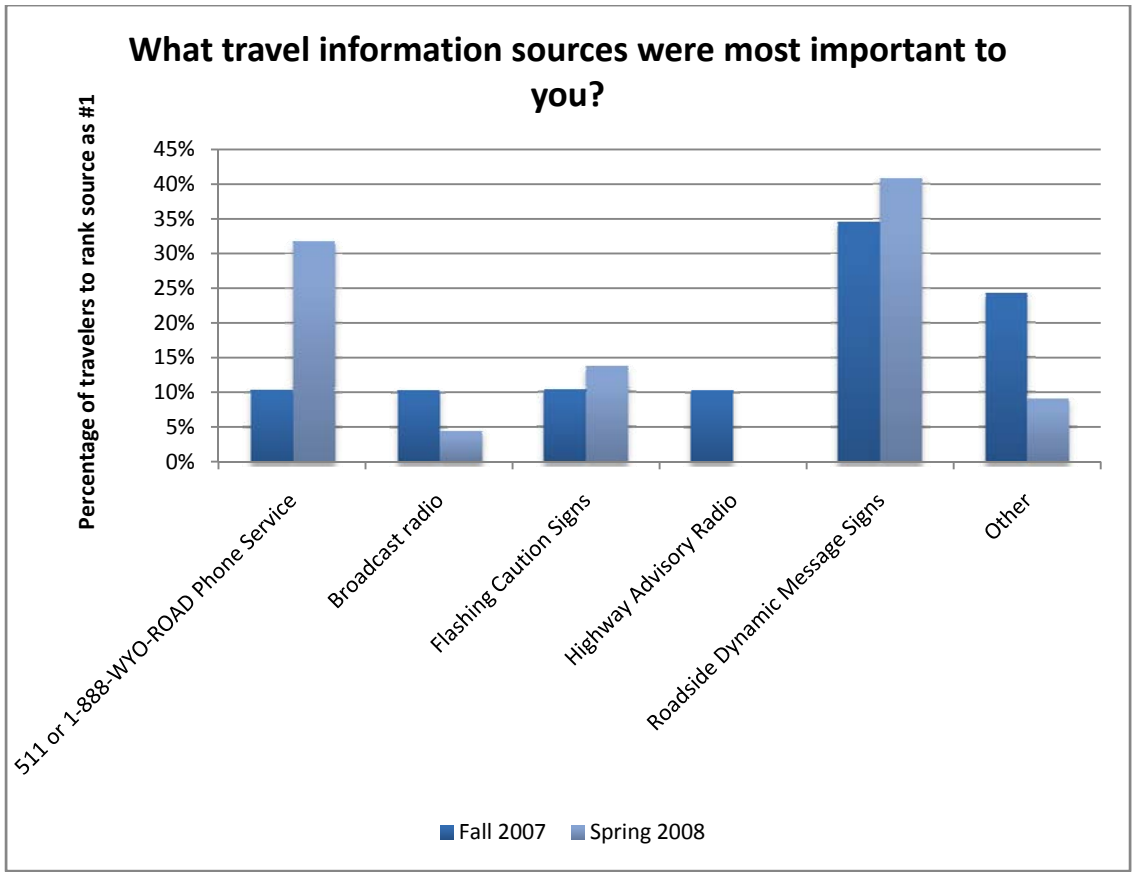

Figure 5.2 Most important sources during trip

The following questions ask the participants to give a reason why they ranked their choice as number one. The respondents who rank DMSs as their first choice during the fall period give the following reasons for this ranking:

- Signs were very visible.
- Because I didn't use any other information except the signs and the feel of the snow as I drove.
- I had already checked the WYO Roads and could see the roads were open. The sign said icy spots. To me that means there will be spots that are icy, it was icy from Laramie to Cheyenne. The worse part of the road was 12 miles outside of Cheyenne where the road was snow covered, you couldn't see the lines and the semi's passed and caused snow flurries. The signs were not on past the top of the summit. Why have 'em if we're not going to use 'em.
- Because it conveyed the appropriate information when I needed it.
- They were visible through the dense fog.
- up to date information.
- Showed that the road was closed.
- Actually, both types of signs were equally useful [referring to DMSs and flashing caution signs].

The respondents who rank DMSs as their first choice during the spring period give the following reasons for this ranking:

- It was most important because it was visible. I did not listen to the radio or check the road report (or web cameras) before I left. I had no idea the roads were bad until I saw it on the dynamic message sign. Although the sign normally has accurate information, it didn't really prepare me for degree to which the roads were bad.
- It lets me know what weather conditions exist ahead.
- Because it is the first source as I get on I-80. I live very close to MM 316.
- It confirmed what the cell phone call said.
- Produces current information about the road conditions.
- Message Signs displayed weather/road conditions, but most importantly displayed the maximum safe speed, which slowed most motorists down to a reasonable speed for the conditions.

The surveys ask about how the information respondents receive affect their trips. The surveys give the following choices and ask respondents to mark all that apply:

- I took the action advised by the travel information (e.g. slow down, watch for ice, etc.).
- Felt less stress because better informed of situation.
- Helped decide what actions to take.
- I postponed my trip until later.
- I cancelled my trip.
- The information did not affect me.
- Other

The results from this question are shown in Figure 5.3. It can be seen that participants are more likely to follow and obey the information given to them during the spring period when compared to the fall.

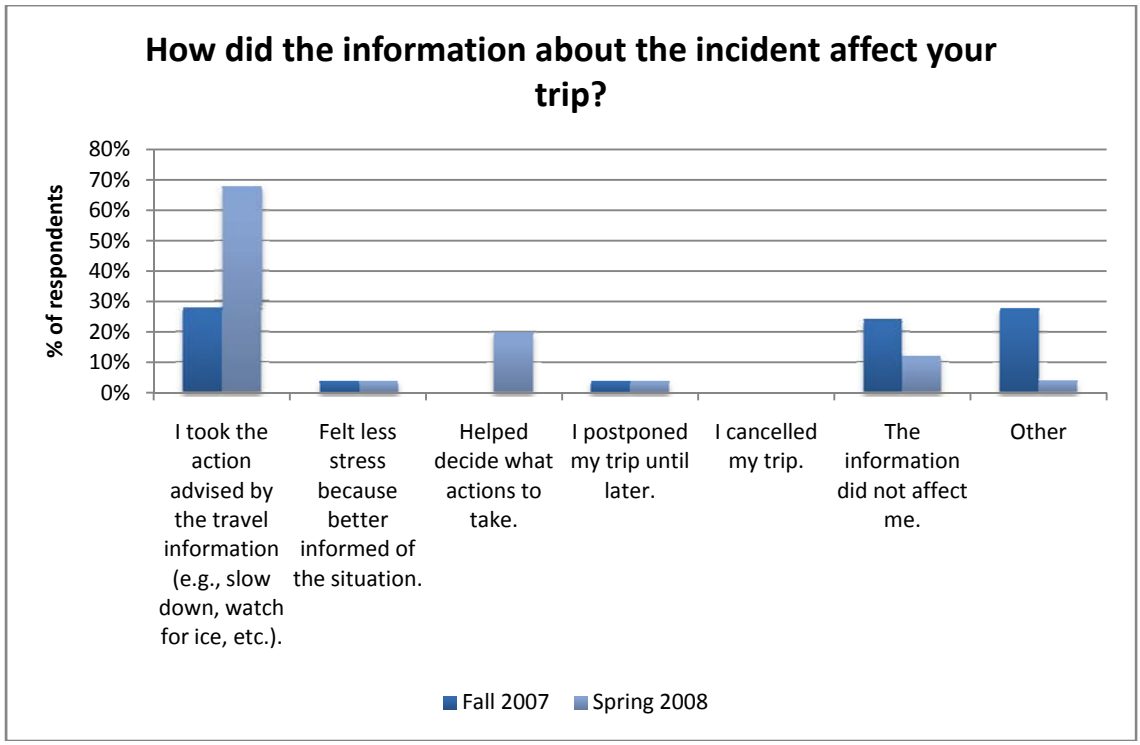

Figure 5.3 Effects of during trip information

Participants were asked to rate their agreement or disagreement with each of the following statements:

- The information was USEFUL for making travel decisions (e.g. go, no-go, delay trip).
- The information was EASY to understand.
- The information was ACCURATE.
- The information was CREDIBLE.
- You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.
- The information was TIMELY and gave you enough time to decide what action to take (e.g. turn back, slow down, etc.).
- You took the action advised by the travel information (e.g. slow down, watch for ice, etc.).
- You used the information to help have a safer trip.
- The roadside Dynamic Message Signs were effective for communicating with you.

The results from these statements are found in Figure 5.4 through Figure 5.7. Figure 5.4 and Figure 5.5 give the Fall 2007 results, and Figure 5.6 and Figure 5.7 give the Spring 2008 results. It can be seen that the effectiveness of the DMSs (the last statement) improves from the fall period to the spring. Twenty-four percent of travelers completely agree the DMSs are effective for communication in the Fall 2007 period, while 52% of travelers completely agree with this statement in the Spring 2008 period.

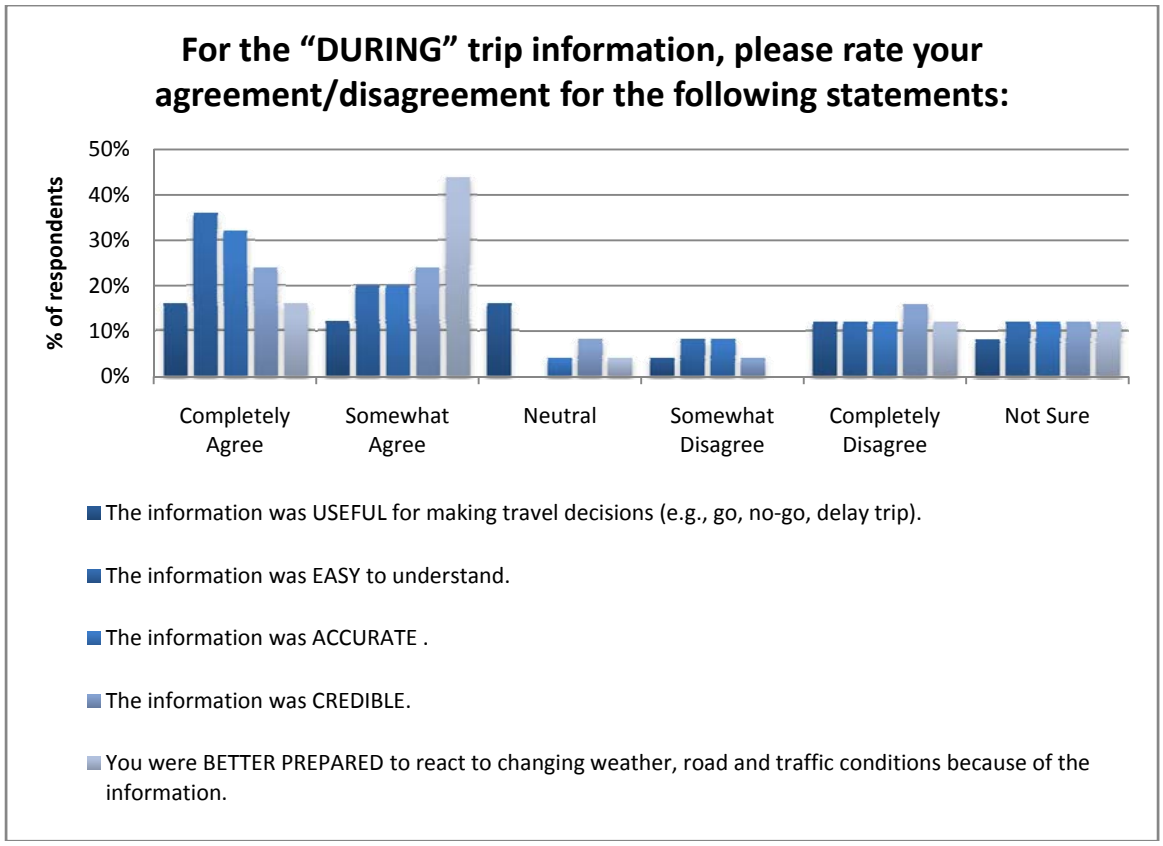

Figure 5.4 During trip information agreement/disagreement, Fall 2007

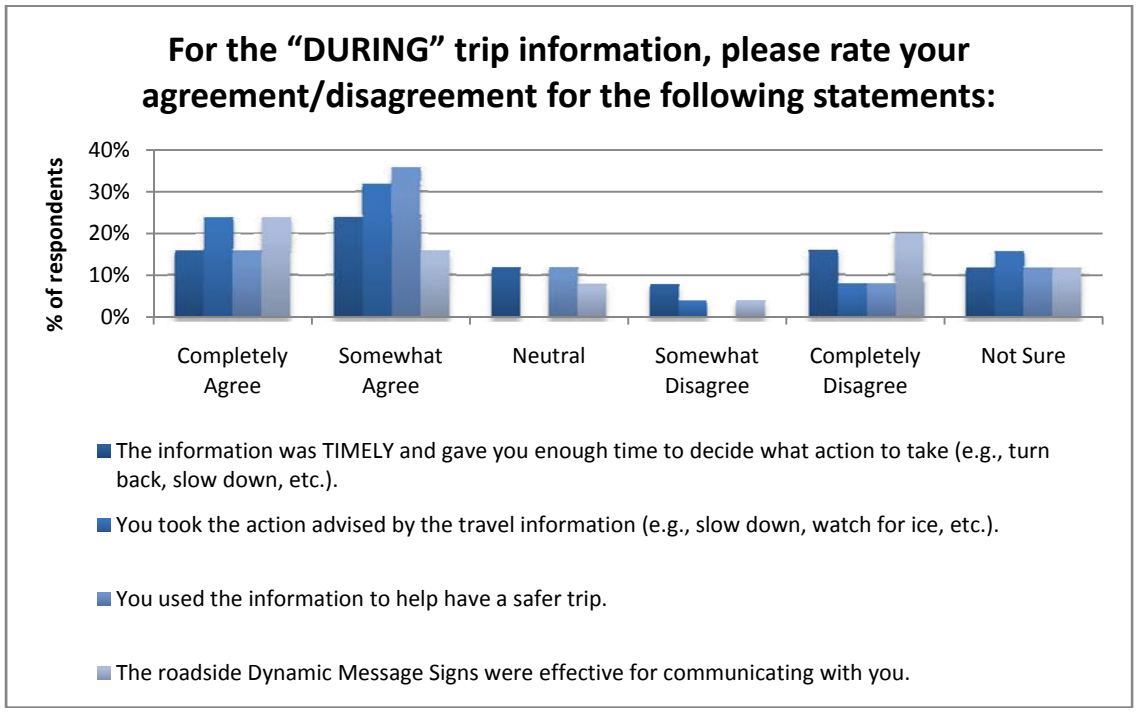

Figure 5.5 During trip information agreement/disagreement, Fall 2007

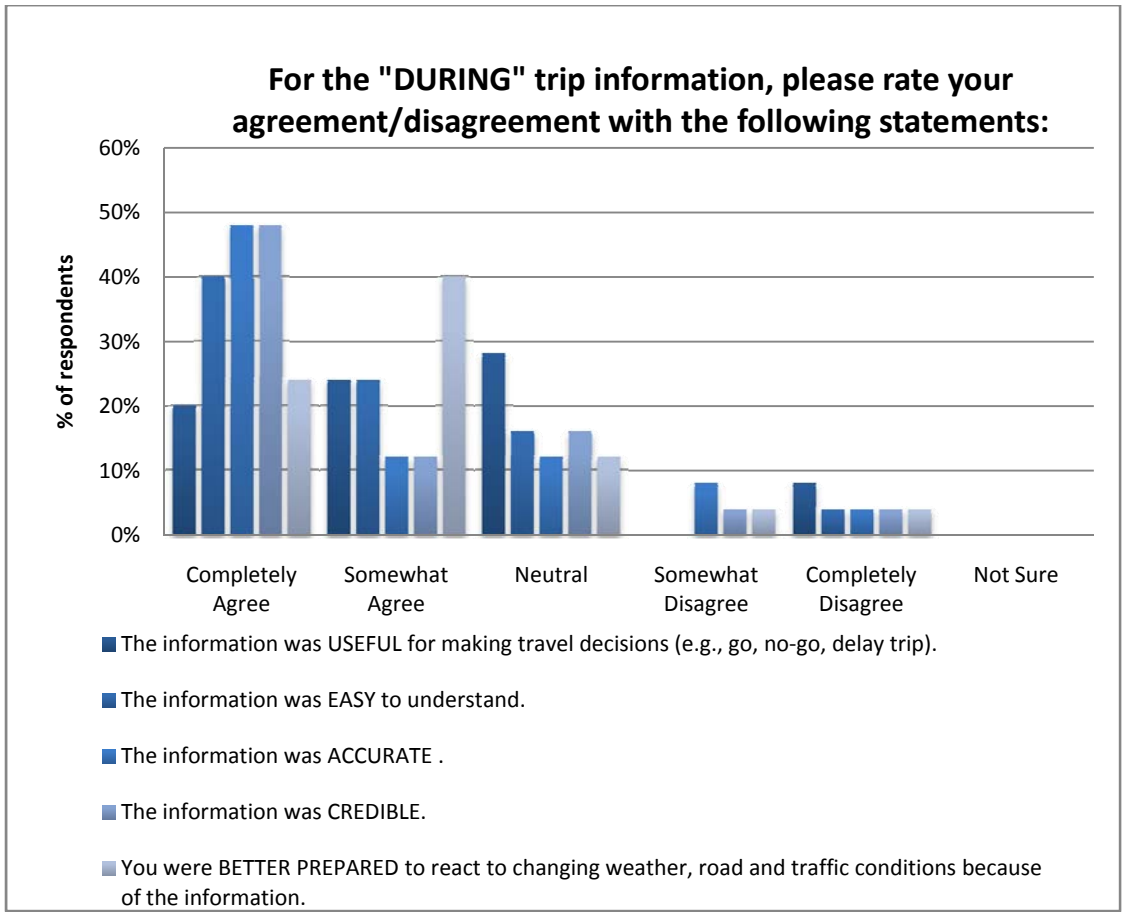

Figure 5.6 During trip information agreement/disagreement, Spring 2008

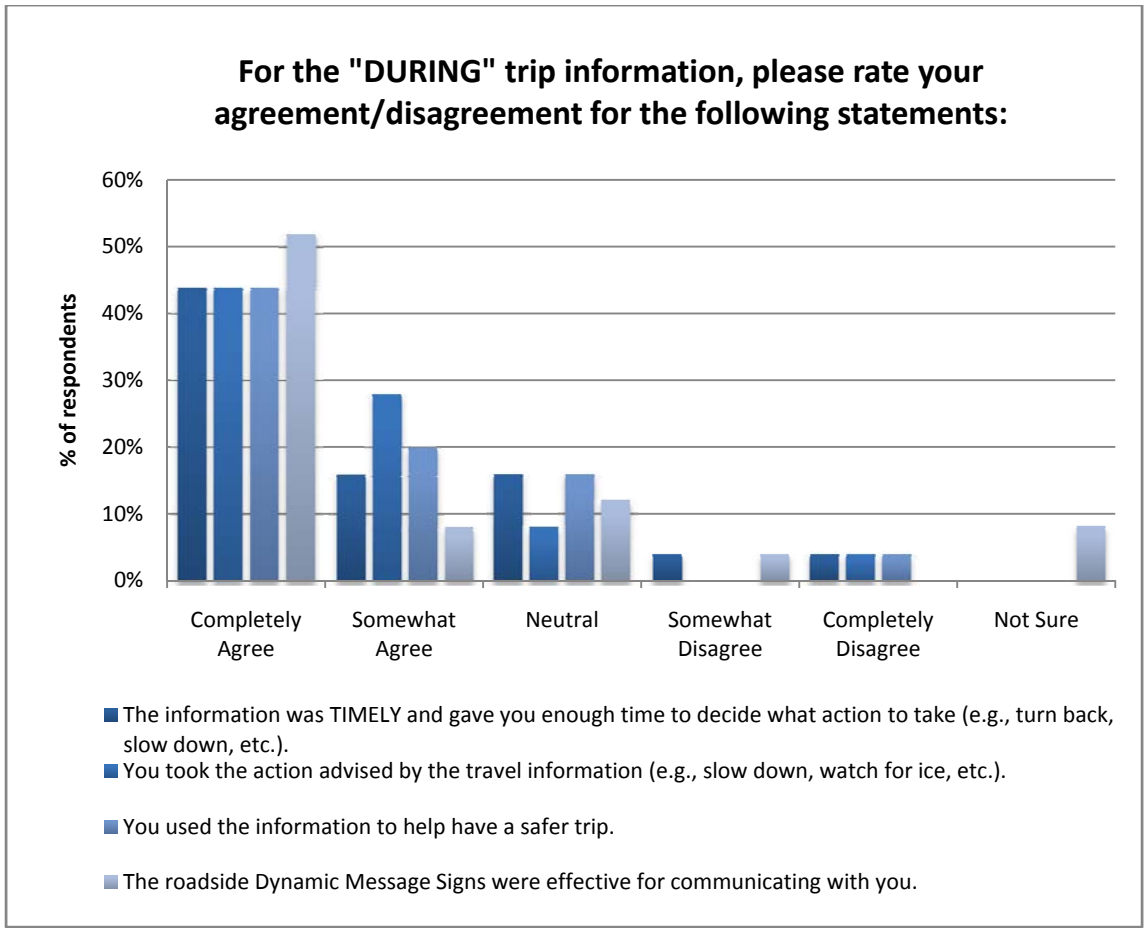

Figure 5.7 During trip information agreement/disagreement, Spring 2008

The next question simply gives participants a blank box in which to share what information is most useful for them. The comments concerning DMSs are extracted from the complete set of responses and are listed below. Some duplicate responses are omitted.

Fall 2007 responses

- The information provided by the overhead message sign about a mile east of the Lincoln Monument was accurate. However the information was obvious by the time I reached the sign.
- Warning of declining weather conditions.
- None, On the morning in question did not check the web site and highway signs were dark, i.e messages had not been posted yet. Note: My time of travel on this day was 5:35am to 6:20am. Was not expecting the slight ice conditions encountered but was surprised the signs weren't on yet. Conditions were worse on the return trip 4:00pm to 4:45pm due to wind blowing across highway and causing ice conditions between Buford and the summit.
- Icy roads ahead.
- Whether the road was open or closed. The road conditions were not very accurate.
- The signs give me a hint of what to expect. They don't influence my driving that much as I adjust my driving based on my perception of the road, not what the signs warn me about.
- Dynamic message signs.
- Road conditions.
- The information that WOULD have been most useful was an accurate description of the weather.

Spring 2008 responses

- Just the warning of possible slick conditions on the road ahead.
- The dynamic message sign.
- Road surface conditions.
- Road conditions.
- Closure info.
- That the road was icy and fog existed.
- Notation of blowing snow and icy roads.
- Speed Limit Advisory on Message Boards.
- To be prepared to for the accident, slow traffic.

Another question asks drivers how they think the traveler information can be improved. Again, the comments concerning DMSs are extracted from the answers given in a blank box and are listed below.

Fall 2007 responses

- The sign at the base of the Summit just east of town was void of any road conditions further east. Since there was no snow in Laramie this morning when I left, I really didn't feel inclined to check on the weather before I left.
- Maybe include message about possible window damage when sanding has taken place.
- More specific warnings (i.e. left lane slick at mile marker 340).
- Was surprised no signs lit during the early morning, usually are operational if conditions warrant.
- More specific locations.
- The signs are fine.
- Might have mentioned the fog.
- Timely updates and information on mid-points such as Otto Road, Harriman Road, and Vedauwoo.
- The roadside signs were not blinking — I always check the radio advisory if the weather is bad to get up to date information. Usually the signs are on but in this case, they were not operational at

the Grand on-ramp in Laramie. It would be ideal, but I realize not always possible, to know when the road might open. I believe it was closed due to accidents and perhaps knowing that the road would be open in X hours would be good. I should note that the road was open going west but not east.

- Being more detailed about the conditions. WYO Roads and the dynamic signs never said No Unnecessary Travel. Blowing snow, icy spots, turn off cruise control can mean there's a mile of this, to the entire way to Cheyenne. If SOMETHING would have said No unnecessary travel we may not have been stuck on the road for over an hour with 2 pregnant women. WE were driving in white out conditions for most of the way. Normally this type of weather stops at the Tree in the Rock. The road was closed AFTER we were on it.

Spring 2008 responses

- Identify not only highway conditions (ice, slick spots) but also visibility and wind. Be more accurate with highway conditions. On March 27 around 6:45 am the signs said the highway was slick in spots when in fact it was snow packed and the outside lane up the to the top of the summit was not useable due to snow accumulation. If the road is completely covered then say so.
- Again, closing roads more often to keep people home and off of them. By the time you see the flashing slick roads and snowfall signs you are already in it and practicing defensive winter driving — the signs don't do much to change that. When the website is down you can't do much either. And frankly, the website and radio usually say the same thing, slick in spots, snow fall, wind and limited visibility. Well that is Wyoming winter. When the verbiage never changes you tend to ignore it.
- Better notice of poor visibility ahead on the road.
- The same thing I say every time. Include maximum speed limits for the conditions, especially for the big trucks, and enforce them! There are too many truckers who go way too fast for the conditions with complete disregard to the endangerment of others.

The surveys ask participants to rate the importance of eight different factors when they choose a traveler information source by picking a level of importance. The eight factors are Accuracy, Easy Access, Convenience, Availability, Usefulness, Accessibility, Timeliness, and Credibility. The results from this question for both time periods are shown in Figure 5.8 through Figure 11. Figure 5.8 and Figure 5.9 give the Fall 2007 results, and Figure 5.10 and Figure 5.11 give the Spring 2008 results. It can be seen that each of the eight factors is important to the drivers, especially accuracy and timeliness. The responses are similar for the two periods.

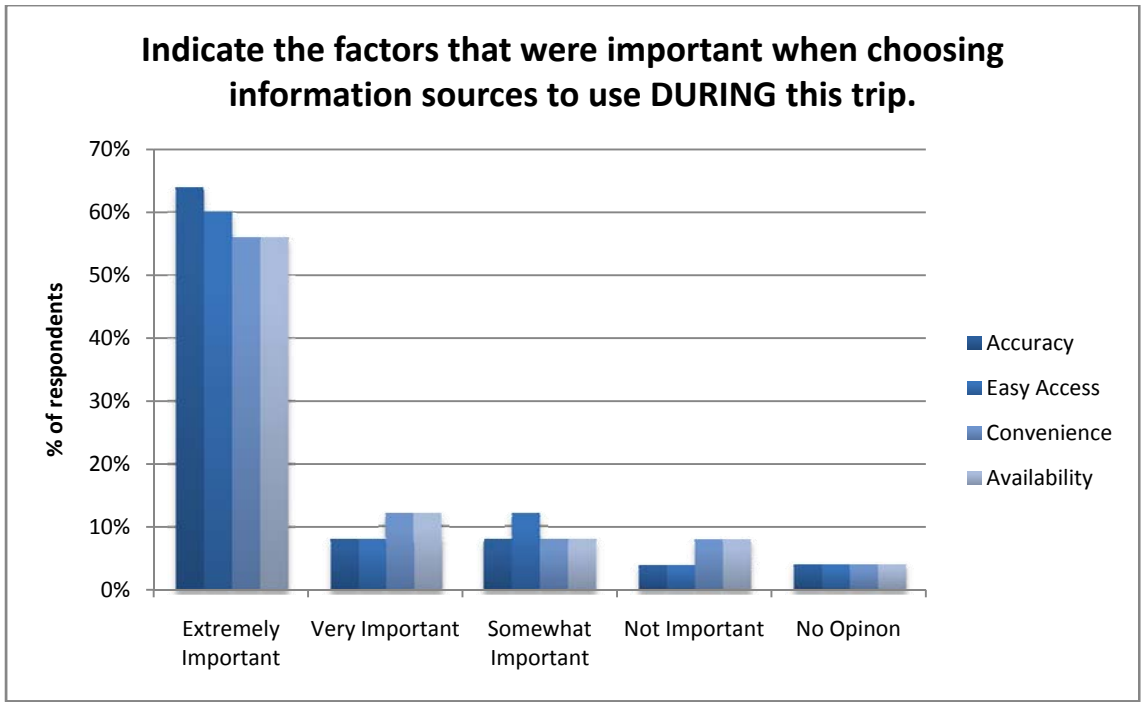

Figure 5.8 Importance of factors for during trip information, Fall 2007

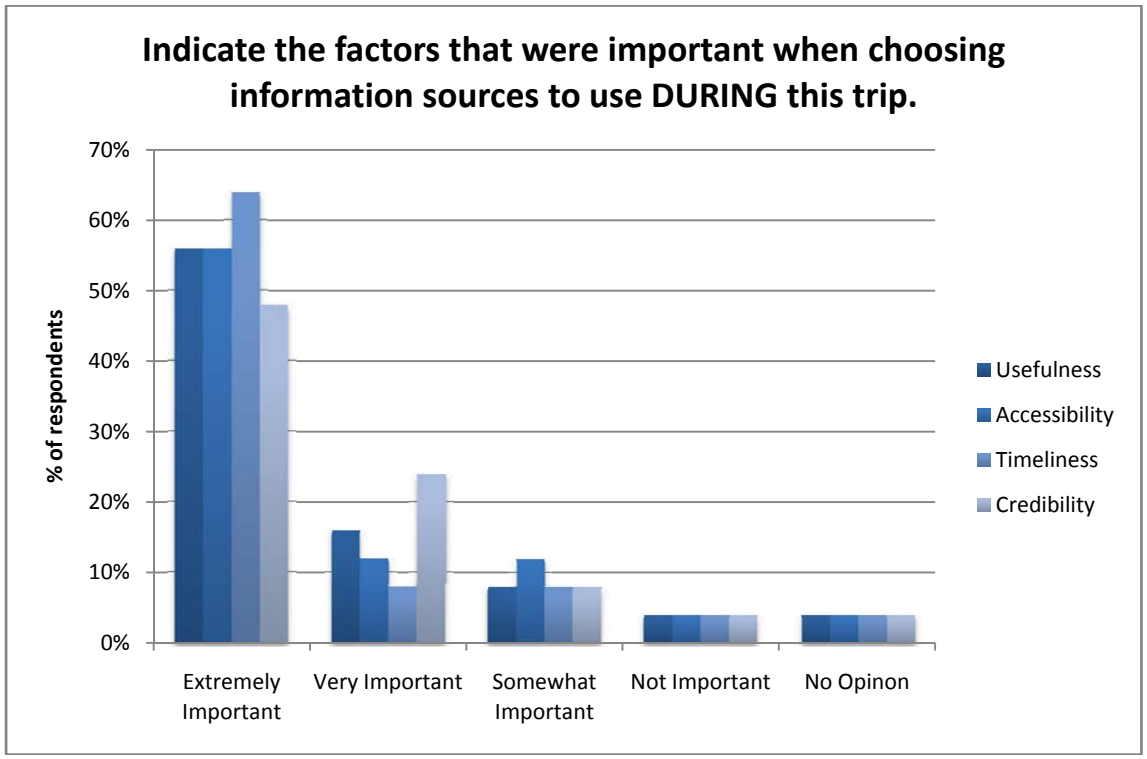

Figure 5.9 Importance of factors for during trip information, Fall 2007

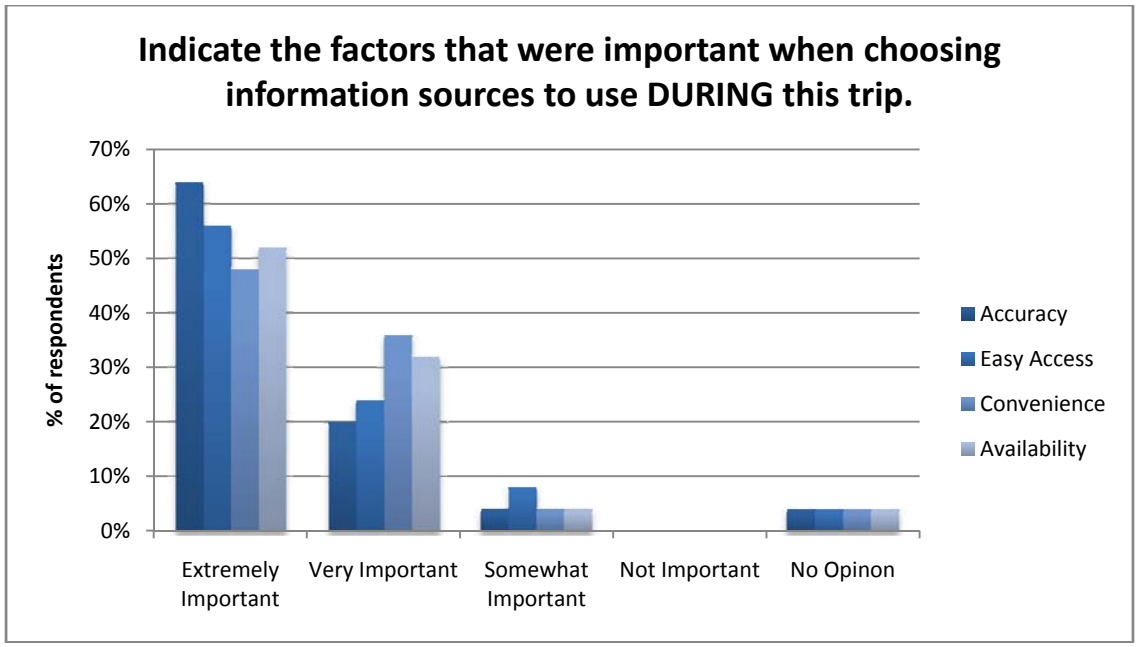

Figure 5.10 Importance of factors for during trip information, Spring 2008

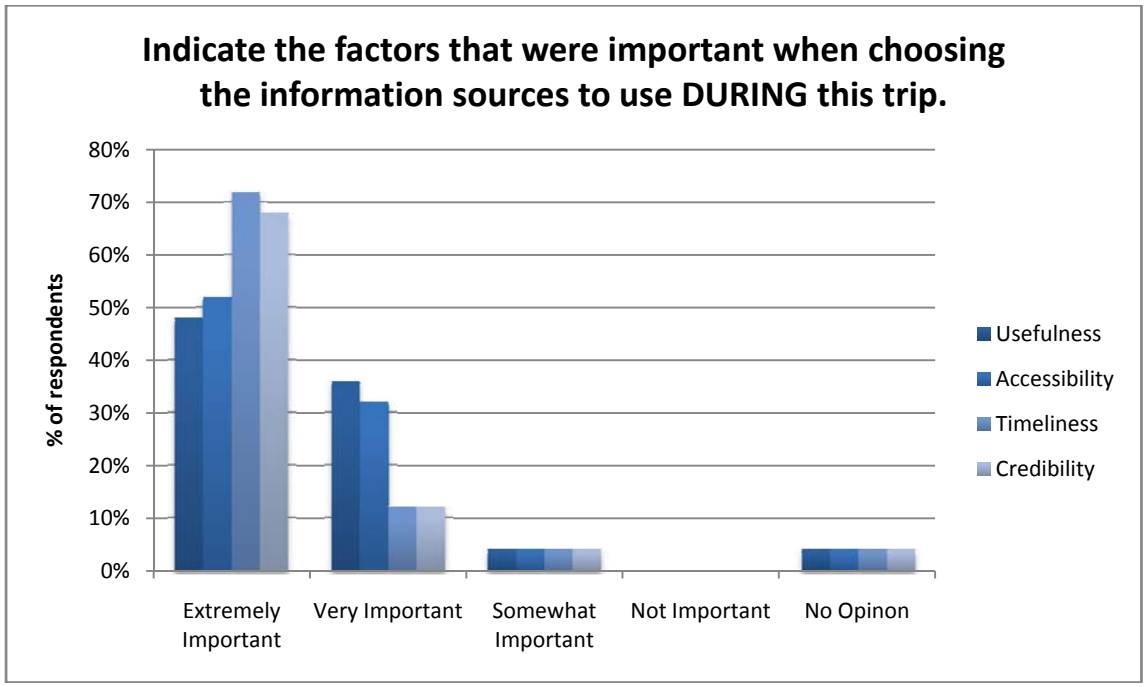

Figure 5.11 Importance of factors for during trip information, Spring 2008

Some generalizations can be made about this survey data, even though it is all qualitative and can be interpreted differently by numerous individuals. This survey data indicate that the DMSs had higher utilization and effectiveness rates during the Spring of 2008 than the Fall of 2007. Much of the data from the spring time period are stronger than the fall time period. For example, the utilization rates (from Figure 5.1), the importance of the sources (from Figure 5.2), and the adherence to the signs (from Figure 5.3) are all higher in the spring. Results for agreement and importance of the usefulness, timeliness, and

effectiveness of the DMSs also follows similar patterns. Participants may have reacted differently during the second intense period and paid more attention to the DMSs because of their presence on the panel.

DMSs are an extremely common source of information to drivers during their trip, second only to the conditions actually encountered while driving. Drivers read the messages, but do not always feel that the messages are helpful to them, or that they are better prepared for adverse conditions after reading them. It should be emphasized that the travelers in this survey are experienced drivers who encounter severe conditions on a regular basis. This could explain why such drivers do not feel that the information displayed on the DMSs is useful to them. Travelers agree that factors such as accuracy, timeliness, and credibility are very important in the presentation of information.

5.2.2 Focus Group

As mentioned earlier, local commuters volunteered an evening of their time to participate in a focus group regarding traveler information. The objective of the focus group was to discuss the traveler information that they see on a daily basis. Analysis of the focus group data show that members of the group all agree that traveler information is highly important for drivers on this stretch of I-80. All members are aware of and highly value the DMSs along their commuting route.

However, in the data, many members express concern about the accuracy of the information being displayed. They do not feel that the information provided is always specific enough to be helpful to them during their trip. They believe that many drivers do not trust the signs due to their inaccuracy in reporting the current conditions. Members agree that the number of signs needs to be increased, and that there are certain locations where the sign locations do not allow drivers to divert to alternate routes or postpone their trip.

Comments concern messages that are left up on the signs too long, either after conditions have improved, or after conditions have worsened. If the drivers find that the sign is not consistent with current conditions, they are less likely to trust the next message they read. Members believe that, in order for this communication system to be effective, there needs to be more ‘spotters’ on the road, people who are actually on the road reporting information back to the dispatch office. They would like to see conditions updated every 30-60 minutes because of the quickly changing conditions in this area.

There is agreement that more specific information needs to be provided to the drivers. Posting real-time wind information is one suggestion made by a commercial driver. The truck drivers agree that wind speed and direction are usually the most important pieces of information when driving a large commercial vehicle. Participants suggest using a rating system on the signs to rank the conditions by severity. With such a system, drivers would have a better idea what to expect on the roadway ahead of them. However, this type of ranking would be relative and would be hard for drivers unfamiliar with the conditions in the area to understand.

There are some sign messages that are highly credible to the members of this panel. They state that “Accident Ahead,” “Road Closed,” and “No Unnecessary Travel” are all messages that they, as drivers, take seriously. These messages contain information that is specific enough for the travelers to make a decision concerning their trip. When asked which type of DMS message has been most helpful, the most frequent response is information concerning accidents. They state that this is the one message they feel they can rely on to be 100% accurate. This message causes them to become more alert, drive more cautiously, and possibly take an alternate route. To improve these accident messages, members suggest providing information on estimated wait time, lane closures, and interim notices to remind drivers not to block shoulders if emergency vehicles need access to and from the accident.

During the focus group, members were presented with various message sets and asked for feedback on certain messages. The first test set compares STRONG WINDS against STRONG WINDS WITH GUSTS 65+ MPH. The participants all agree that the message with the gust information is better, but would be even more effective if a location were given as well.

The second message set compares SLOW DOWN against ADVISE 45 MPH MAX SPEED and SPEED LIMIT 45 MPH. The first message of SLOW DOWN is considered not enough information; members want to know how much to slow down or the reason they need to slow down. Although the latter two messages are both considered to be more informative, the ADVISE 45 MPH MAX SPEED message causes the members to wonder about enforcement and whether or not they can be cited for exceeding this speed. The SPEED LIMIT 45 MPH message is considered to be the best, but members want to know how long and why that speed limit is in effect.

The third message set compares WRECK AHEAD MM 324 against WRECK AHEAD MP 324 and WRECK 8 MILES AHEAD. The participants seem to favor the messages that list the mile marker number, but also raise the concern that, if the conditions are extremely bad, the mile markers may not be visible. The members suggest that the best solution is to include both the mile marker and the distance ahead. There is not a clear preference when comparing MM (mile marker) to MP (milepost).

The fourth message is TURN OFF CRUISE CONTROL, and members are simply asked for their feedback and opinions on the message. Members agree that this is an important piece of information, but does not provide enough information by itself and should always be paired with other conditions.

The fifth message is NO UNNECESSARY TRAVEL, and again, members were asked to provide their opinions about this message. Non-truck drivers state that this message makes them think twice before making their trip. However, the truck drivers view this message as an indication to hurry and get on the road before it is closed.

Focus group members were then asked for other ideas and suggestions for messages to be posted on the DMSs. Two suggestions are: ADVERSE WEATHER and DIAL 511 simply to make drivers aware of the inclement conditions they could be facing. One truck driver suggests posting a message concerning tailgating and including the word ENFORCED. Another suggestion is putting a surprise or humorous message on the DMS to get the drivers' attention. They believe that by varying the messages more often, drivers would feel that someone is actively updating these signs and this, in turn, would cause them to pay more attention during adverse weather.

5.2.3 Random Traveler Surveys

The random traveler surveys are analyzed for the time period that includes the months of February and March of 2008. As previously mentioned, the random traveler surveys consist of surveys collected at the travel plaza and at the rest area. This survey data are broken down into truck driver and non-truck driver responses, so the difference in opinions could be analyzed. Again, only the survey questions relating to the DMSs are included here.

Participants were asked how they received travel information for their trip and were told to mark all options that applied. The results for the travel plaza and rest area surveys are shown in Figure 5.12 and Figure 5.13. It can be seen that a large percentage of drivers utilize the DMSs, especially the travelers surveyed at the travel plaza. The participants at the rest area may not have clearly understood the differences between sign names, such as dynamic message signs and flashing caution signs, since there were no survey members present to assist them and clarify the meanings. Throughout the random traveler

survey results, the rest area responses are weaker than those from the travel plaza. It is possible that without survey members present, the rest area participants may have answered the questions more honestly.

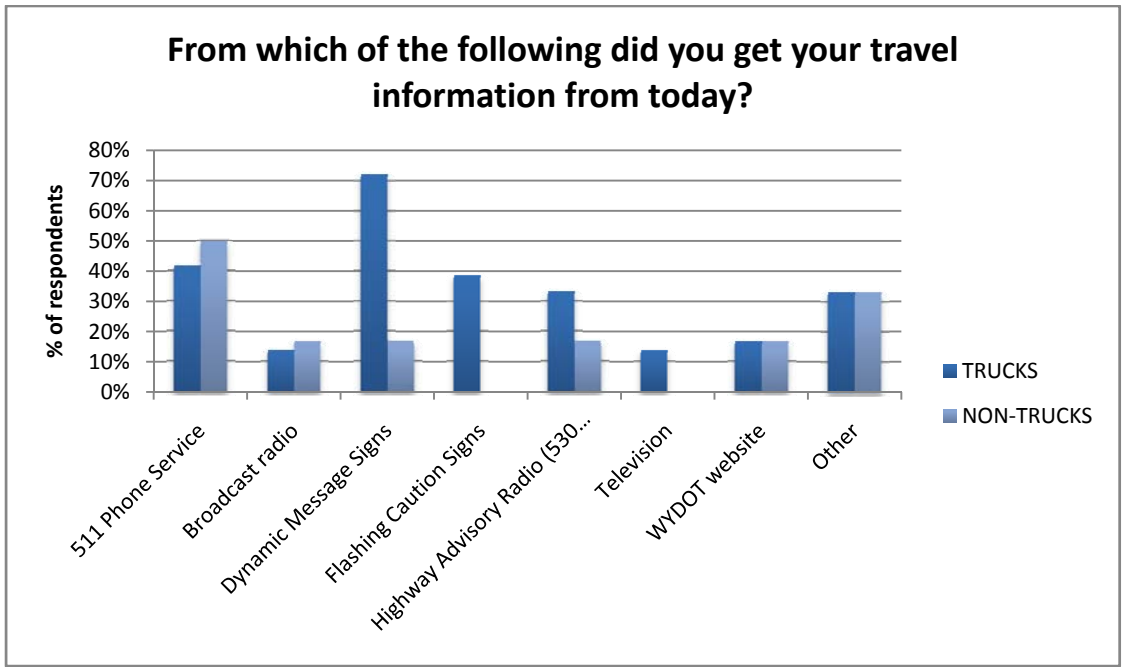

Figure 5.12 Sources of information, travel plaza responses

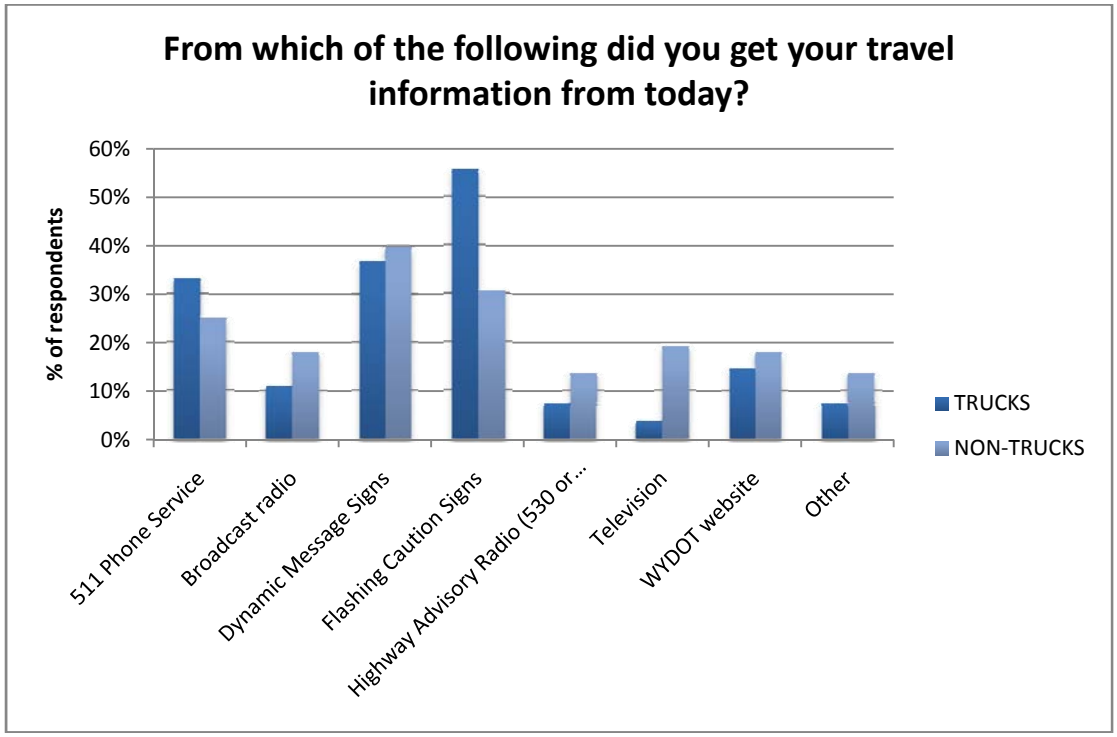

Figure 5.13 Sources of information, rest area responses

Participants were asked to rank each source of information they utilized, according to accuracy, timeliness, and credibility. The wording and layout of this question created some confusion, both for the survey team members and for the survey participants. For reference, Figure 5.14 shows how the question is asked on the survey. There are numerous surveys in which the participant is confused as to what the question is asking and how they are expected to respond. Consequently, the respondents either answer the question incorrectly or skip it altogether. The results of this question are not considered to be valid due to the confusion. Although these results have been omitted here, the raw data, with some analysis, can be found in Appendix D.

9. For each source of information you used, please rank the top 3 according to:
Accuracy, Timeliness, and *Credibility* (Place a "1" for the most, a "2" for the next most, and so on.)

	Accurate	Timely	Credible
511 Phone Service			
Broadcast Radio			
Dynamic Message Signs			
Flashing Caution Signs			
Highway Advisory Radio (530 or 1610 AM Radio)			
Television			
WYDOT website			
Other: _____			

Figure 5.14 Survey question

Participants were asked if they read the advisory messages on the DMSs along the corridor, and, if they had, they were asked to rank their agreement or disagreement with the following statements:

- The DMS signs were clearly VISIBLE.
- The DMS messages were EASY to understand.
- The DMS messages were USEFUL.
- The DMS messages were ACCURATE.
- The DMS messages were SPECIFIC/DETAILED enough to help make decisions about your trip.
- The DMS messages BETTER PREPARED you for changing travel conditions.
- The DMS signs were appropriately spaced to keep you informed about travel conditions.
- Because of the DMS messages, you took the action advised by slowing down, watching for ice, etc.

Of the travel plaza responses, 32 (89%) of the participating truck drivers answer “yes” to reading the DMS message. The remaining four surveys, with an answer of “no,” are not considered in the following analysis. Of the non-truck drivers participating, five (83%) answer yes to reading the DMS message. The remaining survey, with an answer of no, was not considered in the following analysis. The results from these questions are found in Figure 5.15 through Figure 5.22. It can be seen that the participants have a high agreement rate when it comes to the visibility, understandability, and usefulness of the DMSs. However, the agreement of the participants about the accuracy and how prepared the information makes them feel faltered somewhat. Participants’ agreement level drops considerably when asked about the spacing of the signs and the specificity of the information.

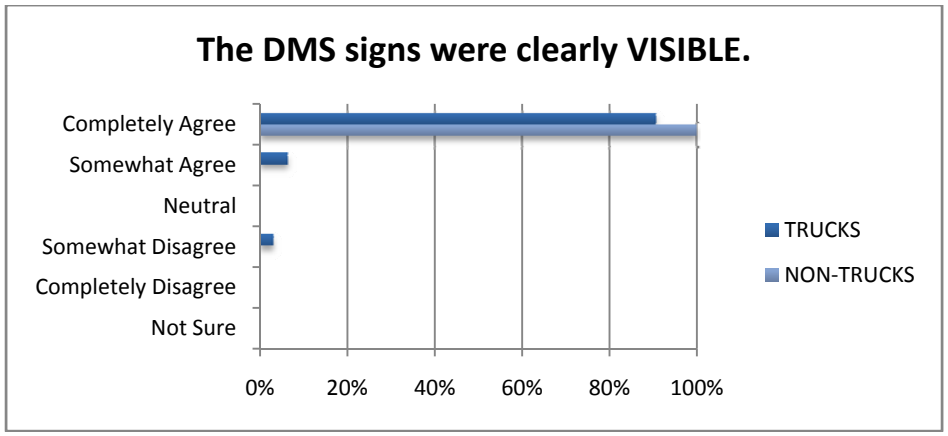

Figure 5.15 Visibility, travel plaza responses

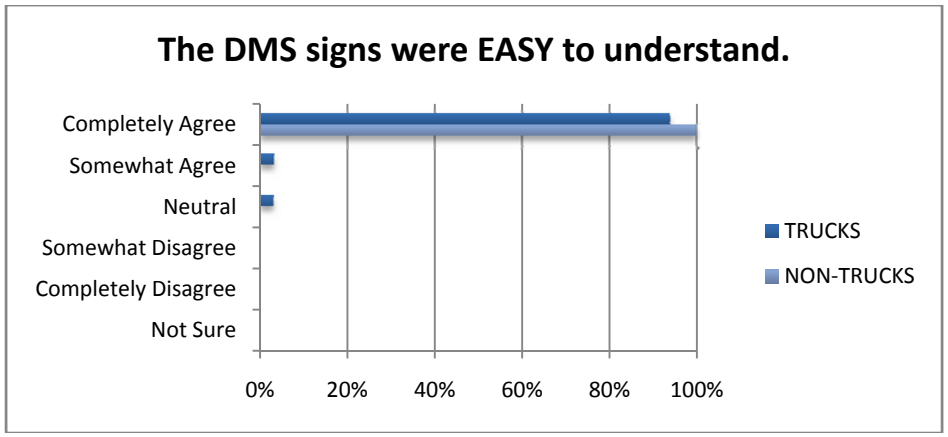

Figure 5.16 Understandable, travel plaza responses

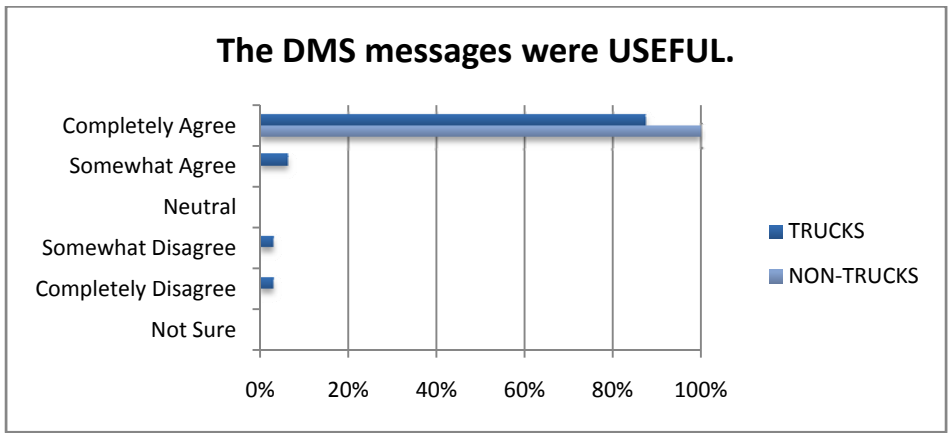

Figure 5.17 Usefulness, travel plaza responses

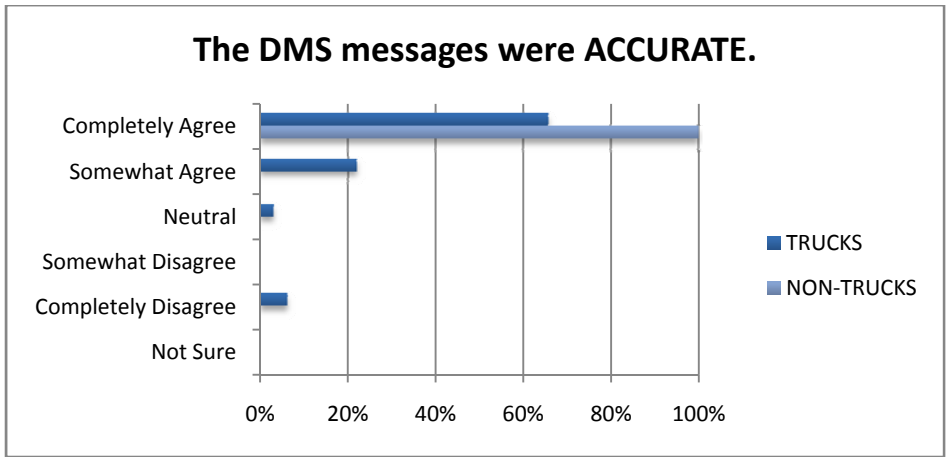

Figure 5.18 Accuracy, travel plaza responses

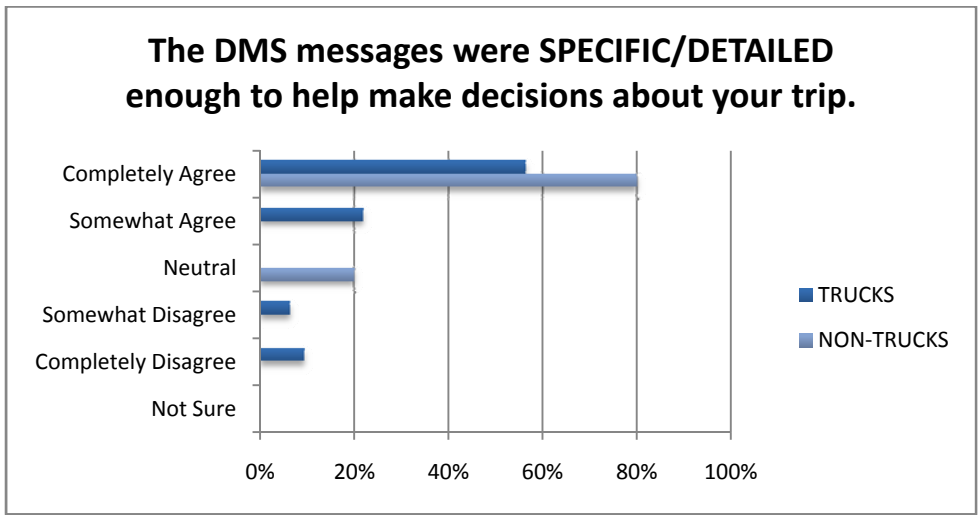

Figure 5.19 Specific/detailed, travel plaza responses

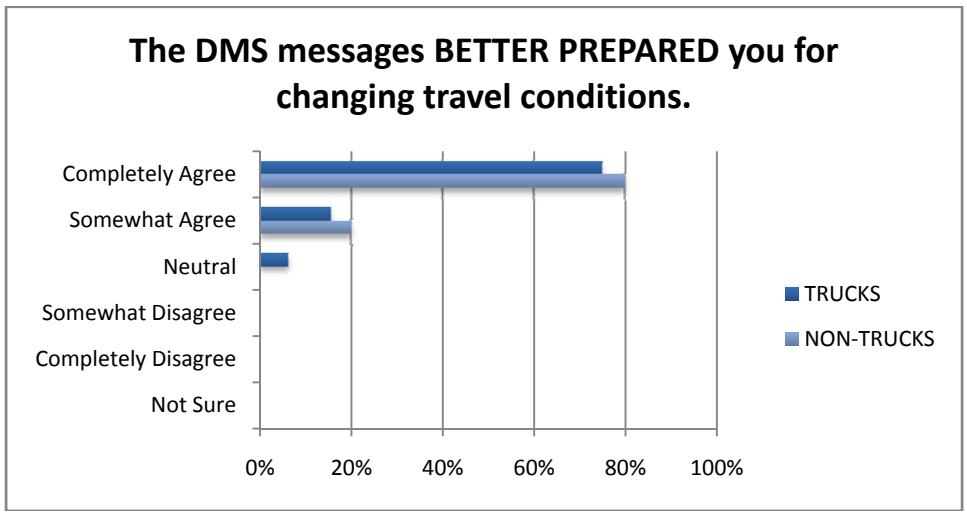

Figure 5.20 Better prepared, travel plaza responses

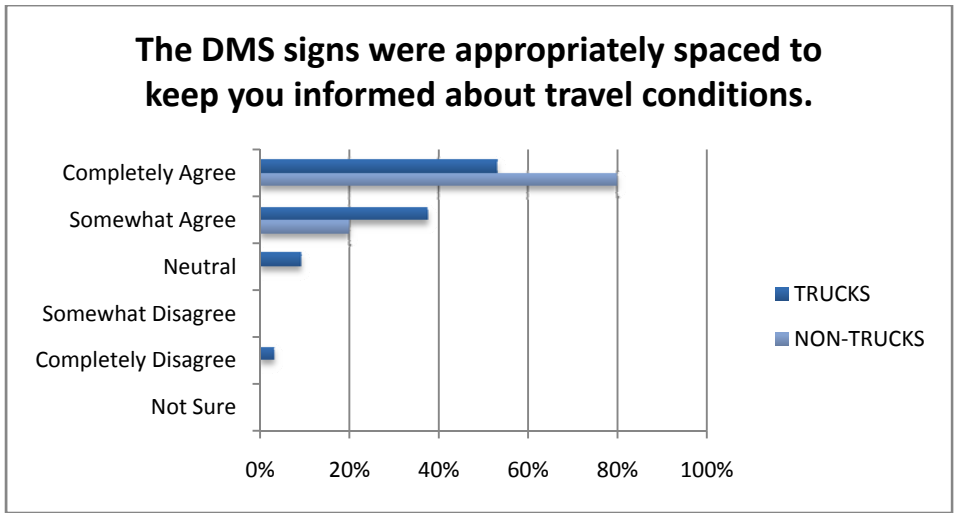

Figure 5.21 Appropriately spaced, travel plaza responses

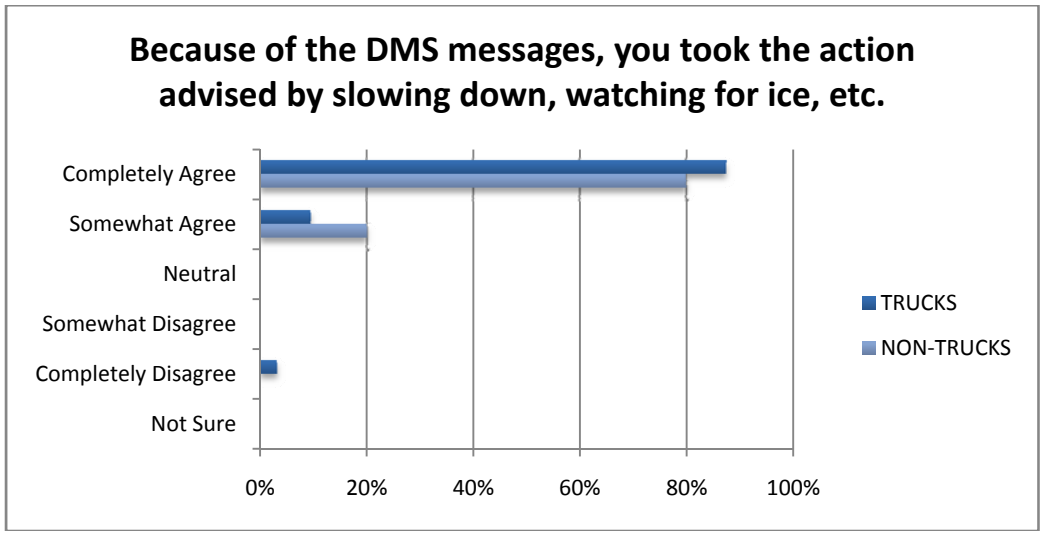

Figure 5.22 Took action, travel plaza responses

Of the rest area responses, 17 (63%) of the participating truck drivers answer “yes” to reading the DMS message. Of the non-truck drivers participating, 54 (61%) answer “yes” to reading the DMS message. The remaining surveys, with an answer of “no,” were not considered in the following analysis. The results from this question can be found in Figure 5.23 through Figure 5.30. The only aspect regarding the DMSs that has relatively high agreement with the rest area travelers is the visibility of the signs. The remaining aspects, including accuracy and specificity, receive low agreement rates. Again, these participants were not being guided as they responded to these questions, so their answers may have been more honest than the responses from the travel plaza participants.

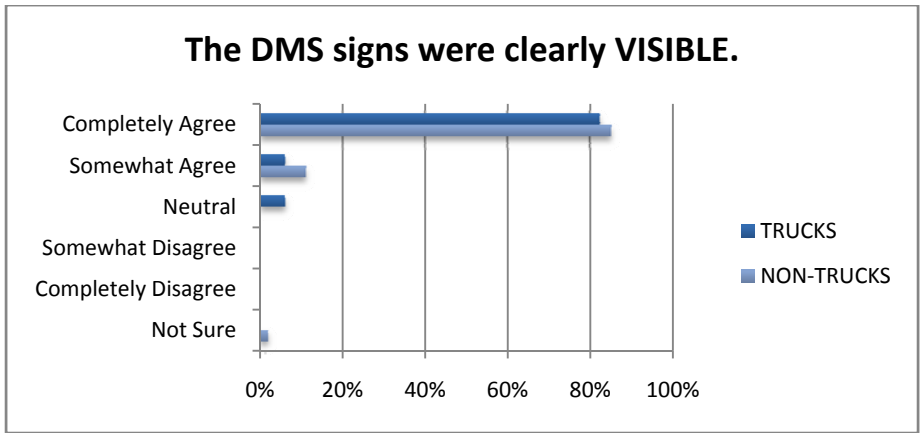

Figure 5.23 Visibility, rest area responses

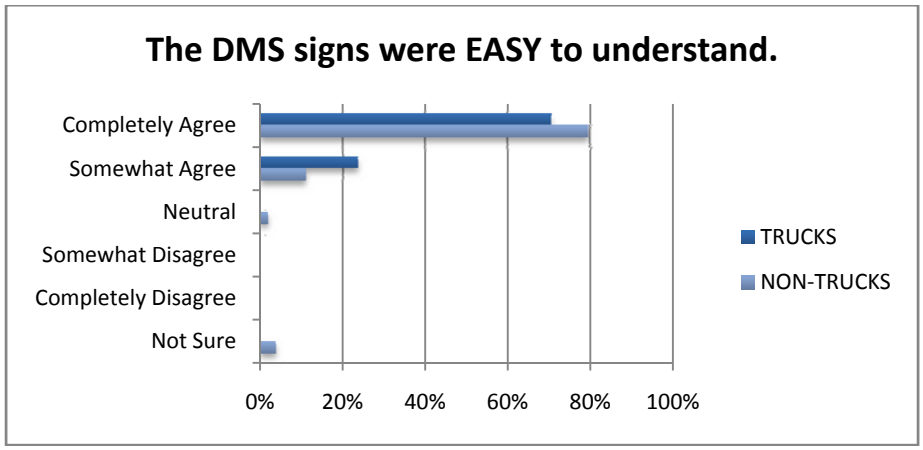

Figure 5.24 Understandable, rest area responses

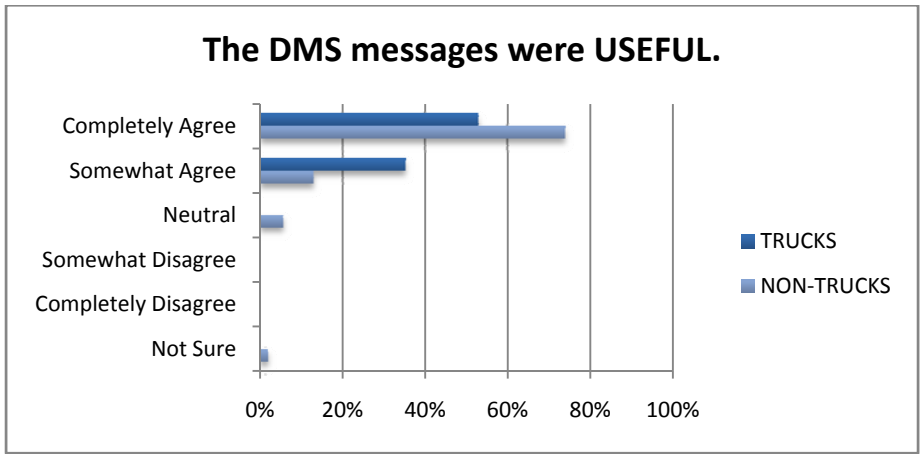

Figure 5.25 Usefulness, rest area responses

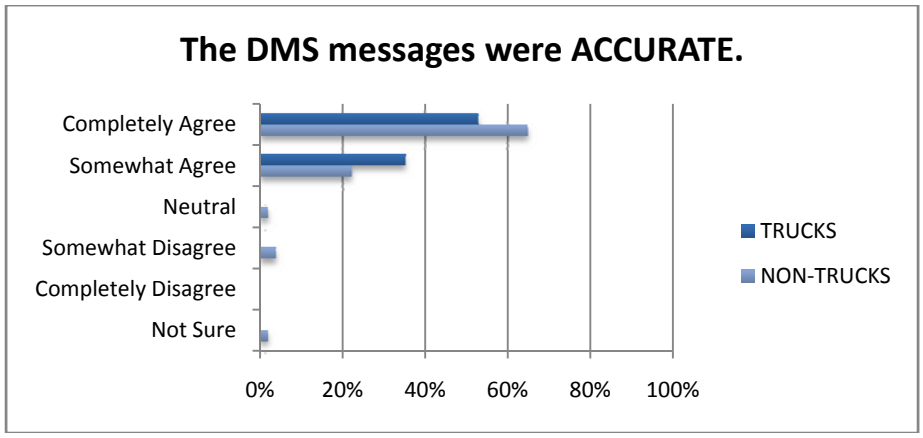

Figure 5.26 Accuracy, rest area responses

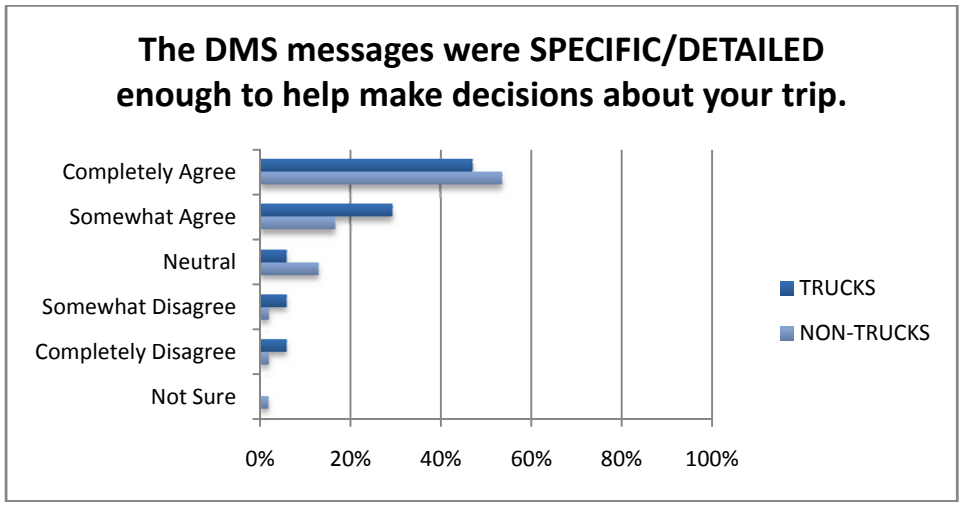

Figure 5.27 Specific/detailed, rest area responses

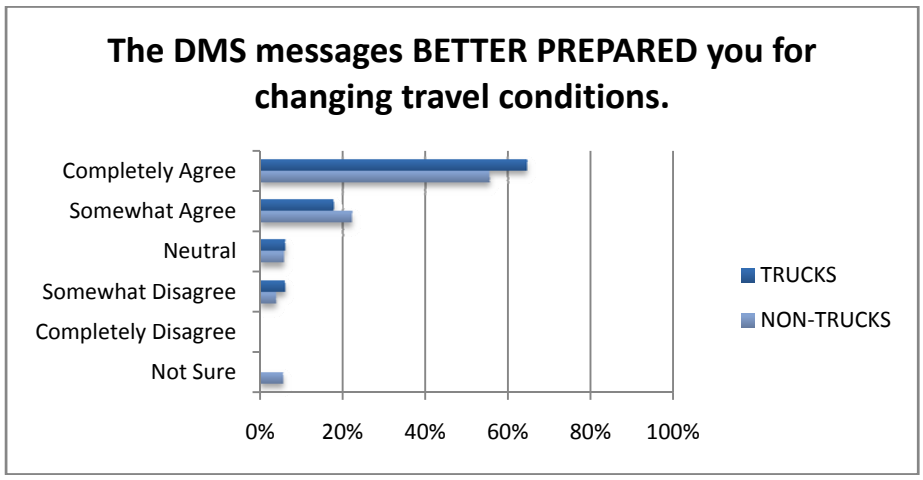

Figure 5.28 Better prepared, rest area responses

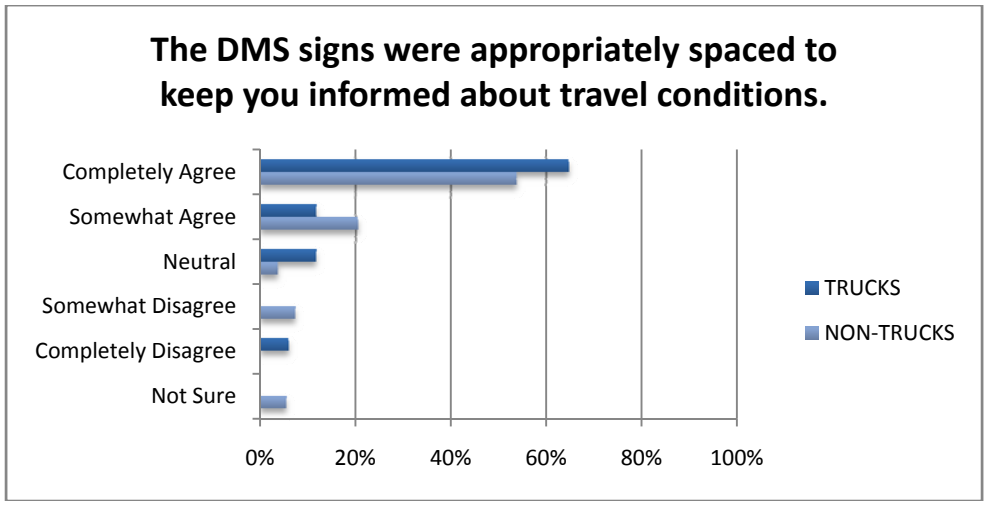

Figure 5.29 Appropriately spaced, rest area responses

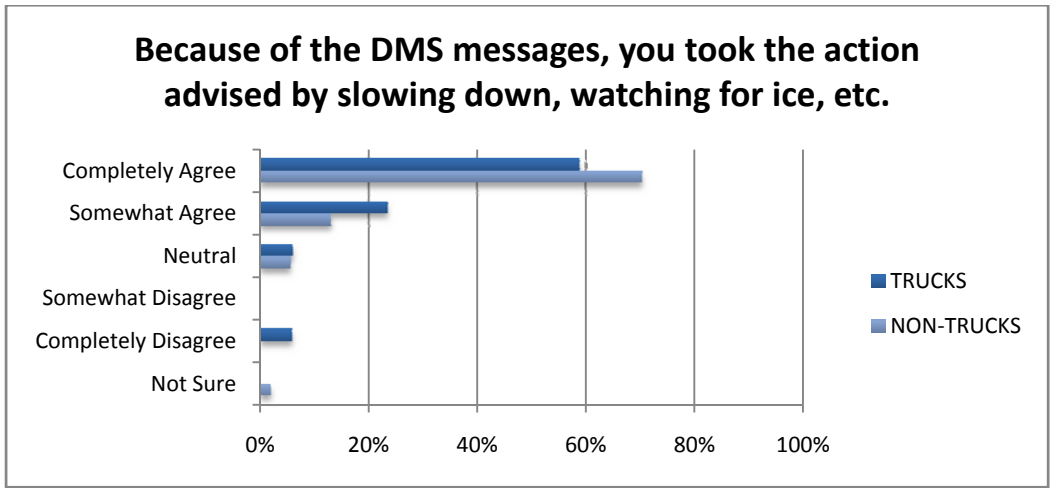

Figure 5.30 Took action, rest area responses

Survey participants were asked about the actions they have taken in response to the DMS messages. They were asked to select each of the following statements if it applied to them. The results of this question can be found in Figure 5.31 and Figure 5.32. It can be seen that the majority of drivers drive more slowly and carefully after reading the information on the DMSs. Once again, the rest area responses are slightly weaker than the travel plaza responses.

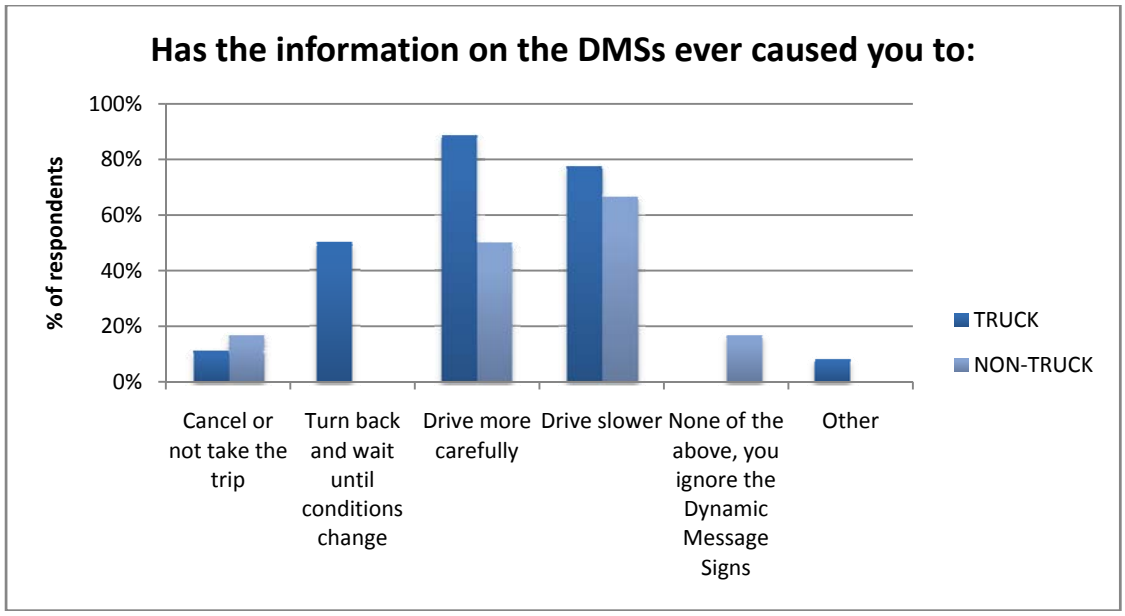

Figure 5.31 Action taken, travel plaza responses

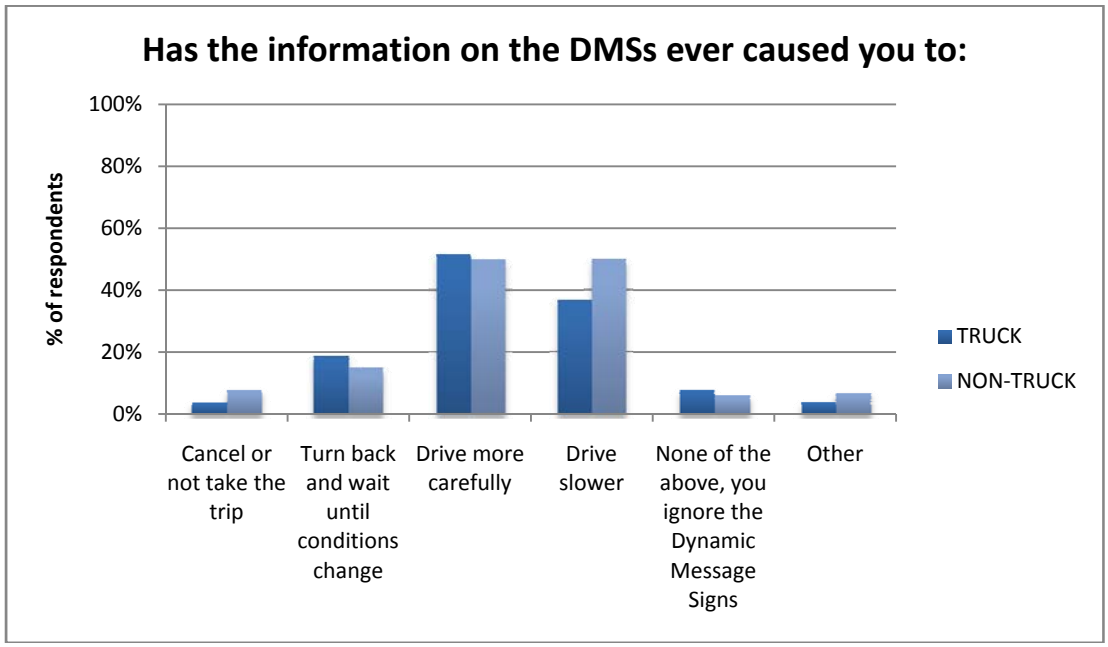

Figure 5.32 Action taken, rest area responses

The respondents who chose “Other” on this question were asked to list the other actions that they took. The other responses from both travel plaza and rest area surveys are as follows:

- If message signs were flashing, I would turn back and wait until the conditions change.
- Visit Rest stop - maybe wind will let down.
- Find place to park/stay.
- Signs not on.
- Yes, when I see them.
- Took off cruise control when advised.
- Turned off cruise control.
- Speed limit.
- Get off road.
- Find alt. route.

Participants were questioned about how they feel other drivers respond to the travel information and advisories. Although this was a “yes” or “no” question, there are a few respondents who answer with both “yes” and “no.” The results are shown in Figure 5.33 and Figure 5.34. These results are mixed, but show many drivers believe that other drivers do not respond to the information appropriately.

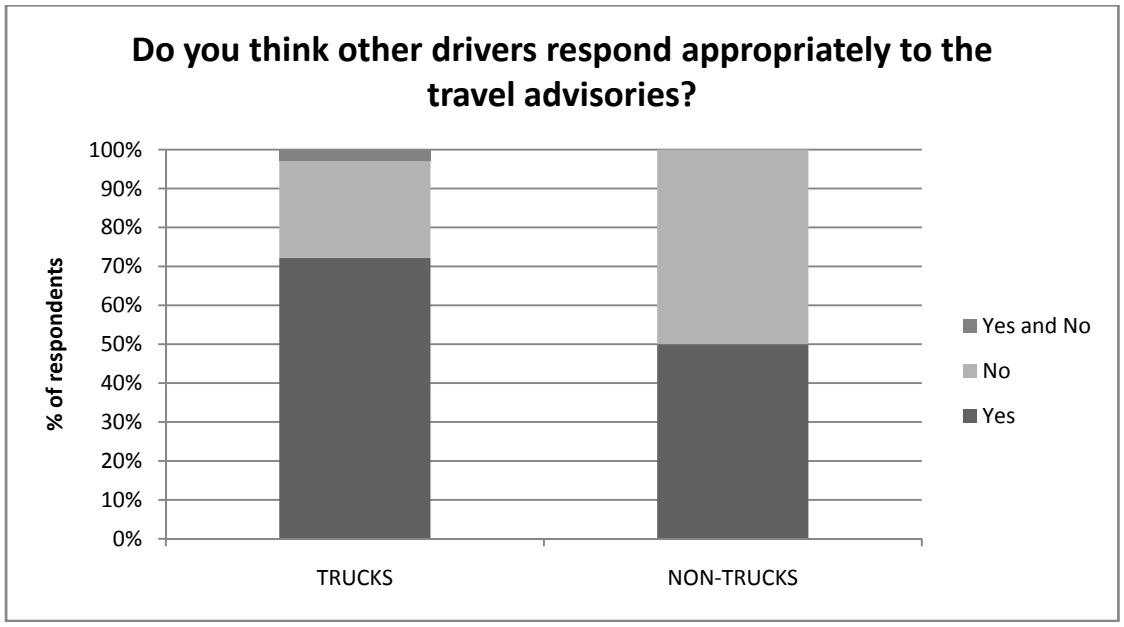

Figure 5.33 Other drivers, travel plaza responses

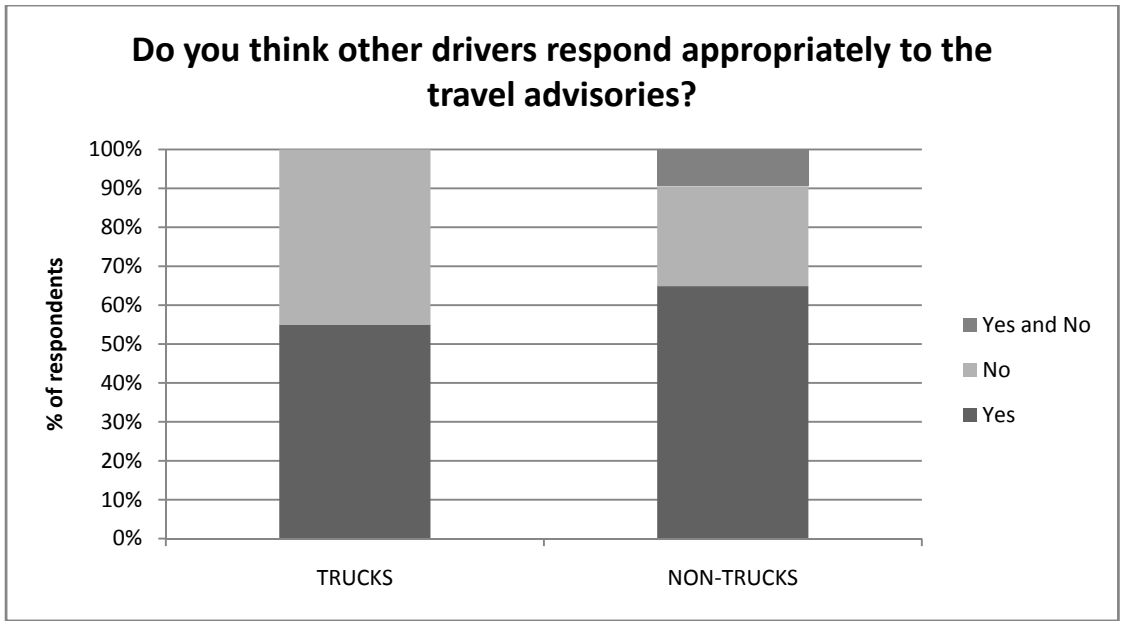

Figure 5.34 Other drivers, rest area responses

Finally, respondents were given an opportunity to express their opinions about any additional information they feel should be placed on DMS signs. All the following responses were given by truck drivers. Some duplicate responses are omitted from the list.

Travel Plaza responses:

- Where the problem really is (m/m).
- Update signs fast.
- If road is closed West of Laramie.
- Wind speeds help.
- Road Closures ahead at what mile marker.
- Closures farther up the road.
- Salt than sand.
- Visual Legends.
- Last updated, time stamps.
- Run broadcast over channel 19 of CB radio.
- Tune into channel “such and such.”
- More Signs, Time of Update.
- Speed that needs to be traveled.
- Weight class breakdown advisory.
- Wildlife warning.
- Open/Closed further ahead, seatbelts, be courteous, DWI -How to get in touch with a state trooper.
- What is a Light Load? # of pounds.

Rest Area responses:

- Warn when snow plows are out, especially if visibility is low.
- Road trip cool and scary and cold.
- Remove all ice from the roadway that is in the shadows.
- Faster updates, also include road work with mile posts.
- Mountains ahead.
- Temp, time to next city.
- No maps of wyo.
- Up to the minute closure info for the entire state.
- Estimated re-open of roads.
- Road closed.
- More timely, accurate info.
- When road closed - please inform on cross highway (I-25). Signs are often placed after exits that could be used to turn/park.
- Good as is.
- If turn back/safe haven opts.
- Wrecks ahead.
- No, it's very good. Thank you – DR.
- More signs.
- Update 511 more often and be accurate!
- "Chains required" instead of closing freeway.

Similar to frequent travelers, DMSs are a common source of information for random travelers, especially for truck drivers. There is agreement that the signs are visible, understandable, and useful. However, the accuracy and detail of the messages is not acceptable to many drivers. The majority of drivers state that they drive more slowly or carefully due to the information provided on the DMS, but many feel that other drivers do not respond appropriately to these warnings. Many of the comments regard placing more information and more detail on the message signs. There are also numerous requests for more frequent updates.

5.3 Survey Analysis Summary

The frequent traveler surveys identify the high visibility of DMSs and how commonly they are read. However, drivers do not always agree that the messages are helpful or help them to be better prepared after reading them. The frequent travelers are experienced drivers who encounter severe conditions on a regular basis, so this could explain why they do not feel the information is useful to them. The following points summarize the results of the frequent traveler survey respondents:

- Almost half of surveyed drivers rank DMSs as the most important source of information during their trip.
- When action is advised on the DMSs, the majority of surveyed drivers obey the travel information.
- Messages should be more specific, detailed, and accurate on the DMSs.
- Messages should include speed limit advisories.
- Travelers agree that accuracy, timeliness, and credibility are very important when it comes to the information being presented.

The results from the focus group are more detailed because members were able to explain and give more opinions than were allowed in the frequent traveler surveys. All members of the focus group highly value the DMSs but express concern on the accuracy of the information being displayed. They state that they do not always take the information seriously, unless there is a message concerning accidents, road closures, or unnecessary travel. The following points highlight the views of the focus group members:

- Messages need to be updated if conditions improve or worsen.
- Messages need to be more specific. Examples include real-time wind information and a rating system to rank the conditions by severity.
- When comparing message sets, messages with more specific information is preferred by the focus group members.

The random traveler surveys uncover similar results as the frequent traveler survey results. A large percentage of drivers utilize the DMSs, especially truck drivers. Drivers strongly feel that DMSs are visible, easy to understand and useful. However the accuracy and detail of the messages is not acceptable to many drivers.

- When advised, drivers take the action suggested by the DMSs (e.g. driving more carefully).
- Many drivers feel that other drivers do not respond appropriately to the DMSs.
- Drivers feel messages should be updated more frequently.

6. STATISTICAL MODELING OF SPEED, WEATHER, AND DMS DATA: ANALYSIS AND RESULTS

In this study, statistical modeling is carried out on speed sensor, weather, and DMS message data to analyze the effects of the messages on the speeds of the vehicles. Due to the extensive nature of the data set, initial modeling is done using data covering 11 separate days ranging from September 2007 to May 2008. By doing initial modeling on only these 11 days, it can be determined if it is worthwhile to perform similar analyses on larger data sets covering several months.

6.1 Data Collection

Five of the 11 days are classified as good weather days, while the remaining six are classified as bad weather days. The bad weather days are determined mainly by the weather conditions that were posted on the DMSs. Table 6.1 shows the conditions that were listed on the DMSs for each bad weather day chosen. Descriptive statistics for these good and bad weather days can be found in Table 6.2 and Table 6.3. The variables in these two tables are described later in this chapter.

Good weather days can be thought of as base conditions, where speeds are at a normal level depending upon the geometrics of the roadway. Speed sensors may be located where there is a steep upgrade or a sharp curve. At these locations, speeds may be lower than the rest of the corridor, even in good conditions.

Table 6.1 Weather conditions on bad weather days

Date	Weather Conditions noted on DMS
11/21/2007	ICY SPOTS, SNOWFALL, ICY ROAD
12/12/2007	ICY SPOTS, STRONG WIND, BLOWING SNOW, POOR VISIBILITY
2/12/2008	ICY SPOTS, BLOWING SNOW, SNOWFALL, STRONG WIND, ICY ROAD, STRONG WIND
4/7/2008	ICY SPOTS, SNOWFALL, LIMITED VISIBILITY, BLOWING SNOW, ICY ROAD, FOG
5/27/2008	HEAVY FOG, LIMITED VISIBILITY
5/28/2008	FOG, HEAVY FOG, LIMITED VISIBILITY

Table 6.2 Descriptive statistics for good weather days

Variable	Mean	Standard Deviation	Median	Minimum	Maximum
Combined Good Weather Days (N = 11,114)					
AvgSpeed	71.120	6.005	72.043	17	93
AirTemp	41.368	13.059	43	20	69
RH	48.711	16.092	47	19	91
AvgWindSpeed	11.948	7.278	11	1	34
GustWindSpeed	17.836	9.866	16	1	47
SfStatus	0.127	0.473	0	0	2
SfTemp	49.965	20.153	47.1	18.7	93.2
Dist	4.652	3.348	5.7	0.1	11.7
MsgCategory	0.033	0.195	0	0	2
Night_Day	0.581	0.493	1	0	1

Table 6.3 Descriptive statistics for bad weather days

	Variable	Mean	Standard Deviation	Median	Minimum	Maximum
11/21/2007	AvgSpeed	60.796	10.296	62.762	26	92
(N = 574)	AirTemp	10.282	2.314	10	4	15
	AvgWindSpeed	9.690	3.875	10	2	21
	GustWindSpeed	13.852	5.243	14	2	26
	SfStatus	0.707	0.957	0	0	2
	SfTemp	19.194	7.073	18.6	7.7	34.7
	Dist	7.050	0.250	7.05	6.8	7.3
	MsgCategory	0.500	0.500	0.5	0	1
	Night_Day	0.460	0.499	0	0	1
12/12/2007	AvgSpeed	58.576	8.780	60	20	77
(N = 420)	AirTemp	15.838	3.270	16	9	21
	AvgWindSpeed	28.064	6.424	29	11	42
	GustWindSpeed	38.983	8.391	40	18	56
	SfStatus	1.252	0.969	2	0	2
	SfTemp	16.988	7.241	14.9	6.4	29.3
	Dist	7.058	0.250	7.3	6.8	7.3
	MsgCategory	1.098	1.292	0	0	3
	Night_Day	0.452	0.498	0	0	1
2/12/2008	AvgSpeed	60.024	9.372	60.774	22	86
(N = 4109)	AirTemp	21.135	2.726	22	13	26
	AvgWindSpeed	24.983	5.162	24	12	38
	GustWindSpeed	35.530	7.151	35	20	50
	SfStatus	1.866	0.429	2	0	2
	SfTemp	22.785	6.259	21.7	12	37.2
	Dist	4.435	3.419	4.4	0.1	11.7
	MsgCategory	0.478	0.618	0	0	2
	Night_Day	0.454	0.498	0	0	1
4/7/2008	AvgSpeed	60.571	7.729	60.182	32.75	87
(N = 2924)	AirTemp	23.858	0.796	24	22	25
	AvgWindSpeed	13.549	4.143	14	4	22
	GustWindSpeed	18.429	6.076	19	6	29
	SfStatus	2.000	0.000	2	2	2
	SfTemp	26.765	1.674	26.2	24.8	32.4
	Dist	3.973	3.331	3.8	0.1	11.7
	MsgCategory	0.709	0.773	1	0	2
	Night_Day	0.443	0.497	0	0	1
5/27/2008	AvgSpeed	65.491	8.216	67	27.615	83
(N = 2312)	AirTemp	32.407	2.008	32	30	40
	AvgWindSpeed	5.867	2.508	6	0	11
	GustWindSpeed	8.837	3.316	9	2	15
	SfStatus	1.168	0.521	1	0	2
	SfTemp	37.664	7.432	34.5	32	63.9
	Dist	3.831	3.454	3.2	0.1	11.7
	MsgCategory	0.139	0.346	0	0	1
	Night_Day	0.525	0.499	1	0	1

Table 6.3 continued

	Variable	Mean	Standard Deviation	Median	Minimum	Maximum
5/28/2008	AvgSpeed	66.056	8.961	68.5	31	82
(N = 5174)	AirTemp	42.935	6.293	45	35	56
	AvgWindSpeed	16.150	3.624	17	1	24
	GustWindSpeed	23.199	4.186	24	7	30
	SfStatus	0.407	0.491	0	0	1
	SfTemp	52.443	15.724	41.9	38.5	88.2
	Dist	3.785	3.443	2.2	0.1	11.7
	MsgCategory	0.351	0.750	0	0	2
	Night_Day	0.663	0.473	1	0	1

There are thirteen speed sensors installed along this project corridor. The location of each speed sensor can be seen on the project corridor map in Figure 3.1 in Section 3. The data were collected by most speed sensors every five minutes for each lane of traffic. However, there were some speed sensors that were collecting data at 30-second intervals. This data had to be aggregated to five-minute intervals in order to compare with the other sensors.

An example of speed sensor output can be seen in Table 6.4. The Sensor column contains the IP address of the particular speed sensor. The Lane ID column identifies the lane, with 1 being the lane closest to the speed sensor and 4 being the lane farthest away. The Speed column is the average speed in miles per hour recorded over the five-minute period for that individual lane. The Vol column gives the total number of vehicles that passed the speed sensor in the five-minute period, which is used in the calculation of the average speed. Occ represents the occupancy, which is the percentage of time in the five minutes in which the vehicle occupied the space detected. The Speed 85 column gives the 85th percentile speed of the vehicles passing in the time period. The Head and Gap columns are simply the average headways and gaps, both measured in seconds. The speed sensors assign each passing vehicle to one of four predetermined vehicle classifications. The Small %, Med %, MedLar %, and Lar % columns show the percentage of the vehicles that fall into each length-based classification. Small vehicles are from 0 to 20 feet, medium (Med) are from 20 to 40 feet, medium-large (MedLar) are from 40 to 60 feet, and large (Lar) are greater than 60 feet in length.

Table 6.4 Sample speed sensor output

Time	IP	Lane ID	Speed	Vol	Occ	Speed 85	Head	Gap	Small %	Med %	MedLar %	Lar %
4/7/08 0:00	10.145.11.111:50004 (00127)	1	68	11	3	71	19.1	18.4	18	9	0	73
4/7/08 0:00	10.145.11.111:50004 (00127)	2	70	1	0	71	30	29.8	100	0	0	0
4/7/08 0:00	10.145.11.111:50004 (00127)	3	80	2	1	88	15	14.8	0	100	0	0
4/7/08 0:00	10.145.11.111:50004 (00127)	4	72	12	6	74	15	14.3	25	0	0	75
4/7/08 0:05	10.145.11.111:50004 (00127)	1	70	8	3	76	18.8	18.2	25	25	0	50
4/7/08 0:05	10.145.11.111:50004 (00127)	2	0	0	0	0	0	0	0	0	0	0
4/7/08 0:05	10.145.11.111:50004 (00127)	3	85	3	0	86	30	29.8	67	33	0	0
4/7/08 0:05	10.145.11.111:50004 (00127)	4	76	12	5	80	15	14.4	8	25	8	58
4/7/08 0:10	10.145.11.111:50004 (00127)	1	67	7	3	67	25.7	25	14	0	14	71
4/7/08 0:10	10.145.11.111:50004 (00127)	2	78	1	0	79	30	29.8	100	0	0	0
4/7/08 0:10	10.145.11.111:50004 (00127)	3	0	0	0	0	0	0	0	0	0	0
4/7/08 0:10	10.145.11.111:50004 (00127)	4	75	5	3	77	18	17.3	20	0	0	80
4/7/08 0:15	10.145.11.111:50004 (00127)	1	68	11	5	73	13.6	13	27	9	0	64
4/7/08 0:15	10.145.11.111:50004 (00127)	2	73	1	0	74	30	29.8	100	0	0	0
4/7/08 0:15	10.145.11.111:50004 (00127)	3	0	0	0	0	0	0	0	0	0	0
4/7/08 0:15	10.145.11.111:50004 (00127)	4	73	6	5	76	15	14.3	0	0	0	100
4/7/08 0:20	10.145.11.111:50004 (00127)	1	66	6	4	68	20	19.2	0	0	0	100
4/7/08 0:20	10.145.11.111:50004 (00127)	2	76	1	0	77	30	29.8	100	0	0	0
4/7/08 0:20	10.145.11.111:50004 (00127)	3	77	1	0	78	30	29.8	100	0	0	0
4/7/08 0:20	10.145.11.111:50004 (00127)	4	72	7	4	75	17.1	16.5	29	0	0	71

All data similar to that in Table 6.4 are aggregated to get eastbound values and westbound values for each sensor. Data are analyzed by direction (either eastbound or westbound), rather than by lane, simply because an overall picture of the situation on this corridor is desired. However, the effects are dampened by aggregating the data from both lanes together. Evaluating each lane separately would be a feasible task in future analyses since the behavior of drivers in the left lane may be different from those traveling in the right lane.

Although there are 13 total speed sensors on this corridor, not all sensors were working properly during the entire study period. Table 6.5 shows the number of sensors that were operational and collecting data for each day that was modeled. There are numerous reasons for the sporadic collection of speed sensor data, with the major problem being loss of communication. There are also times when the speed sensors were not operating correctly, and the data collected were not accurate. Inaccurate data are omitted from the analysis. Although rare, there are also instances in which no vehicles passed the sensor during the

five-minute period. Table 6.5 shows the total number of observations that are included in the modeling for each day.

Table 6.5 Number of speed sensor observations

Date	Number of Sensors	Sensor Location (by milepost)	Number of Obs. (per sensor)	Date	Number of Sensors	Sensor Location (by milepost)	Number of Obs. (per sensor)
Good Weather Days				Bad Weather Days			
9/14/2007	1	324.0	574	11/21/2007	1	324.0	573
10/5/2007	1	324.0	574	12/12/2007	1	324.0	258
3/13/2008	8	324.0	570	2/12/2008	7	324.0	553
		326.9	574			326.9	554
		334.5	574			334.5	556
		335.5	574			335.5	523
		336.5	574			336.5	565
		338.1	138			340.5	560
		340.5	574			343.8	558
		343.8	574	4/7/2008	10	317.2	261
4/14/2008	1	324.0	572			324.0	263
5/31/2008	9	317.2	574			324.8	262
		324.8	573			325.8	261
		325.8	576			326.9	264
		330.0	575			335.5	261
		335.5	575			336.1	262
		336.1	575			336.5	263
		336.5	576			340.5	261
		340.5	575			343.8	264
		343.8	576	5/27/2008	9	317.2	241
						324.8	263
						325.8	261
						330.0	245
						335.5	262
						336.1	246
						336.5	262
						340.5	262
						343.8	246
				5/28/2008	9	317.2	574
						324.8	570
						325.8	574
						330.0	574
						335.5	572
						336.1	574
						336.5	566
						340.5	573
						343.8	573

Data from the single RWIS station on this corridor was also collected for the eleven modeling days. The location of the RWIS station at milepost 330 can be seen on the project corridor map in Figure 3.1 in Section 3. It should be noted that this single source of weather information reports only the conditions at milepost 330, and conditions throughout the corridor may be widely varied. An example of the RWIS output is found in Table 6.6.

Similar to the speed sensors, the RWIS station collects data every five minutes. The column labeled AirTemp gives the current air temperature in degrees fahrenheit. RH is the relative humidity, or the percent of moisture in the air. Dew Point is the temperature at which the air becomes saturated. AvgWindSpeed is the average velocity, measured in miles per hour, of the wind over the previous five minutes. The GustWindSpeed column determines the maximum wind speed, in miles per hour that is measured during the five-minute period. WindDirect indicates the average wind direction during the five-minute period in eight cardinal directions: N, NE, E, SE, S, SW, W, and NW. SfStatus represents the surface status of the pavement, which can fall into three categories: Dry, Trace Moisture, and Ice Watch. These three categories were depicted with a 0, 1, 2 classification, respective to the three statuses. Similarly, SfTemp represents the pavement surface temperature, measured in degrees fahrenheit. ChemFactor is the relative amount of chemical present in the moisture on the surface on a scale from 0 to 100. Conduct shows the conductance of the ice/liquid mixture on the pavement, while Salinity is the estimated number of grams of dissolved salt per kilogram of water, shown in parts per 100,000.

Table 6.6 Sample RWIS output

Date/ Time	Air Temp	RH	Dew Point	Avg Wind Speed	Gust Wind Speed	Wind Direct	Sf Status	Sf Temp	Chem Factor	Conduct	Salinity
4/7/2008 0:02	23	91	21	6	7	S	Ice Watch	24.8	95	4	515
4/7/2008 0:07	23	91	21	6	7	S	Ice Watch	25	95	4	510
4/7/2008 0:12	24	91	21	6	6	S	Ice Watch	25	95	4	509
4/7/2008 0:17	24	91	21	5	6	S	Ice Watch	24.8	95	4	508
4/7/2008 0:22	24	91	21	6	6	S	Ice Watch	25	95	4	505

Unlike the speed sensors, there are very few occasions when the RWIS station is not working properly due to communication or other technology-based difficulties. RWIS data are available for each of the 11 data collection days. As mentioned previously, the RWIS and speed sensor data were collected every five minutes. However, these five-minute periods are not collected from the same minute, meaning that the speed sensor data was collected at 12:00, 12:05, etc. while the RWIS data was collected at 12:02, 12:07, etc. Because the RWIS and speed sensors were not collecting data at the exact same minute, the RWIS data with the closest time was associated with the respective speed sensor observation.

Data from the DMSs are also associated with the observations containing speed sensor and RWIS data. It is determined which DMS has the closest location prior to each speed sensor. The Dist variable, as seen in

Table Table 6.2 and

Table Table 6.3, indicates the distance, in miles, beyond the nearest DMS to that respective speed sensor. For each speed sensor observation, the message on the nearest DMS was determined and incorporated into the data set. Along with the message, the message category was also included. The discussion on the establishment of the message categories can be found in Section 4.2 with detailed descriptions shown in Table 4.3.

Using the speed sensor records as the base records, the RWIS observations and DMS data are appended to each speed record. This is the complete data set used in the statistical analysis described in the next section.

6.2 Methodology and Analysis

Linear regression analysis investigates the potential relationship between the response variable (y) and each of the predictor variables (x_1, x_2, …, x_i). Linear regression estimates the predictor variable coefficients (β_1, β_2, …, β_i) for the linear equation, shown in the following equation, which can be used to predict values of the response variable. For this analysis, the response variable is the average speed of the vehicles.

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots + \beta_i x_i$$

For traffic analyses, the 85th percentile speed is generally a better measure to determine the behavior of the traffic. However, for this analysis, 85th percentile speed is not available for each speed sensor. As previously mentioned, some of the speed sensor data had to be aggregated from 30 second intervals to five-minute intervals. The 85th percentile speed measure cannot be computed during this process, since individual vehicle observations are not available. Therefore, average speed is used as the response variable.

Initial predictor variables include the following variables: AirTemp, RH, Dewpoint, AvgWindSpeed, GustWindSpeed, SfStatus, SfTemp, Dist, MsgCategory, Night_Day, Day, and Sensor. The first seven listed variables are RWIS measurements described in the last section. As mentioned previously, the Dist variable is the distance from the speed sensor to the nearest DMS and MsgCategory is the classification of the message described in Section 4. Night_Day is a binary variable to account for nighttime and daytime observations, with 0 signifying a nighttime observation and 1 signifying a daytime observation. Daytime is identified using the U.S. Naval Observatory's definition of civil twilight, which is generally 30 minutes before sunrise to 30 minutes after sunset (United States Naval Observatory 2007). To account for the different days, the Variable Day was created, and each day modeled is given an ID number from 1 to 11. Each speed sensor is similarly identified with a number ranging from 1 to 26, creating the variable Sensor. There are 26 different sensor IDs for 13 sensor locations with one sensor ID for the eastbound direction and one for the westbound direction. As is described later, some of these variables are eliminated through the modeling process.

To accurately model the 11 days, the statistical analysis software SAS 9.1 is utilized. Initially, the regression procedure, known as PROC REG in SAS syntax, is used to estimate models holding the day constant (i.e. a separate model for each day) and also models holding the sensor constant (i.e. a separate model for each sensor).

The SAS general linear model procedure, known as PROC GLM, is then utilized to analyze the data set as whole (all days and all sensors). Because of the categorical variables for sensors and days, it has been determined that the simple PROC REG would not provide reasonable output. PROC GLM performs analyses using the method of least squares regression to fit general linear models either with variables that

are classification variables or continuous variables (SAS Institute Inc. 2007). Three predictor variables are entered into the PROC GLM as classification variables: the variable accounting for sensor (Sensor), the variable accounting for day (Day), and the variable accounting for message set category (MsgCategory). If these variables are left as continuous, a linear relationship is assumed. For example, SAS would assume that Day 8 is directly related to Day 7 by one unit. Because this is not the case for these three variables, they are categorized as classification variables.

The p-values for initial and final models are shown in Table 6.7. The p-value is often called the observed level of significance and ideally should be less than 0.05 (meaning that the predictor fits the model at a statistically significant level of 95%). The R^2 value is the coefficient of determination and estimates the degree of linear association between the response and predictor variables. Higher R^2 values mean the given regression equation fits the given data well. It has been determined that AvgWindSpeed and Dist could be removed from the model, since the p-values for these variables are approximately 0.14 and 0.29, respectively. Therefore, removing them has very little effect on the resulting R^2 value. Most likely, the effects of these variables are being accounted for through other variables.

Table 6.7 Model results for all data

	Initial model		**Final model**	
Variable	Coefficient	p-value	Coefficient	p-value
Intercept	63.1753	<.0001	59.1741	<.0001
AirTemp	0.0825	0.0005	0.1559	<.0001
Dewpoint	0.1685	<.0001	0.0112	0.0245
GustWindSpeed	-0.0548	<.0001	-0.0559	<.0001
SfStatus	-1.7776	<.0001	-1.9521	<.0001
MsgCategory 1	0.2143	0.1532	0.1755	0.2418
MsgCategory 2	-5.6526	<.0001	-5.9297	<.0001
MsgCategory 3	-3.2800	0.001	-3.1261	0.0018
Night_Day	2.8936	<.0001	2.9614	<.0001
RH	-0.0769	<.0001		
AvgWindSpeed	0.0252	0.1417		
SfTemp	-0.0221	0.0001		
Dist	-0.4444	0.2928		

Although it has a relatively high p-value, MsgCategory 1 is left in the model because of its importance in the modeling efforts. All MsgCategory variables are important variables that matter when determining the effects of the DMSs on vehicle speeds. The fact that this variable is statistically insignificant suggests that the lower severity messages may not affect the way people drive. The conditions included in the low severity MsgCategory 1 are extremely varied, thus making this category somewhat ambiguous. There is a wide range of information included in the MsgCategory 1, which is difficult to group together. The effects resulting from a simple message stating the road is wet are likely to be different than the effects resulting from a message regarding an advisory speed of 60 miles per hour with poor visibility. Later in this section, future analysis measures to counteract this ambiguity are discussed.

The residual value is the difference between the actual, observed value and the predicted value. Because deviations from the model equation are assumed to be random quantities with the same variance, the graph the residuals plot against the predicted values for the response variable can be analyzed for constant variance. In this case, the graph shows non-constant variance (a funnel-shaped plot), indicating that this regression model is not appropriate. This graph is seen in Appendix F.

To correct this problem, the weighted least squares procedure is carried out. The appropriate value for weight is chosen by examining plots of residuals versus individual variables, using usual procedures for weighted least squares. An appropriate weight is determined to be approximately proportional to $(1/RH)^2$.

Parameter estimates (β_0, β_1, etc.) are obtained for the model using PROC GLM. These estimates, for both the initial and final models, are shown in Table 6.7. The coefficient estimates for the Day and Sensor classification variables are omitted from this table due to length, but are included in the initial and final models. They are found in Appendix F, with the full results.

By analyzing the coefficients, many important features of the behavior of the variables can be determined. For predictors that are continuous (not classification variables), the coefficient indicates the slope of the regression line. The magnitude of the coefficient denotes the change in response variable if the predictor variable is increased by one unit, and all other predictor variables are held constant. The sign of each coefficient is examined using intuition and common sense. For example, if the air temperature decreases, one would expect that the average speeds should also decrease. Therefore, the sign of the air temperature coefficient should be negative.

There are two variables for which the sign of the coefficient is counterintuitive. This could be due to collinearity, or the correlation of predictor variables with each other. Therefore, these two variables (RH and SfTemp) are removed from the model on this basis.

Referring back to Table 6.7, it can be seen that this type intuition can be used on each coefficient in the final model. From the example used in the previous paragraph, one can see that the AirTemp coefficient of 0.16 makes sense because it is positive. The small magnitude indicates that a one degree increase in temperature would result in a very small increase in speed. Dew point is related to air temperature and moisture content of the air, and therefore has a similar effect as air temperature. The Dewpoint coefficient of 0.01 indicates that the dewpoint has an even smaller effect on speeds than air temperature. The GustWindSpeed coefficient of -0.06 denotes that as the gust wind speeds increase, the average speed of the vehicles decrease slightly.

The SfStatus coefficient of -1.95 has a larger effect on the vehicle speeds than the previous variables. Referring back to section one of this section, the SfStatus has three categories that increase with the severity of the pavement surface status. As the status of the pavement conditions worsens (or SfStatus increases), the vehicle speeds decrease by a significant amount. The coefficient for MsgCategory 1 does not provide any accurate information, because it is not statistically significant.

For the MsgCategory coefficients, MsgCategory 0 is designated to be the reference variable. Therefore, each of the MsgCategory variables is calculated in reference to no message or a simple public service announcement message. The MsgCategory 2 coefficient of -5.93 indicates that vehicles are traveling approximately six miles per hour slower when there is a message of category 2 on the DMS than when there is no message at all. Similarly, the MsgCategory 3 coefficient of -3.13 indicates that vehicles are traveling approximately three miles per hour slower when there is a message of category 3 on the DMS than when there is no message at all. The fact that messages of category 2 are slowing vehicles down more than messages of category 3 could be due to random noise, or to the grouping of the categories discussed earlier. The Night_Day coefficient of 2.96 indicates that during the day, average vehicle speeds are approximately three miles per hour than those at night. It is important to remember that all of these effects are taking place with all other variables holding constant.

To check for collinearity, the variance inflation factors (VIFs) are inspected. Generally, if VIFs are less than 10, it is assumed that there are no major problems with collinearity. Another good indication of variables with low collinearity is when the average VIF is less than five. The VIFs for this model were

checked and the average was less than five, with no VIFs greater than 10. These values can be seen in Appendix F. The final R^2 value for this model is 0.639, which leads to the conclusion that the final chosen predictor variables are affecting the vehicle speed in some way.

Another approach to modeling this data did not include combining all data together. As previously mentioned, the geometrics of the roadway can affect the average speeds at any location. By analyzing the data from a single speed sensor, the location and geometric factors are held constant. The sensor located at milepost 325.8 is chosen for modeling. This sensor contained data for one good weather day and three bad weather days. In the eastbound direction, this sensor is located 0.9 miles past the closest DMS. In the westbound direction, it is located 5.5 miles past the closest DMS. This sensor is chosen for its range in distances past the closest DMS and the amount of data that it generates.

Initial findings in the analysis suggest that the distance past the DMS does affect speeds. The shorter distance has a greater effect on the speeds than the longer distance. This was determined by looking at the coefficient estimates, which estimate the effects of a certain predictor on speed, holding all other predictors constant. The estimated coefficients for the initial and final models of this sensor in the eastbound and westbound direction are shown in Table 6.8 and Table 6.9. The intercept coefficient for the eastbound model is 93.21, while the intercept coefficient for the westbound model is 71.23. The full results from the models of each of these speed sensors are in Appendix F.

Table 6.8 Model results for sensor 325.8 EB

	Initial model		**Final model**	
Variable	Coefficient	p-value	Coefficient	p-value
Intercept	93.2126	<.0001	71.2349	<.0001
SfTemp	0.0997	0.0004	0.0464	0.0025
Dewpoint	0.3367	0.004	-0.0526	0.0282
GustWindSpeed	-0.1146	0.0839	-0.1265	0.0005
SfStatus	-2.3724	0.0003	-3.4266	<.0001
MsgCategory 1	2.3929	0.0006	1.6569	0.0132
MsgCategory 2	-8.5158	<.0001	-9.4910	<.0001
Night_Day	3.5554	<.0001	3.5040	<.0001
Day 1	-3.3493	0.0179	-2.2788	0.0622
Day 2	-2.3210	0.0234	-3.2258	<.0001
Day 3	1.4993	0.0069	1.2036	0.0273
RH	-0.2332	0.0003		
AvgWindSpeed	0.0001	0.9987		
AirTemp	-0.5108	0.0002		

Table 6.9 Model results for sensor 325.8 WB

	Initial model		Final model	
Variable	Coefficient	p-value	Coefficient	p-value
Intercept	93.5986	<.0001	90.3275	<.0001
AirTemp	-0.5699	<.0001	-0.4766	<.0001
RH	-0.3509	<.0001	-0.3353	<.0001
Dewpoint	0.5973	<.0001	0.5976	<.0001
GustWindSpeed	-0.1297	0.0662	-0.0850	0.0236
SfStatus	-5.2396	<.0001	-5.5312	<.0001
MsgCategory 2	-5.9932	<.0001	-5.8272	<.0001
Night_Day	4.5160	<.0001	4.6061	<.0001
Day 1	11.9197	<.0001	12.6602	<.0001
Day 2	6.7752	<.0001	7.1180	<.0001
Day 3	2.6035	<.0001	2.3830	<.0001
AvgWindSpeed	0.0318	0.7242		
SfTemp	0.0387	0.1924		

6.3 Future Analysis

Additional, in-depth modeling of larger data sets is needed to completely understand the full effects of each of these variables on speed. The next step in this research should involve similar, yet more sophisticated, modeling procedures for data that cover several months, ideally a full winter season. The data set used for this modeling is not complete due to technical difficulties with the sensors. Therefore, it is important to perform modeling on data that is continuously collected from all sensors for a longer time period.

The standard regression method discussed here assumes fixed effects for all the factors that influence the average speed of vehicles. However, these factors are sometimes random effects. In a more sophisticated procedure, a 'mixed model.' including the influence of both fixed and random effects, would be used to analyze this data.

The messages in this phase of the statistical analysis are grouped according to severity. This method contains some uncertainty because many conditions cannot be assumed to have the same effect on vehicle speeds. One approach to improving on this problem would be to create more message categories to better describe and group the conditions occurring on the roadway. Another technique to better analyze the messages could look more specifically into certain messages on a single sign, rather than on the corridor as a whole. Observations from speed sensors directly before and directly after one DMS could be analyzed when there is a message on the sign. For example, if the sign is stating an advisory speed of 45 miles per hour, the speeds before and after that message are evaluated to see if the vehicles are reducing their speed after reading the sign.

This type of analysis could be completed on numerous signs, with numerous message types to determine the outcome of certain message sets. Different message sets could be compared to determine which ones are more effective in reducing vehicles speeds. Further modeling could also determine if particular message sets have different effects on various types of vehicles, such as passenger cars or trucks, by utilizing the vehicle classification data provided from the speed sensors. By determining these effects, decisions on which messages to place on the DMSs becomes more clear.

As mentioned previously, future analysis could also include the investigation of each lane separately, rather than aggregated together as it was done in this analysis. This would provide more information about the behavior of drivers in the left lane compared to those in the right lane.

6.4 Statistical Modeling Summary

The modeling efforts completed here suggest that the average speeds of the vehicles are being affected by numerous factors including weather conditions, messages on the DMSs, and location of the speed sensors. This modeling effort suggests that future analysis of larger data sets will be worthwhile. By determining individual effects more accurately, messages placed on the DMSs can become more effective. If the effects of weather conditions on vehicle speeds can be better understood, drivers can be better informed and be better prepared for adverse road and weather conditions via the information shown on DMSs.

The specific determination of message effectiveness by way of statistical means was not completed with this statistical modeling. The modeling suggests that the DMSs are effective, if all other variable are held constant, but specific messages should be analyzed. This is an initial objective of this pilot study and should be completed in future analyses.

7. SUMMARY AND CONCLUSIONS

This section summarizes and highlights the important aspects of each completed research task. The future research tasks for this project are discussed and recommendations are given for implementation by WYDOT in the short term.

7.1 DMS Analysis Summary

The inconsistencies found in the messages displayed on DMSs may not have an extreme effect on the behaviors of the drivers because the messages are still likely to be effective. However, if the messaging is as consistent as possible, it will probably be more effective. If drivers have seen a message previously, it will not take them as long to process the message and react to it. Therefore, keeping the message sets consistent is an important aspect of DMS practice. Recommendations to increase the effectiveness of the DMSs through message set selection are as follows:

- Remove messages from the signs if they are displayed for an extended period, especially if conditions have changed. Operators should be aware of the durations of each message.
- Refrain from placing weather warnings and public service announcements in the same message set. Weather warnings should take precedence.
- Follow consistent messaging procedures when providing weather and road closure information. The development of written guidelines for message procedures for common conditions is recommended.

7.2 Survey Analysis Summary

The frequent traveler surveys demonstrate that DMSs are highly visible and commonly read by drivers. However, drivers did not always agree that reading the messages helped them to be better prepared for adverse road and/or weather conditions. Frequent travelers are experienced drivers who encounter severe conditions on a regular basis. This could explain why they do not feel the DMS information is useful to them. The following points summarize the results of the frequent traveler surveys:

- Almost half of surveyed drivers rank DMSs as the most important source of information during their trip.
- When action is advised on the DMSs, the majority of surveyed drivers perform the suggested action.
- DMS messages should be more specific, detailed, and accurate.
- Messages should include speed limit advisories.
- Travelers agree that accuracy, timeliness, and credibility of the presented information is very important.

The results from the focus group are more detailed because members are able to give more opinions and explain them in detail, compared to the brief responses that are allowed in the frequent traveler surveys. All members of the focus group highly valued the DMSs, but expressed concern about the accuracy of the information being displayed. They do not always take the information seriously, unless the message concerns accidents, road closures, or unnecessary travel. The following points highlight the views of the focus group members:

- Messages need to be updated in a timely matter if conditions improve or worsen.
- Messages need to be more specific. Desired types of information include real-time wind data and a rating system to rank the conditions by severity.
- When comparing message sets, messages with more specific information are preferred by the focus group members.

The random traveler surveys produced results similar to the frequent traveler surveys. A large percentage of these drivers utilize the DMSs, especially truck drivers. Drivers strongly feel that DMSs are visible, easy to understand, and useful. However, the accuracy and detail of the messages is not acceptable to many drivers. The following points summarize the results of the random traveler surveys:

- Drivers take the action suggested by the DMSs (e.g. driving more carefully).
- Many drivers feel other drivers do not respond appropriately to the DMSs.
- Drivers feel messages should be updated more frequently.

7.3 Statistical Modeling Summary

The modeling efforts completed here suggest that the average speeds of the vehicles are affected by numerous factors, including weather conditions, messages on the DMSs, and location of the speed sensors. This modeling effort provides promising indications that different messages sets on the DMSs are an important part of the model. It suggests that future analysis of larger, more continuous data sets, are a worthwhile effort. By determining the effects of different messages with future research, effective messages can be selected and placed on the DMSs. If weather conditions can be analyzed and their effects on vehicle speeds understood, drivers can be better informed and prepared by the information displayed on DMSs.

The specific determination of message effectiveness by way of statistical means is not completed with this statistical modeling. The modeling suggests that the DMSs are effective, if all other variable are held constant, but specific messages should be analyzed. This is an initial objective of this pilot study and should be completed in future analyses.

7.4 Future Research Tasks

The continuation of this research is important to assure the complete success of this project. As mentioned in the last section, the in-depth statistical analysis of larger data sets should allow the effects of the DMSs on the vehicle speeds to be determined more accurately. Once the vehicle speeds are understood under certain conditions, they are used for predicting advisory speed warnings and placement on the DMSs as a part of a decision support system (DSS). If the average speed of drivers under these certain conditions is determined, the advisory speed is more appropriately set.

From this analysis, the DS is developed to assist the dispatch operators in message selection. The expert system takes real-time weather and speed data into account and suggests a recommended message for each DMS to the operator. Speed data are included in this determination because of the lack of weather data coverage. Since there is only one weather station along the 40-mile corridor, a clear idea of weather conditions over the entire corridor is not available. By utilizing real-time speed data, a fuller picture of the entire corridor is revealed. If all vehicle speeds begin to reduce, it is assumed that there is some type of incident occurring on the roadway. With the combination of the information from the plow drivers and web cameras, it is determined what the incident is and what type of information needs to be placed on the DMSs.

Another task that will be accomplished during future research efforts is the collection of data from a second set of driver surveys. The frequent and random traveler surveys will be performed again during the time period from September 2009 to May 2010. These surveys will be compared to the surveys completed during the study period from September 2007 to May 2008 to see if driver opinions and behavior have changed, due to implementation of the short-term recommendations given in the following section.

7.5 Recommendations

In the short-term, before the complete decision support system is developed, there are recommended practices that can be implemented by WYDOT before the complete decision-support system is developed to improve the effectiveness of the DMSs. Because the majority of drivers see and read the DMSs it is important that the information given on the signs be accurate, credible, timely, and consistent. Recommendations listed below are based on the results of the research tasks in Sections 4 and 5. For more details, please refer to these sections.

- Utilize predetermined message sets as much as possible to improve consistency.
- Update the information more frequently, in accordance with the changing roadway and weather conditions, to improve its accuracy.
- Provide more detailed information when applicable (e.g. wind gusts, accident locations, lane closures).

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APPENDIX A: DMS MESSAGE EVENT LOG ANALYSIS

Sign Name: 80 EB 317.2 (LARAMIE)	SignId: 68	Milepost:	317.2
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	17	12:24	198:29
STRONG WIND AHEAD GUSTS 35+ MPH	7	3:32	24:48
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH			
DENSE FOG AHEAD LIMITED VISIBILITY REDUCE SPEED	5	4:36	24:48
DENSE FOG AHEAD			
SNOW AND FOG AHEAD SLOW DOWN			
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 EB 317.2 (LARAMIE)	SignId: 68	Milepost:	317.2
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	26	2:20	60:40
FOG AHEAD	7	2:09	15:03
DENSE FOG 7 MILES AHEAD			
THICK FOG AHEAD			
DENSE FOG AHEAD			
DENSE FOG AHEAD LIMITED VISIBILITY AHEAD			
HEAVY SNOW LOW VISIBILITY FOG ICY ROADS AHEAD	4	4:47	19:09
SNOWFALL			
ICY ROADS	14	6:24	89:48
ICY ROAD SNOWFALL			
ICY ROAD WITH SNOWFALL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD WITH SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS DENSE FOG AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL LOW VISIBILITY			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
RIGHT LANE CLOSED AHEAD	1	1:14	1:14
ROAD WORK 4 MILES AHEAD	2	1:32	3:23
STRONG WIND GUSTS 40+ MPH	22	3:34	78:41
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH SNOWFALL			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
WET ROAD	11	4:06	45:13
WET ROAD ICY IN SPOTS			
WET ROAD ICY IN SPOTS WITH FOG			
WET ROAD SNOWFALL			
WET ROAD SNOWFALL AHEAD			
WET ROAD WITH STRONG WIND AHEAD			
WET ROADS AHEAD WITH SNOWFALL			
WET TO ICY IN SPOTS WITH SNOWFALL AHEAD			
WET WITH SNOW			
WET WITH SNOW AND FOG			

Sign Name: 80 EB 317.2 (LARAMIE)	SignId: 68	Milepost:	317.2
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	1	1:59	1:59
ICY SPOTS AHEAD	10	8:36	86:03
ICY SPOTS SNOWFALL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS TURN OFF CRUISE CONTROL			
ICY IN SPOTS WITH SNOWFALL AHEAD			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
SNOWFALL AHEAD	3	0:52	2:38
STRONG WIND AHEAD	18	4:49	86:57
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS			
WRECK AHEAD PLEASE SLOW DOWN	1	0:06	0:06

Sign Name: 80 EB 317.2 (LARAMIE)	SignId: 68	Milepost:	317.2
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY SPOTS	86	5:28	470:15
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ICY ROAD AHEAD TURN OFF CRUISE CONTROL NO PASSING			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW STRONG WIND GUSTS 50+ MPH			
ICY ROAD BLOWING SNOW ADVISE NO LIGHT TRAILERS GUSTS 60+ MPH			
ICY ROAD SLOW DOWN			
ICY ROAD SNOW FALL POOR VISIBILITY ADVISE NO LIGHT TRAILERS GUST 55+MPH			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL SLOW DOWN WATCH FOR WILDLIFE ON ROAD			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL FOG AHEAD WATCH FOR WILDLIFE ON ROAD			
ICY ROAD TURN OFF CRUISE CONTROL NO PASSING			
ICY ROAD TURN OFF CRUISE CONTROL WATCH FOR WILDLIFE			
ICY ROADS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROADS SNOWFALL SLOW DOWN			
ICY SPOTS ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ICY SPOTS BLOWING SNOW POOR VISIBILITY			
ICY SPOTS BLOWING SNOW REDUCE SPEED 55 MPH			

ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN WATCH FOR WILDLIFE ON ROAD			
ICY SPOTS SN0WFALL TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN I-25 SOUTH IS CLOSED			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND AHEAD GUSTS 50+ MPH SLOW DOWN ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND AHEAD GUSTS 55+ MPH SLOW DOWN ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW POOR VISIBILITY WY-210 CLOSED			
ICY SPOTS STRONG WIND BLOWING SNOW REDUCE SPEED 55 MPH			
ICY SPOTS STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 80+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 55+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 65+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT TRAILERS			
ICY SPOTS TURN OFF CRUISE CONTROL STRONG WIND GUSTS 45+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL WATCH FOR WILDLIFE			
ROAD CLOSED	12	2:28	29:37
I-25 SOUTHBOUND IS CLOSED			
I-80 CLOSED AHEAD RETURN TO LARAMIE NO PARKING ON ROADWAY			
I-80 CLOSED AHEAD RETURN TO LARAMIE NO PARKING ON ROADWAYS			
I-80 CLOSED ALL TRAFFIC MUST EXIT			
I-80 CLOSED NO PARKING ON ROADWAY RETURN TO LARAMIE			
I-80 CLOSED RETURN TO LARAMIE NO PARKING ON ROADWAY			
I-80 CLOSED US-30 CLOSED AT LARAMIE ICY SPOTS STRONG WIND SLOW DOWN			
I-80 CLOSED WY-210 CLOSED			
ROAD CLOSED DUE TO WRECK			
ROAD CLOSED RETURN TO LARAMIE			
WY-210 CLOSED ICY SPOTS BLOWING SNOW POOR VISIBILITY			
STRONG WIND	25	3:17	82:11
ADVISE NO LIGHT TRAILERS GUSTS 50+MPH ICY SPOTS TURN OFF CRUISE CONTROL			
ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
STRONG WIND 7 MILES AHEAD GUSTS 40+ MPH			
STRONG WIND 7 MILES AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 30+ MPH			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			

STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 70+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 80+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS ICY SPOTS			
STRONG WIND GUSTS 70+ MPH ADVISE NO LIGHT TRAILERS ICY SPOTS			
STRONG WIND GUSTS 35+MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET SNOWFALL	3	0:11	0:33
WET ICY IN SPOTS SNOWFALL			
WET TO ICY IN SPOTS WITH SNOWFALL AHEAD			

Sign Name: 80 EB 317.2 (LARAMIE) SignId: 68 Milepost: 317.2 **JANUARY 2008**			
Message	**Frequency**	**Average Duration**	**Total Duration**
I-80 & US 30 CLOSED	1	3:12	3:12
BLOWING SNOW STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS	1	9:33	9:33
ICY SPOTS	68	5:29	373:30
ICY IN SPOTS			
ICY IN SPOTS BLOWING SNOW			
ICY IN SPOTS SNOWFALL			
ICY ROAD SLOW DOWN			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW AHEAD			
ICY SPOTS BLOWING SNOW AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS DRIFTING SNOW SNOWFALL BLOWING SNOW AHEAD			
ICY SPOTS FOG			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WINDS BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND 7 MILES AHEAD			
ICY SPOTS STRONG WIND AHEAD			
ICY SPOTS STRONG WIND AHEAD GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 50+ MPH			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 60+ MPH			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			

ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUST 40+MPH			
ICY SPOTS STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND GUSTS 45+MPH			
ICY SPOTS STRONG WIND GUSTS 55+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 60+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND GUSTS 60+ MPH SNOWFALL ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL I-25 SOUTH TO COLORADO IS CLOSED			
ICY SPOTS TURN OFF CRUISE CONTROL FOG LIMITED VISIBILITY			
ICY SPOTS TURN OFF CRUISE CONTROL WATCH FOR WILDLIFE ON ROAD			
ICY SPOTS WET ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS WRECK 2 MILES AHEAD KEEP RIGHT			
NO UNNECESSARY TRAVEL GUSTS 55+ MPH ICY ROAD BLOWING SNOW LIMITED VISIBILITY	1	2:04	2:04
STRONG WIND	23	2:20	49:02
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+ MPH ICY ROAD BLOWING SNOW LIMITED VISIBILITY			
STRONG WIND ADVISE NO LIGHT OR EMPTY TRAILERS WRECK 2 MILES AHEAD KEEP RIGHT			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 55+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 60+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW			
STRONG WINDS ADVISE NO LIGHT OR EMPTY TRAILERS BLOWING SNOW TURN OFF CRUISE CONTROL			

Sign Name: 80 EB 317.2 (LARAMIE)	SignId: 68	Milepost:	317.2
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD	2	1:38	3:17
FOG AHEAD SLOW DOWN			
I-80 CLOSED	5	1:52	9:22
I-80 CLOSED NO PARKING ON ROAD			
I-80 CLOSED NO PARKING ON ROAD RETURN TO LARAMIE			
I-80 CLOSED NO PARKING ON ROADWAY			
ROAD CLOSED NO STOPPING ON ROADWAY			
ICY IN SPOTS	51	5:40	289:16
ICY ROAD ADVISE 35 MPH MAX			
ICY ROAD ADVISE 35 MPH MAX SPEED			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL AHEAD SLOW DOWN			
ICY ROAD SNOWFALL BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX SPEED			
ICY ROAD STRONG WINDS BLOWING SNOW 7 MILES AHEAD			
ICY ROAD STRONG WINDS BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW AHEAD			
ICY SPOTS BLOWING SNOW FOG			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 60+			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 60+MPH			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND GUSTS 45+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND GUSTS 40+ MPH			
ICY SPOTS STRONG WIND SNOWFALL AHEAD			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL STRONG WIND 7 MI AHEAD GUSTS 45+ MPH			
ICY SPOTS TURN OFF CRUISE CONTROL STRONG WIND 7 MI AHEAD GUSTS 50+ MPH			
ICY SPOTS TURN OFF CRUISE CONTROL STRONG WIND GUSTS 45+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL WRECK 12 MILES AHEAD			
SNOWFALL	1	1:51	1:51
STRONG WIND AHEAD GUSTS 40+ MPH	7	4:33	31:55
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			

STRONG WIND BLOWING SNOW 7 MILES AHEAD			
STRONG WIND BLOWING SNOW 7 MILES AHEAD ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 35+ MPH			

Sign Name: 80 EB 317.2 (LARAMIE) SignId: 68 Milepost: 317.2 **MARCH 2008**			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD	7	1:22	9:40
DENSE FOG POOR VISIBILITY SLOW DOWN			
DENSE FOG POOR VISIBILITY SLOW DOWN MAX 45 MPH IN AREAS OF FOG			
DENSE FOG POOR VISIBILITY SLOW DOWN MAX 50 MPH IN AREAS OF FOG			
FOG AHEAD POOR VISIBILITY SLOW DOWN			
ICY SPOTS	64	3:12	205:33
ICY ROAD BLOWING SNOW DRIFTING SNOW NO UNNECESSARY TRAVEL LIMITED VISIBILITY			
ICY ROAD BLOWING SNOW DRIFTING SNOW SNOWFALL STRONG WIND			
ICY ROAD BLOWING SNOW DRIFTING SNOW TURN OFF CRUISE CONTROL LIMITED VISIBILITY			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD FOG AHEAD LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL LIMITED VISIBILITY			
ICY ROAD SNOWFALL FOG AHEAD LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL POOR VISIBILITY WRECK AHEAD USE LEFT LANE			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL WRECK AHEAD USE LEFT LANE			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROADS SNOWFALL FOG POOR VISIBILITY			
ICY SPOTS AHEAD			
ICY SPOTS AHEAD BLOWING SNOW			
ICY SPOTS AHEAD SNOWFALL LIMITED VISIBILITY AHEAD			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW AHEAD			
ICY SPOTS BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG SLOW DOWN			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL FOG			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND AHEAD			
ICY SPOTS STRONG WIND AHEAD GUSTS 50+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR			

EMPTY TRAILERS GUSTS 45+MPH			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 30+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 60+MPH			
ROAD CLOSED WRECK AHEAD	2	5:02	10:05
I-80 CLOSED RETURN TO LARAMIE DO NOT PARK ON ROADWAY OR SHOULDER			
SNOWFALL	2	0:44	1:29
SNOWFALL AHEAD			
STRONG WIND	18	5:15	94:30
ADVISE NO LIGHT OR EMPTY TRAILERS STRONG WIND GUSTS 45+ MPH			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 40+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WATCH FOR WILDLIFE	1	3:49	3:49

Sign Name: 80 EB 317.2 (LARAMIE)	SignId: 68	Milepost:	317.2
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE MAX SAFE SPEED 45 MPH NO PASSING ICY ROAD SNOWFALL BLOWING SNOW	2	4:56	9:53
FOG AHEAD	3	2:23	7:11
FOG ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
FOG 7 MILES AHEAD			
ICY SPOTS	45	2:48	126:43
ICY IN SPOTS			
ICY IN SPOTS SLOW DOWN			
ICY IN SPOTS SNOWFALL			
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY IN SPOTS SNOWFALL WRECK AHEAD DRIVING LANE BLOCKED			
ICY IN SPOTS TURN OFF CRUISE CONTROL			
ICY ROAD			
ICY ROAD BLOWING SNOW			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL AHEAD			
ICY ROAD SNOWFALL RIGHT LANES BLOCKED USE LEFT LANE			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY			

ADVISE 45 MPH MAX SAFE SPEED			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL STRONG WINDS			
ICY SPOTS STRONG WIND BLOWING SNOW SNOWFALL ADVISE 45 MPH MAX SAFE SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD CLOSED NO STOPPING ON ROADWAY	5	4:58	24:53
ROAD CLOSED NO STOPPING OR PARKING ON ROADWAY			
ROAD CLOSED RETURN TO LARAMIE NO STOPPING ON ROADWAY			
I-80 CLOSED ALL MUST EXIT			
SNOWFALL	5	2:06	10:30
SNOWFALL AHEAD SLOW DOWN			
SNOWFALL AHEAD SLOW DOWN ICY SPOTS			
SNOWFALL SLOW DOWN			
STRONG WIND	17	4:37	78:34
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 30 MPH			
STRONG WIND AHEAD GUSTS 45 MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET ROAD SNOWFALL	5	2:48	14:01
WET ROAD ICY SPOTS SNOWFALL			
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL			
WET ROADS BLOWING SNOW TURN OFF CRUISE CONTROL			

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	16	13:20	200:07
WET ROAD	3	0:20	1:02
LIMITED VISIBILTY WET ROAD			
STRONG WIND AHEAD GUSTS 35+ MPH	5	4:55	24:38
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH			
DENSE FOG AHEAD	3	7:02	21:06
DENSE FOG AHEAD LIMITED VISIBILITY REDUCE SPEED			
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
SNOWFALL	1	1:30	1:30
CAUTION WATCH FOR WILDLIFE ON ROAD	29	7:38	221:40
DENSE FOG AHEAD	6	6:03	36:18
FOG AHEAD			
FOG AHEAD TURN OFF CRUISE CONTROL			
CAUTION FOGGY CONDITIONS MAY EXIST			
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	2	0:47	1:35
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
ICY ROAD	18	2:50	51:11
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD WITH SNOWFALL			
ICY ROAD WITH SNOWFALL TURN OFF CRUISE CONTROL			
ICY IN SPOTS			
ICY IN SPOTS FOG AHEAD			
ICY IN SPOTS WITH FOG			
ICY SPOTS			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH			
ROAD ICY IN SPOTS WITH FOG			
STRONG WIND GUSTS 40+ MPH	22	4:28	98:19
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH SNOWFALL			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
WET ROAD AHEAD	5	1:43	8:39
WET ROAD SNOWFALL			
WET ROAD SNOWFALL AHEAD			
WET ROADS AHEAD WITH SNOWFALL			
WET TO ICY IN SPOTS WITH SNOWFALL AHEAD			

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	1	2:00	2:00
ICY SPOTS	30	3:52	116:25
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS AND FOG AHEAD			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL			

ICY IN SPOTS WITH SNOWFALL AHEAD			
ICY IN SPOTS AND BLOWING SNOW AHEAD			
ICY IN SPOTS WITH BLOWING SNOW SLOW DOWN			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
WET ROAD BLOWING SNOW	1	0:20	0:20
BLOWING SNOW	2	1:03	2:06
SNOWFALL AHEAD	2	0:08	0:17
FOG WITH SNOWFALL AHEAD	1	2:20	2:20
STRONG WIND	35	3:45	131:24
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 40+ MPH BLOWING SNOW			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS			

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW	7	5:05	35:36
BLOWING SNOW DRIFTING SNOW POOR VISIBILITY			
BLOWING SNOW SLOW DOWN			
BLOWING SNOW STRONG WIND GUSTS 45+MPH			
FOG POOR VISIBILITY ICY ROAD TURN OFF CRUISE CONTROL	1	12:10	12:10
ICY SPOTS SLOW DOWN	101	3:13	325:36
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY IN SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW ADVISE NO LIGHT TRAILERS GUSTS 60+ MPH			
ICY ROAD BLOWING SNOW STRONG WIND GUSTS 50+ MPH			
ICY ROAD BLOWING SNOW STRONG WIND GUSTS 60+ MPH			
ICY ROAD BLOWING SNOW POOR VISIBILITY NO PASSING			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOW FALL POOR VISIBILITY ADVISE NO LIGHT TRAILERS GUST 55+MPH			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ICY ROAD STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW NO PASSING			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND GUSTS 50+ MPH TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROADS SNOWFALL SLOW DOWN			

ICY SPOTS AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW POOR VISIBILITY			
ICY SPOTS BLOWING SNOW REDUCE SPEED 55 MPH			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW SLOW DOWN STRONG WIND GUST 45+MPH			
ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW STRONG WIND POOR VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL DRIFTING SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN I-25 SOUTH IS CLOSED			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW REDUCE SPEED 55 MPH			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 70+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 80+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 55+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 65+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 55+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 60+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 80+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW DRIFTING SNOW LIMITED VISIBILITY			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW LIMITED VISIBILITY			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW LIMITED VISIBILITY MAX SPEED 55 MPH			

ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL STRONG WIND GUSTS 65+ MPH			
ROAD CLOSED DUE TO WRECK	4	3:16	13:04
I-25 SOUTHBOUND IS CLOSED			
I-80 EASTBOUND CLOSED ALL TRAFFIC EXIT			
WY-210 CLOSED ICY SPOTS BLOWING SNOW POOR VISIBILITY			
SNOWFALL FOG POOR VISIBILITY ICY ROAD TURN OFF CRUISE CONTROL	1	5:08	5:08
TURN OFF CRUISE CONTROL ICY SPOTS BLOWING SNOW POOR VISIBILITY	1	4:25	4:25
STRONG WIND	37	3:24	125:50
ADVISE NO LIGHT TRAILERS GUSTS 50+MPH			
STRONG WIND AHEAD GUSTS 30+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND BLOWING SNOW			
STRONG WIND BLOWING SNOW POOR VISIBILITY SLOW DOWN			
STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 30+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 50+ MPH ICY ROAD SLOW DOWN			
STRONG WIND GUSTS 50+ MPH BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SPEED POOR VISIBILITY BLOWING SNOW SLOW DOWN	2	2:44	5:29
ADVISE 45 MPH MAX SPEED POOR VISIBILITY ICY SPOTS BLOWING SNOW SLOW DOWN			
BLOWING SNOW	6	1:34	9:24
BLOWING SNOW POOR VISIBILITY 45 MPH MAX SPEED TURN OFF CRUISE CONTROL			
BLOWING SNOW SLOW DOWN			
BLOWING SNOW STRONG WIND GUSTS 40+ MPH			
BLOWING SNOW STRONG WIND LIMITED VISIBILITY GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
FOG	3	4:16	12:50
FOG LIMITED VISIBILITY			
FOG POOR VISIBILITY			
ICY SPOTS	74	3:14	240:08
ICY IN SPOTS BLOWING SNOW			
ICY IN SPOTS SNOWFALL			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW STRONG WIND GUSTS 40+MPH			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL SLOW DOWN I-25 SOUTH TO COLORADO IS CLOSED			
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND GUSTS 50+ MPH BLOWING SNOW			
ICY ROAD STRONG WIND GUSTS 60+ MPH BLOWING SNOW			

ICY ROAD STRONG WIND GUSTS 50+ MPH BLOWING SNOW SLOW DOWN			
ICY ROAD STRONG WIND GUSTS 50+MPH BLOWING SNOW I-80 WESTBOUND CLOSED			
ICY ROAD STRONG WIND GUSTS 55+ MPH BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND POOR VISIBILITY			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW LIMITED VISIBILITY			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW ROAD WORK AHEAD BE PREPARED TO STOP			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 55+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW			
ICY SPOTS STRONG WIND LIMITED VISIBILITY BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL FOG LIMITED VISIBILITY			
STRONG WIND	34	3:22	111:25
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			

STRONG WIND BLOWING SNOW GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW GUSTS 50+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW GUSTS 60+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			
STRONG WIND BLOWING SNOW LIMITED VISIBILITY GUSTS 60+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW SLOW DOWN			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW			
STRONG WIND GUSTS 40+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 50+ MPH ICY ROAD SNOWFALL BLOWING SNOW SLOW DOWN			
STRONG WIND GUSTS 50+ MPH ICY ROAD TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 60+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 60+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WINDS ADVISE NO LIGHT OR EMPTY TRAILERS BLOWING SNOW TURN OFF CRUISE CONTROL			

Sign Name: 80 EB 324.9 SignId: 76 Milepost: 324.9

FEBRUARY 2008

Message	Frequency	Average Duration	Total Duration
BLOWING SNOW	1	12:15	12:15
FOG AHEAD SLOW DOWN	1	1:07	1:07
ICY IN SPOTS BLOWING SNOW	90	2:31	227:13
ICY ROAD ADVISE 35 MPH MAX			
ICY ROAD ADVISE 35 MPH MAX SPEED			
ICY ROAD ADVISE 35 MPH MAX SPEED BLOWING SNOW			
ICY ROAD ADVISE 35 MPH MAX SPEED LIMITED VISIBILITY			
ICY ROAD ADVISE 35 MPH MAX SPEED STRONG WIND BLOWING SNOW			
ICY ROAD ADVISE 45 MPH MAX SPEED STRONG WIND BLOWING SNOW			
ICY ROAD ADVISE 45 MPH MAX SPEED STRONG WIND BLOWING SNOW POOR VISIBILITY			
ICY ROAD BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL SLOW DOWN			
ICY ROAD BLOWING SNOW LIMITED VISIBILITY ADVISE 45 MPH STRONG WIND GUSTS 50+ MPH			
ICY ROAD BLOWING SNOW STRONG WIND LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOW LIMITED VISIBILITY			

ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW			
ICY ROAD SNOWFALL BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD STRONG WIND BLOWING SNOW ADVISE 45 MPH			
ICY ROAD STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX SPEED			
ICY ROAD STRONG WIND BLOWING SNOW BLOWING SNOW ADVISE 35 MPH MAX			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY ADVISE 35 MPH MAX			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY ADVISE 45 MPH			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW ADVISE 45 MPH STRONG WIND GUSTS 50+ MPH			
ICY SPOTS BLOWING SNOW ADVISE 55 MPH STRONG WIND GUSTS 50+ MPH			
ICY SPOTS BLOWING SNOW AHEAD			
ICY SPOTS BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL SLOW DOWN			
ICY SPOTS BLOWING SNOW FOG			
ICY SPOTS BLOWING SNOW LIMITED VISIBILITY ADVISE 45 MPH STRONG WIND GUSTS 50+ MPH			
ICY SPOTS BLOWING SNOW LIMITED VISIBILITY ADVISE 65 MPH STRONG WIND GUSTS 50+ MPH			
ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD			
ICY SPOTS SNOWFALL BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW ADVISE 55 MPH			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW WRECK AHEAD 4 MILES			
ICY SPOTS SNOWFALL STRONG WIND DRIFTED SNOW BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND ADVISE 45 MPH MAX SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 45+ MPH			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN ADVISE 45 MPH MAX			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE			

CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW WRECK AHEAD SLOW DOWN ADVISE 45 MPH MAX			
ICY SPOTS STRONG WIND GUST 45+MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH			
ICY SPOTS STRONG WIND GUSTS 40+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD WORK AHEAD BE PREPARED TO STOP	1	1:18	1:18
SNOWFALL STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL	2	0:54	1:48
SNOWFALL STRONG WIND ICY SPOTS BLOWING SNOW LIMITED VISIBILITY			
STRONG WIND	11	6:02	66:22
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
WRECK AHEAD BOTH LANES BLOCKED	2	1:26	2:52
WRECK AHEAD RIGHT LANE BLOCKED			

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
MAX 50 MPH DENSE FOG LIMITED VISIBILITY	2	1:25	2:50
MAX 50 MPH IN AREAS OF FOG DENSE FOG LIMITED VISIBILITY AHEAD			
BLOWING SNOW STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL	1	0:37	0:37
FOG AHEAD	1	3:31	3:31
ICY SPOTS	87	2:42	235:11
ICY IN SPOTS FOG BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW DRIFTING SNOW NO UNNECESSARY TRAVEL LIMITED VISIBILITY			
ICY ROAD BLOWING SNOW DRIFTING SNOW SNOWFALL STRONG WIND			
ICY ROAD BLOWING SNOW DRIFTING SNOW TURN OFF CRUISE CONTROL LIMITED VISIBILITY			
ICY ROAD BLOWING SNOW MAX SPEED 45 MPH TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD BLOWING SNOW SNOWFALL STRONG WIND			
ICY ROAD BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD FOG AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD POOR VISIBILITY TURN OFF CRUISE			

CONTROL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL LIMITED VISIBILITY			
ICY ROAD SNOWFALL BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY			
ICY ROAD STRONG WIND BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WINDS			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW LIMITED VISIBILITY ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+MPH			
ICY SPOTS BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW SNOWFALL BLOWING SNOW			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL FOG			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW POOR VISIBILITY			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS ""+MPH			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 40+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 30+MPH TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS STRONG WIND GUSTS 40+MPH TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 30+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL BLOWING SNOW			
STRONG WIND	27	4:14	114:32

ADVISE NO LIGHT OR EMPTY TRAILERS STRONG WIND GUSTS 45+ MPH			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET ROAD SNOWFALL	3	0:48	2:25
WET SNOWFALL STRONG WINDS BLOWING SNOW			

Sign Name: 80 EB 324.9	SignId: 76	Milepost:	324.9
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE MAX SAFE SPEED 45 MPH NO PASSING ICY ROAD SNOWFALL BLOWING SNOW	1	2:26	2:26
BLACK ICE AHEAD SLOW DOWN TURN OFF CRUISE CONTROL	1	1:35	6:53
FOG AHEAD	5	0:42	3:34
FOG AHEAD LIMITED VISIBILITY SLOW DOWN			
FOG AHEAD LIMITED VISIBILITY SLOW DOWN ADVISE MAX SAFE SPEED 45 MPH			
FOG AHEAD SLOW DOWN			
I-80 EAST CLOSED LIMITED VISIBILITY ICY SPOTS DRIFTING SNOW SNOWFALL	1	11:02	11:02
ICY SPOTS	61	2:26	149:16
ICY IN SPOTS			
ICY IN SPOTS FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY IN SPOTS FOG TURN OFF CRUISE CONTROL			
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD FOG BLOWING SNOW SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW MAX SPEED 55 MPH TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY ADVISE 45 MPH MAX SAFE SPEED			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD BLOWING SNOW WRECK AHEAD 1 LANE TRAFFIC USE CAUTION			
ICY SPOTS AHEAD BLOWING SNOW WRECK AHEAD DRIVING LANE BLOCKED			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			

ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND GUSTS 45+MPH SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW POOR VISIBILITY			
ICY SPOTS SNOWFALL STRONG WINDS			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ROAD WORK AHEAD BE PREPARED TO STOP			
ICY SPOTS STRONG WIND BLOWING SNOW SNOWFALL ADVISE 45 MPH MAX SAFE SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD WORK AHEAD BE PREPARED TO STOP USE BOTH LANES ICY SPOTS STRONG WIND	1	0:31	0:31
SNOWFALL	8	1:36	12:48
SNOWFALL AHEAD SLOW DOWN			
SNOWFALL BLOWING SNOW SLOW DOWN			
SNOWFALL ICY SPOTS			
SNOWFALL ICY SPOTS BLOWING SNOW			
SNOWFALL ICY SPOTS LIMITED VISIBILITY			
STRONG WIND	24	4:49	115:38
STRONG WIND AHEAD			
STRONG WIND BLOWING SNOW			
STRONG WIND BLOWING SNOW LIMITED VISIBILITY ICY SPOTS DRIFTING SNOW SNOWFALL			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW			
STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND TURN OFF CRUISE CONTROL ICY ROAD SNOWFALL BLOWING SNOW			
TURN OFF CRUISE CONTROL ICY ROAD SNOWFALL BLOWING SNOW	1	2:08	2:08
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL	1	8:24	8:24

Sign Name: 80 EB 326.2	SignId: 75	Milepost:	326.2
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
DENSE FOG AHEAD	1	6:55	6:55
WET ROAD	3	0:51	2:33
LIMITED VISIBILTY WET ROAD			
AMBER ALERT SYSTEM TEST	1	0:24	0:24

Sign Name: 80 EB 326.2	SignId: 75	Milepost:	326.2
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
WRECK AHEAD KEEP LEFT	1	1:41	1:41
Sign Name: 80 EB 326.2	SignId: 75	Milepost:	326.2

NOVEMBER 2007

Message	Frequency	Average Duration	Total Duration
DENSE FOG AHEAD PLEASE SLOW DOWN	1	1:23	1:23
SLOW DOWN WRECK AHEAD	1	1:48	1:48
SNOWFALL AHEAD	1	0:16	0:16
TEST FROM LARAMIE	1	1:09	1:09

Sign Name: 80 EB 326.2 SignId: 75 Milepost: 326.2

DECEMBER 2007

Message	Frequency	Average Duration	Total Duration
55 MPH MAX SPEED	1	2:13	2:13
CRASH AHEAD	1	5:06	5:06
BLOWING SNOW	2	3:52	7:45
BLOWING SNOW DRIFTING SNOW POOR VISIBILITY			
ICY SPOTS TURN OFF CRUISE CONTROL	5	11:18	56:33
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ROAD CLOSED DUE TO WRECK	1	6:04	6:04
ROAD WORK 1 MILE AHEAD	1	3:54	3:54

Sign Name: 80 EB 326.2 SignId: 75 Milepost: 326.2

JANUARY 2008

Message	Frequency	Average Duration	Total Duration
ADVISE 45 MPH MAX SPEED POOR VISIBILITY SLOW DOWN	1	5:31	5:31
BLOWING SNOW	3	2:06	6:20
BLOWING SNOW BRIDGES MAY BE ICY			
BLOWING SNOW SLOW DOWN			
FOG	3	4:45	14:15
FOG POOR VISIBILITY			
ICY ROAD	7	3:44	26:12
ICY ROAD AHEAD			
ICY ROAD BLOWING SNOW SNOWFALL STRONG WIND			
ICY ROAD SLOW DOWN			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN FOG POOR VISIBILITY			
LIMITED VISIBILITY SLOW DOWN	1	1:22	1:22
ROAD WORK AHEAD BE PREPARED TO STOP	1	0:55	0:55

Sign Name: 80 EB 326.2 SignId: 75 Milepost: 326.2

FEBRUARY 2008

Message	Frequency	Average Duration	Total Duration
ADVISE 35 MPH MAX	9	2:36	23:27
ADVISE 35 MPH MAX WRECK AHEAD			
ADVISE 45 MPH MAX			
ADVISE 45 MPH MAX ICY ROAD STRONG WIND			
ADVISE 45 MPH MAX SLOW DOWN			
ADVISE 45 MPH MAX SPEED			
ADVISE 65 MPH MAX ICY SPOTS BLOWING SNOW			
ICY ROAD AHEAD ADVISE 45 MPH MAX	6	6:09	36:59
ICY ROAD AHEAD SLOW DOWN			
ICY ROAD AHEAD WRECK AHEAD SLOW DOWN			

ICY ROAD SLOW DOWN			
ICY ROAD WRECK AHEAD SLOW DOWN			
ICY SPOTS BLOWING SNOW			
ROAD WORK AHEAD BE PREPARED TO STOP	1	1:17	1:17
WATCH FOR TRAFFIC ENTERING ROAD MP 317	1	2:06	2:06
WRECK AHEAD SLOW DOWN	2	1:56	3:53
WRECK AHEAD USE RIGHT LANE			

Sign Name: 80 EB 326.2	SignId: 75	Milepost:	326.2
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD SLOW DOWN	2	12:22	24:45
ICY SPOTS SNOWFALL			
MAX 45 MPH IN AREAS OF FOG	4	0:59	3:59
MAX 50 MPH DENSE FOG AHEAD			
MAX 50 MPH IN AREAS OF FOG			
MAX SPEED 45 MPH			
WET ROAD SNOWFALL	1	0:34	0:34

Sign Name: 80 EB 326.2	SignId: 75	Milepost:	326.2
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SAFE SPEED	5	4:47	23:59
ADVISE MAX SAFE SPEED 45 MPH			
ADVISE MAX SAFE SPEED 45 MPH NO PASSING			
MAX SPEED 55 MPH TURN OFF CRUISE CONTROL			
SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY SPOTS SLOW DOWN	2	6:58	13:56
ICY SPOTS SNOWFALL			
ROAD WORK AHEAD BE PREPARED TO STOP	1	0:53	0:53
WRECK AHEAD ICY ROADS SLOW DOWN	1	2:41	2:41

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
DENSE FOG AHEAD	1	6:55	6:55
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	3	0:31	1:35
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
ICY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
STRONG WIND AHEAD	1	3:46	3:46

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
SLOW DOWN WRECK AHEAD	1	1:48	1:48
STRONG WIND GUSTS 40+ MPH	3	9:45	29:17
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
55 MPH MAX SPEED	4	4:00	16:02
REDUCE SPEED 35 MPH POOR VISIBILITY			
REDUCE SPEED 45 MPH POOR VISIBILITY			
SLOW DOWN 45 MPH TURN OFF CRUISE CONTROL			
BLOWING SNOW	4	3:28	13:53
BLOWING SNOW AHEAD			
BLOWING SNOW AHEAD LIMITED VISIBILITY			
BLOWING SNOW DRIFTING SNOW POOR VISIBILITY			
DRIFTING SNOW	2	1:03	2:06
DRIFTING SNOW SLOW DOWN CRASH 8 MILES AHEAD			
I-80 EASTBOUND CLOSED ALL TRAFFIC MUST EXIT	1	5:30	5:30
ICY SPOTS	8	7:32	60:21
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 50+ MPH	1	6:09	6:09
WRECK AHEAD SLOW DOWN	1	1:29	1:29

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW	6	4:06	24:39
BLOWING SNOW POOR VISIBILITY SLOW DOWN			
BLOWING SNOW POOR VISIBILITY SLOW DOWN ADVISE 45 MPH			
BLOWING SNOW SLOW DOWN			
FOG	1	15:16	15:16
ICY SPOTS	13	4:00	52:04
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW STRONG WIND GUSTS 40+MPH			
ICY ROAD SLOW DOWN			
ICY SPOTS BLOWING SNOW			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN FOG POOR VISIBILITY			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
LIMITED VISIBILITY	2	1:41	3:23
POOR VISIBILITY			
STRONG WIND BLOWING SNOW POOR VISIBILITY	1	1:15	1:15

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 35 MPH MAX	5	5:51	29:16
ADVISE 45 MPH MAX			
ADVISE 45 MPH MAX SPEED			
ADVISE 65 MPH MAX			
ICY ROADS AHEAD	3	7:32	22:36
ICY ROADS AHEAD ADVISE 45 MPH SPEED			
ICY SPOTS SNOWFALL AHEAD DRIFTING SNOW BLOWING SNOW			
WRECK AHEAD 4 MILES SLOW DOWN	1	1:18	1:18

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG 5 MILES AHEAD	1	1:49	1:49
MAX 45 MPH IN AREAS OF FOG	4	0:59	3:59
MAX 50 MPH DENSE FOG AHEAD			
MAX 50 MPH IN AREAS OF FOG			
MAX SPEED 45 MPH			
STRONG WIND AHEAD	1	6:12	6:12
WET ROAD SNOWFALL	1	0:34	0:34

Sign Name: 80 EB 328.8 (VEDAUWOO)	SignId: 74	Milepost:	328.8
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE MAX SAFE SPEED 45 MPH	4	1:32	6:11
ADVISE MAX SAFE SPEED 45 MPH NO PASSING			
MAX SPEED 55 MPH TURN OFF CRUISE CONTROL			
SPEED LIMIT 50 MPH IN AREAS OF FOG			
FOG	2	0:36	1:12
FOG AHEAD			
ICY ROAD AHEAD	5	5:15	26:19
ICY ROAD STRONG WIND BLOWING SNOW			
ICY SPOTS AHEAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL			

Sign Name: 80 EB 341.6 (HARRIMAN)	SignId: 70	Milepost:	341.6
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION 6 MILES AHEAD ANTELOPE ON ROAD	1	0:10	0:10
DENSE FOG AHEAD	1	6:55	6:55
ROAD WORK AHEAD SLOW DOWN	3	1:11	3:35
ROAD WORK AHEAD SLOW			
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 EB 341.6 (HARRIMAN)	SignId: 70	Milepost:	341.6
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD	1	13:55	13:55
ICY SPOTS	14	1:52	26:08

ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTROL			
ICY IN SPOTS			
ICY IN SPOTS WITH SNOWFALL			
ICY IN SPOTS WITH SNOWFALL PLEASE SLOW DOWN			
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL PLEASE SLOW DOWN			
SNOWFALL	1	0:41	0:41
WET ROAD WITH SNOWFALL	2	0:01	0:01
ROADS WET WITH SNOWFALL			

Sign Name: 80 EB 341.6 (HARRIMAN) SignId: 70 Milepost: 341.6

NOVEMBER 2007

Message	Frequency	Average Duration	Total Duration
FOG AHEAD SLOW DOWN SNOWFALL	2	0:32	1:05
FOG AHEAD SLOW DOWN ICY ROADS SNOWFALL			
ICY ROAD SLOW DOWN	15	3:20	50:01
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL POOR VISIBILITY SLOW DOWN			
ICY ROADS SNOWFALL LIMITED VISIBILITY			
ICY ROADS SNOWFALL SLOW DOWN			
ICY SPOTS AHEAD			
ICY SPOTS AHEAD SLOW DOWN			
ICY SPOTS AHEAD PLEASE SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS AND SNOWFALL AHEAD SLOW DOWN			
LIVESTOCK ON ROAD	1	1:17	1:17
ROAD WORK AHEAD RIGHT LANE CLOSED	1	1:51	1:51
SNOWFALL	1	0:32	0:32
WRECK AHEAD SLOW DOWN	2	1:00	2:01
STRONG WIND GUSTS 40+ MPH	3	6:43	20:11
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			

Sign Name: 80 EB 341.6 (HARRIMAN) SignId: 70 Milepost: 341.6

DECEMBER 2007

Message	Frequency	Average Duration	Total Duration
I-25 SOUTH IN COLORADO IS CLOSED	2	1:56	3:53
I-25 SOUTH TO COLORADO IS CLOSED			
BLACK ICE SLOW DOWN ADVISE 35 MPH	1	2:26	2:26
BLOWING SNOW ICY SPOTS TURN OFF CRUISE CONTROL	1	1:36	1:36
ICY SPOTS AHEAD SLOW DOWN	78	4:44	364:53
ICY ROAD AHEAD BLOWING SNOW SLOW DOWN			
ICY ROAD BLOWING SNOW ADVISE 40MPH MAX SPEED			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD FOG AHEAD			
ICY ROAD FOG AHEAD SLOW DOWN			
ICY ROAD FOG REDUCE SPEED			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL FOG REDUCE SPEED			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL 35 MPH MAX			
ICY ROAD SNOWFALL BLOWING SNOW POOR VISIBILITY			

ICY ROAD SNOWFALL FOG			
ICY ROAD SNOWFALL FOG POOR VISIBILITY			
ICY ROAD SNOWFALL FOG SLOW DOWN			
ICY ROAD SNOWFALL POOR VISIBILITY			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD WITH SNOWFALL AHEAD			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW 35 MPH MAX			
ICY SPOTS BLOWING SNOW POOR VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW SNOWFALL			
ICY SPOTS BLOWING SNOW SNOWFALL POOR VISIBILITY			
ICY SPOTS BLOWING SNOW SNOWFALL SLOW DOWN			
ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW STRONG WIND POOR VISIBILITY			
ICY SPOTS BLOWING SNOW STRONG WIND SLOW DOWN			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW			
ICY SPOTS DRIFTED SNOW BLOWING SNOW POOR VISIBILITY			
ICY SPOTS DRIFTED SNOW BLOWING SNOW SLOW DOWN			
ICY SPOTS FOG AHEAD			
ICY SPOTS FOG AHEAD SLOW DOWN			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW DRIFTING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROUGH ICE SLOW DOWN TURN OFF CRUISE CONTROL	1	4:20	4:20
STRONG WIND GUSTS 50+ MPH	2	3:14	6:28
STRONG WIND GUSTS 65+ MPH			

Sign Name: 80 EB 341.6 (HARRIMAN) SignId: 70 Milepost: 341.6

JANUARY 2008

Message	Frequency	Average Duration	Total Duration
ICY ROAD SNOWFALL SLOW DOWN	13	7:10	93:19
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
LIMITED VISIBILITY BLOWING SNOW SLOW DOWN	2	0:27	0:54
SNOWFALL	3	0:51	2:34
SNOWFALL AHEAD			
SNOWFALL TURN OFF CRUISE CONTROL			
STRONG WIND	3	2:26	7:19
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 50+ MPH			

Sign Name: 80 EB 341.6 (HARRIMAN)	SignId: 70	Milepost:	341.6
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY IN SPOTS TURN OFF CRUISE CONTROL	17	3:52	65:44
ICY ROAD POOR VISIBILITY SLOW DOWN			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS DRIFTED SNOW SNOWFALL BLOWING SNOW			
ICY SPOTS POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD DRIFTING SNOW BLOWING SNOW			
ICY SPOTS SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW POOR VISIBILITY			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND AHEAD	5	13:41	68:28
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND ICY SPOTS TURN OFF CRUISE CONTROL			
WET ROAD SNOWFALL AHEAD	1	0:58	0:58
WRECK 15 MILES AHEAD BE PREPARED TO STOP	1	0:01	0:01

Sign Name: 80 EB 341.6 (HARRIMAN)	SignId: 70	Milepost:	341.6
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG	3	7:24	22:13
DENSE FOG POOR VISIBILITY ICY SPOTS SNOWFALL			
DENSE FOG POOR VISIBILITY SLOW DOWN			
ICY SPOTS FOG	36	2:14	80:40
ICY ROAD ADVISE 35 MPH FOG POOR VISIBILITY			
ICY ROAD ADVISE 35 MPH SNOWFALL FOG			
ICY ROAD SLOW DOWN ADVISE 35 MPH MAX			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW			
ICY ROAD SNOWFALL BLOWING SNOW POOR VISIBILITY			
ICY ROAD SNOWFALL FOG			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL LIMITED VISIBILITY			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS TURN OFF CRUISE CONTROL			
SNOWFALL	1	1:58	1:58

Sign Name: 80 EB 341.6 (HARRIMAN)	SignId: 70	Milepost:	341.6
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SAFE SPEED	2	3:41	7:23
ADVISE MAX SAFE SPEED 45 MPH NO PASSING			
FOG	3	0:58	2:55
FOG POOR VISIBILITY			
I-25 SOUTHBOUND CLOSED CRASHES IN COLORADO	1	0:07	0:07
ICY SPOTS	26	2:39	69:01
ICY IN SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY ROAD			
ICY ROAD AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW SLOW DOWN			
ICY ROAD SNOWFALL FOG			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTING SNOW BLOWING SNOW STRONG WIND			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL FOG			
ICY SPOTS SNOWFALL FOG SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WINDS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND	3	5:38	16:55
STRONG WIND GUST 45 MPH			
STRONG WIND GUSTS 40+ MPH			
WET ROAD SNOWFALL	4	1:02	4:09
WET ROAD ICY SPOTS SNOWFALL AHEAD			
WET ROAD SNOWFALL FOG			
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL			

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG	1	0:38	0:38
WET ROAD	2	0:19	0:39

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD	2	0:00	0:00
DENSE FOG AHEAD			
ROAD WORK	2	0:40	1:21
ICY SPOTS	2	18:46	37:32
ICY ROAD			
WET ROAD	1	1:47	1:47

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD	4	6:33	26:15
ICY ROADS			
ICY SPOTS			

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD	12	14:47	162:41
ICY SPOTS			

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD	10	14:09	155:43
ICY SPOTS			

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD	10	12:12	122:07
ICY SPOTS			
ROAD WORK	1	4:26	4:26

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD	11	12:35	138:26
ICY SPOTS			
WRECK	3	0:31	1:35
WRECK AHEAD			

Sign Name: 80 EB 322.6 (SUMMIT BLANKOUT)	SignId: 87	Milepost:	322.6
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD	12	3:51	46:19
ICY ROAD SNOWFALL			
ICY SPOTS			

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE)	SignId: 70	Milepost:	323
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
AVOID WET ROAD CRASHES ADVISE 55 MPH WHEN WET	2	22:29	44:59
DENSE FOG AHEAD	1	6:55	6:55
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE)	SignId: 70	Milepost:	323
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
AVOID WET ROAD CRASHES ADVISE 55 MPH WHEN WET	9	16:25	131:27
ADVISE 55 MPH WHEN WET			
ADVISE 55 MPH WHEN WET AVOID WET ROAD CRASHES			
ICY ROAD WITH SNOWFALL	3	6:37	19:53
ICY ROAD SNOWFALL I-80 CLOSED WEST OF LARAMIE			
SLOW DOWN ICY ROAD AHEAD			
RIGHT LANE CLOSED 2 MILES AHEAD ROAD WORK	2	0:41	1:22
ROAD WORK 2 MILES AHEAD STRIPING CREW			
WRECK AHEAD USE LEFT LANE	1	0:24	0:24
DENSE FOG AHEAD LIMITED VISIBILITY	1	0:47	0:47
SPEED LIMIT 40 MPH ON DOWNGRADE	2	0:38	1:16

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE)	SignId: 70	Milepost:	323
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY SPOTS SLOW DOWN	3	14:20	43:00
ICY SPOTS SNOWFALL			
ICY ROAD SLOW DOWN			
WRECK AHEAD SLOW DOWN RIGHT LANE BLOCKED	1	1:10	1:10

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE)	SignId: 70	Milepost:	323
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
I-80 & US-30 CLOSED WEST OF LARAMIE	1	1:20	1:20
ICY SPOTS	37	7:44	286:35
ICY ROAD AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN MAX SPEED 45 MPH			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL WATCH FOR WILDLIFE			
ICY ROADS			
ICY ROADS SNOWFALL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW MAX SPEED 45 MPH			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG MAX SPEED 45 MPH			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN MAX SPEED 45 MPH			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			

ICY SPOTS SLOW DOWN WATCH FOR WILDLIFE			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL MAX SPEED 45 MPH			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL WATCH FOR WILDLIFE			
ICY SPOTS TURN OFF CRUISE CONTROL			
MAX SPEED 40 MPH	2	2:43	5:26
MAX SPEED 55 MPH			

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE)	SignId: 70	Milepost:	323
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
I-80 CLOSED WESTBOUND	1	1:51	1:51
ICY SPOTS	34	4:30	153:00
ICY IN SPOTS			
ICY IN SPOTS BLOWING SNOW			
ICY IN SPOTS SNOWFALL			
ICY ROAD			
ICY ROAD AHEAD BLOWING SNOW SLOW DOWN			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW WRECK AHEAD SLOW DOWN			
ICY ROAD SNOWFALL AHEAD			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW MAX SPEED 55 MPH			
ICY SPOTS BLOWING SNOW REDUCE SPEED			
ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN MAX SPEED 45MPH			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WINDS BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW	1	11:25	11:25
WRECK AHEAD RIGHT LANE CLOSED	5	0:54	4:33
CRASH AHEAD LANE BLOCKAGE REDUCE SPEED			
CRASH AHEAD REDUCE SPEED LANE BLOCKAGE			
WRECK AHEAD REDUCE SPEED RIGHT LANE BLOCKED			
WET ROAD ICY SPOTS SNOWFALL AHEAD	1	1:43	1:43

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE)	SignId: 70	Milepost:	323
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW	1	8:05	8:05
ICY IN SPOTS	18	8:09	146:57
ICY ROAD			
ICY ROAD AHEAD			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL AHEAD BLOWING SNOW AHEAD			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS			
ICY SPOTS AHEAD			

ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD WORK AHEAD KEEP RIGHT	1	4:27	4:27
WRECK AHEAD LANES BLOCKED BE PREPARED TO STOP	1	0:01	0:01

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE) SignId: 70 Milepost: 323

MARCH 2008

Message	Frequency	Average Duration	Total Duration
FOG AHEAD	1	4:23	4:23
ICY ROAD	33	4:59	164:28
ICY ROAD FOG POOR VISIBILITY SLOW DOWN			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD SNOWFALL POOR VISIBILITY			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS			
ICY SPOTS ADVISE MAX SPEED 45MPH			
ICY SPOTS AHEAD			
ICY SPOTS AHEAD SNOWFALL POOR VISIBILITY			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS TURN OFF CRUISE CONTROL			
WRECK AHEAD RIGHT LANE CLOSED	2	1:35	3:11
WRECK AHEAD USE RIGHT LANE LEFT LANE CLOSED			

Sign Name: 80 WB 323.0 (SUMMIT INTERCHANGE) SignId: 70 Milepost: 323

APRIL 2008

Message	Frequency	Average Duration	Total Duration
ICY SPOTS	24	5:58	143:14
ICY IN SPOTS TURN OFF CRUISE CONTROL			
ICY ROAD			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS TURN OFF CRUISE CONTROL			
SNOWFALL	4	1:13	4:53
SNOWFALL BLOWING SNOW SLOW DOWN			
SNOWFALL WET ROAD ICY SPOTS			
STRONG WIND GUSTS 30 MPH	3	2:38	7:56
STRONG WIND GUSTS 45 MPH			
WRECK AHEAD 8 MILES	1	10:01	10:01

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
DENSE FOG AHEAD	1	6:55	6:55
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD	2	10:54	21:49
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	2	0:45	1:30
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
STRONG WIND AHEAD	1	12:08	12:08

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
NONE			

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
55 MPH MAX SPEED	1	2:13	2:13
BLOWING SNOW	2	5:26	10:53
BLOWING SNOW AHEAD LIMITED VISIBILITY			
ICY ROAD TURN OFF CRUISE CONTROL	8	10:29	73:00
ICY ROAD 1 MILE AHEAD			
ICY ROAD FOG TURN OFF CRUISE CONTOL			
ICY ROAD SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
WRECK AHEAD MM 324 ALL LANES BLOCKED	3	0:29	1:28
WRECK AHEAD MM 324 BOTH LANES BLOCKED			
WRECK AHEAD MM 324 LEFT LANE BLOCKED			

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW SLOW DOWN	1	2:09	2:09
LIMITED VISIBILITY SLOW DOWN	1	1:22	1:22
ROAD CLOSED AHEAD AT MP 323 PREPARE TO STOP	1	0:41	0:41

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 35 MPH MAX	6	4:47	28:47
ADVISE 45 MPH MAX			
ADVISE 45 MPH MAX SPEED			

ADVISE 55 MPH MAX			
ADVISE 65 MPH MAX			
ICY ROAD	4	4:19	17:19
ICY ROAD AHEAD			
ICY SPOTS SLOW DOWN			
ROAD WORK 7 MILES AHEAD LEFT LANE CLOSED	1	4:22	4:22
WRECK 4 MILES AHEAD PREPARE TO STOP	3	1:03	3:09
WRECK AHEAD BE PREPARED TO STOP			
WRECK AHEAD USE LEFT LANE			

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY SPOTS	2	14:02	28:04
ICY ROAD SLOW DOWN			
MAX 45 MPH IN AREAS OF FOG	4	0:59	3:59
MAX 50 MPH DENSE FOG AHEAD			
MAX 50 MPH IN AREAS OF FOG			
MAX SPEED 45 MPH			
STRONG WIND AHEAD	2	3:14	6:29
STRONG WIND GUSTS 40+ MPH			
WET ROAD SNOWFALL	1	0:32	0:32
WRECK AHEAD	2	1:59	3:59
WRECK AHEAD KEEP LEFT			

Sign Name: 80 WB 331.3 (VEDAUWOO)	SignId: 73	Milepost:	331.3
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SAFE SPEED	6	4:40	28:00
ADVISE MAX SAFE SPEED 45 MPH			
ADVISE MAX SAFE SPEED 45 MPH NO PASSING			
MAX SPEED 55 MPH TURN OFF CRUISE CONTROL			
SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY SPOT SLOW DOWN	1	0:43	0:43
STRONG WIND	1	3:22	3:22

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
DENSE FOG AHEAD	1	6:55	6:55
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
WET ROAD ICY IN SPOTS	1	0:17	0:17
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	2	0:45	1:31
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
DENSE FOG AHEAD PLEASE SLOW DOWN	1	4:49	4:49
ICY SPOTS AHEAD	2	7:08	14:16
WRECK AHEAD SLOW DOWN	2	0:31	1:03
WRECK AHEAD MOVE TO LEFT SLOW DOWN			

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
55 MPH MAX SPEED	2	4:43	9:27
SLOW DOWN 45 MPH TURN OFF CRUISE CONTROL			
BLOWING SNOW	5	4:55	24:37
BLOWING SNOW AHEAD LIMITED VISIBILITY			
BLOWING SNOW DRIFTED SNOW POOR VISIBILITY			
BLOWING SNOW POOR VISIBILITY			
DRIFTING SNOW	1	9:18	9:18
ICY SPOTS	10	6:28	64:43
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN			
ICY ROAD SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 65+ MPH	3	0:53	2:39
STRONG WIND GUSTS 75+ MPH			
WRECK AHEAD	2	1:28	2:57
WRECK AHEAD SLOW DOWN			

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SPEED POOR VISIBILITY SLOW DOWN	1	5:31	5:31
BLOWING SNOW	4	2:07	8:31
BLOWING SNOW POOR VISIBILITY SLOW DOWN			
BLOWING SNOW POOR VISIBILITY SLOW DOWN ADVISE 45 MPH			
BLOWING SNOW SLOW DOWN			
FOG AHEAD	1	0:55	0:55
ICY SPOTS STRONG WIND BLOWING SNOW	2	4:24	8:48
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH			
LIMITED VISIBILITY SLOW DOWN	1	1:22	1:22
STRONG WIND BLOWING SNOW POOR VISIBILITY	1	1:15	1:15

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 35 MPH MAX	7	4:08	28:56
ADVISE 45 MPH MAX			
ADVISE 45 MPH MAX SPEED			
ADVISE 55 MPH MAX			
ADVISE 65 MPH MAX			
ICY ROAD AHEAD	3	5:07	15:23

ICY ROAD AHEAD ADVISE 45 MPH MAX			
ICY ROADS SLOW DOWN			
ROAD CLOSED	2	1:26	2:52
I-80 CLOSED AT LARAMIE EXIT 316 FOR PARKING			
WRECK 7 MILES AHEAD PREPARE TO STOP	2	2:13	4:27
WRECK AHEAD USE LEFT LANE			

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ICY ROAD AHEAD SLOW DOWN	1	21:32	21:32
MAX 45 MPH IN AREAS OF FOG	3	0:56	2:49
MAX 50 MPH DENSE FOG AHEAD			
MAX 50 MPH IN AREAS OF FOG			
WET ROAD SNOWFALL	1	0:32	0:32

Sign Name: 80 WB 334.5 (BUFORD)	SignId: 72	Milepost:	334.5
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SAFE SPEED	6	4:40	28:00
ADVISE MAX SAFE SPEED 45 MPH			
ADVISE MAX SAFE SPEED 45 MPH NO PASSING			
MAX SPEED 55 MPH TURN OFF CRUISE CONTROL			
SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY IN SPOTS	2	0:22	0:44
ICY SPOTS SLOW DOWN			

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	16	13:20	200:08
SNOW AHEAD SLOW DOWN	1	0:21	0:21
DENSE FOG AHEAD	3	7:02	21:08
DENSE FOG AHEAD LIMITED VISIBILITY REDUCE SPEED			
I80 WEST OF LARAMIE CLOSED	1	3:04	3:04
STRONG WIND AHEAD GUSTS 35+ MPH	6	4:06	24:37
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH I80 WEST OF LARAMIE CLOSED			
STRONG WIND GUSTS 45+ MPH			
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	30	8:28	250:46
CAUTION WATCH FOR WILDLIFE			
DENSE FOG AHEAD	6	2:15	13:35
CAUTION FOGGY CONDITIONS MAY EXIST			
FOG AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS	20	2:22	47:30
ICY SPOTS TURN OFF CRUISE CONTROL			

ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY IN SPOTS			
ICY IN SPOTS WITH FOG			
ROAD ICY IN SPOTS WITH FOG			
ICY ROAD			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD WITH SNOWFALL			
ICY ROAD WITH SNOWFALL TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 40+ MPH	22	4:34	100:48
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH SNOWFALL			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
WET ROAD	9	1:53	16:58
WET ROAD AHEAD			
WET ROAD AHEAD WITH SNOWFALL			
WET ROAD SNOWFALL			
WET ROAD SNOWFALL AHEAD			
WET ROAD ICY IN SPOTS			
WET TO ICY IN SPOTS WITH SNOWFALL AHEAD			
WET WITH SNOW			
WET WITH SNOW AND FOG			
SNOWFALL	1	1:30	1:30
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	2	0:46	1:33
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
WRECK AHEAD PREPARE TO STOP	1	2:45	2:45

Sign Name: 80 WB 336.1 (BUFORD) SignId: 71 Milepost: 336.1

NOVEMBER 2007

Message	Frequency	Average Duration	Total Duration
CAUTION WATCH FOR WILDLIFE ON ROAD	1	1:59	1:59
BLOWING SNOW	2	1:08	2:17
SNOWFALL AHEAD	2	0:17	0:34
ICY SPOTS	30	3:33	106:41
ICY SPOTS AHEAD			
ICY SPOTS SNOWFALL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS AND FOG AHEAD			
ICY IN SPOTS AND BLOWING SNOW AHEAD			
ICY IN SPOTS WITH BLOWING SNOW SLOW DOWN			

ICY IN SPOTS WITH SNOWFALL AHEAD			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
STRONG WIND	42	4:17	180:23
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND AHEAD GUSTS 40+MPH			
STRONG WIND AHEAD GUSTS 45+MPH			
STRONG WIND AHEAD GUSTS 50+MPH			
STRONG WIND AHEAD GUSTS 60+MPH			
STRONG WIND GUSTS 40+ MPH BLOWING SNOW			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS			
WET ROAD BLOWING SNOW	1	0:20	0:20
FOG WITH SNOWFALL AHEAD	1	2:20	2:20

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW	3	4:37	13:53
BLOWING SNOW SLOW DOWN			
FOG POOR VISIBILITY ICY ROAD TURN OFF CRUISE CONTROL	1	12:12	12:12
TURN OFF CRUISE CONTROL ICY SPOTS BLOWING SNOW	2	0:27	0:54
TURN OFF CRUISE CONTROL ICY SPOTS BLOWING SNOW POOR VISIBILITY			
WY-210 CLOSED ICY SPOTS BLOWING SNOW POOR VISIBILITY	1	0:44	0:44
ICY SPOTS	94	3:36	338:55
ICY IN SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW ADVISE NO LIGHT TRAILERS GUSTS 60+ MPH			
ICY ROAD BLOWING SNOW POOR VISIBILITY NO PASSING			
ICY ROAD BLOWING SNOW STRONG WIND GUSTS 50+ MPH			
ICY ROAD BLOWING SNOW STRONG WIND GUSTS 60+ MPH			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOW FALL POOR VISIBILITY ADVISE NO LIGHT TRAILERS GUST 55+MPH			
ICY ROAD SNOWFALL BLOWING SNOW FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW NO PASSING			
ICY ROAD STRONG WIND GUSTS 50+ MPH TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW POOR VISIBILITY			
ICY SPOTS BLOWING SNOW POOR VISIBILITY REDUCE SPEED 45			

MPH			
ICY SPOTS BLOWING SNOW POOR VISIBILITY REDUCE SPEED 55 MPH			
ICY SPOTS BLOWING SNOW SLOW DOWN STRONG WIND GUST 45+MPH			
ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW STRONG WIND POOR VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL DRIFTING SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL WRECK AHEAD			
ICY SPOTS STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 70+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 80+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 60+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 80+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW DRIFTING SNOW LIMITED VISIBILITY			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW LIMITED VISIBILITY			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW LIMITED VISIBILITY MAX SPEED 55 MPH			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 65+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL STRONG WIND GUSTS 65+ MPH			
ICY SPOTS TURN OFF CRUISE CONTROL WATCH FOR WILDLIFE			
ICY SPOTS TURN OFF CRUISE CONTROL WATCH FOR WILDLIFE ON HIGHWAY			
SNOWFALL FOG POOR VISIBILITY ICY ROAD TURN OFF CRUISE CONTROL	1	5:08	5:08
STRONG WIND	37	3:22	124:41
ADVISE NO LIGHT TRAILERS GUSTS 50+MPH			
STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 30+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND BLOWING SNOW			
STRONG WIND BLOWING SNOW POOR VISIBILITY SLOW DOWN			

STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 50+ MPH BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
STRONG WIND GUSTS 50+ MPH ICY ROAD SLOW DOWN			

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45MPH MAX SPEED POOR VISIBILITY BLOWING SNOW	2	2:46	5:32
ADVISE 45MPH MAX SPEED POOR VISIBILITY STRONG WIND BLOWING SNOW			
BLOWING SNOW	6	0:56	5:38
BLOWING SNOW POOR VISIBILITY 45 MPH MAX SPEED TURN OFF CRUISE CONTROL			
BLOWING SNOW SLOW DOWN			
BLOWING SNOW STRONG WIND GUSTS 40+ MPH			
BLOWING SNOW STRONG WIND LIMITED VISIBILITY GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
FOG POOR VISIBILITY	2	7:38	15:17
I-80 CLOSED WESTBOUND	2	3:17	6:34
ICY SPOTS	66	3:48	251:07
ICY ROAD AHEAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND GUSTS 50+ MPH BLOWING SNOW SLOW DOWN			
ICY ROAD STRONG WIND GUSTS 50+MPH BLOWING SNOW I-80 WESTBOUND CLOSED			
ICY ROAD STRONG WIND GUSTS 55+ MPH BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW STRONG WIND GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTING SNOW SNOWFALL BLOWING SNOW AHEAD			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND ADVISE 45 MPH MAX			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW LIMITED VISIBILITY			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			

ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW BRIDGES MAY BE ICY			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 55+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW BRIDGES MAY BE ICY			
ICY SPOTS STRONG WIND LIMITED VISIBILITY BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL FOG LIMITED VISIBILITY			
STRONG WIND	37	3:37	130:30
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			
STRONG WIND BLOWING SNOW			
STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			
STRONG WIND BLOWING SNOW GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW GUSTS 50+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW GUSTS 60+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND BLOWING SNOW LIMITED VISIBILITY GUSTS 60+ MPH TURN OFF CRUISE CONTROL			
STRONG WIND BLOWING SNOW SLOW DOWN			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW			
STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 60+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			

STRONG WIND GUSTS 60+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 50+ MPH ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 50+ MPH ICY ROAD SNOWFALL BLOWING SNOW SLOW DOWN			
STRONG WIND GUSTS 50+ MPH ICY ROAD TURN OFF CRUISE CONTROL			
STRONG WINDS ADVISE NO LIGHT OR EMPTY TRAILERS BLOWING SNOW TURN OFF CRUISE CONTROL			

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW	2	7:35	15:10
FOG AHEAD SLOW DOWN	1	1:07	1:07
ICY IN SPOTS BLOWING SNOW	77	2:48	215:44
ICY ROAD ADVISE 35 MPH MAX			
ICY ROAD ADVISE 35 MPH MAX SPEED			
ICY ROAD ADVISE 35 MPH MAX SPEED BLOWING SNOW			
ICY ROAD ADVISE 35 MPH MAX SPEED LIMITED VISIBILITY			
ICY ROAD ADVISE 35 MPH MAX SPEED STRONG WIND BLOWING SNOW			
ICY ROAD ADVISE 45 MPH MAX SPEED STRONG WIND BLOWING SNOW			
ICY ROAD ADVISE 45 MPH MAX SPEED STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL SLOW DOWN			
ICY ROAD BLOWING SNOW STRONG WIND LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW STRONG WIND WRECK 1 MI AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOW LIMITED VISIBILITY			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW			
ICY ROAD SNOWFALL BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD STRONG WIND BLOWING SNOW ADVISE 45 MPH			
ICY ROAD STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX SPEED			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY ADVISE 35 MPH			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND LIMITED VISIBILITY BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW AHEAD			
ICY SPOTS BLOWING SNOW DRIFTED SNOW TURN OFF CRUISE CONTROL SLOW DOWN			
ICY SPOTS BLOWING SNOW FOG			

ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD			
ICY SPOTS SNOWFALL BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW ADVISE 55 MPH			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL STRONG WIND DRIFTED SNOW BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND ADVISE 45 MPH MAX SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE 45 MPH MAX TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS ""+ MPH			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUST 45+MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
SNOWFALL STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL	2	0:54	1:48
SNOWFALL STRONG WIND ICY SPOTS BLOWING SNOW LIMITED VISIBILITY			
STRONG WIND	11	3:18	36:18
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
ROAD CLOSED 6 MILES AHEAD	2	0:38	1:16
I-80 & US-30 CLOSED AT LARAMIE			
WRECK AHEAD BOTH LANES BLOCKED	3	1:14	3:44
WRECK AHEAD ICY SPOTS			
WRECK AHEAD RIGHT LANE BLOCKED			

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLOWING SNOW STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL	1	0:36	0:36
FOG AHEAD	4	2:07	8:30
DENSE FOG POOR VISIBILITY SLOW DOWN			
DENSE FOG POOR VISIBILITY SLOW DOWN MAX 45 MPH IN AREAS OF FOG			
DENSE FOG POOR VISIBILITY SLOW DOWN MAX 50 MPH IN AREAS OF FOG			
ICY SPOTS	88	2:37	231:04
ICY IN SPOTS FOG BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW DRIFTING SNOW NO UNNECESSARY TRAVEL LIMITED VISIBILITY			
ICY ROAD BLOWING SNOW DRIFTING SNOW SNOWFALL STRONG WIND			
ICY ROAD BLOWING SNOW DRIFTING SNOW TURN OFF CRUISE CONTROL LIMITED VISIBILITY			
ICY ROAD BLOWING SNOW MAX SPEED 45 MPH TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD BLOWING SNOW SNOWFALL STRONG WIND			
ICY ROAD BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD FOG AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL AHEAD POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL LIMITED VISIBILITY			
ICY ROAD SNOWFALL BLOWING SNOW LIMITED VISIBILITY SLOW DOWN			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY			
ICY ROAD STRONG WIND BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WINDS			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW LIMITED VISIBILITY ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+MPH			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW SNOWFALL BLOWING SNOW			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			

ICY SPOTS SNOWFALL FOG			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW POOR VISIBILITY			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 45+MPH			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+MPH			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 60+MPH			
ICY SPOTS STRONG WIND BLOWING SNOW GUSTS 40+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW LIMITED VISIBILITY			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUST 30+MPH TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS STRONG WIND GUSTS 40+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 40+ MPH TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS STRONG WINDS GUST 30+MPH TURN OFF CRUISE CONTROL BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+MPH			
ICY SPOTS TURN OFF CRUISE CONTROL BLOWING SNOW			
SNOWFALL AHEAD	1	0:01	0:01
STRONG WIND	29	4:02	117:09
ADVISE NO LIGHT OR EMPTY TRAILERS STRONG WIND GUSTS 45+ MPH			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 40+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET ROAD SNOWFALL	2	1:12	2:24
WET SNOWFALL STRONG WINDS BLOWING SNOW			

Sign Name: 80 WB 336.1 (BUFORD)	SignId: 71	Milepost:	336.1
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE MAX SAFE SPEED 45 MPH NO PASSING ICY ROAD SNOWFALL BLOWING SNOW	1	4:34	4:34
BLACK ICE AHEAD SLOW DOWN TURN OFF CRUISE CONTROL	1	1:35	1:35
FOG AHEAD	5	0:42	3:34
FOG AHEAD LIMITED VISIBILITY SLOW DOWN			
FOG AHEAD LIMITED VISIBILITY SLOW DOWN ADVISE MAX SAFE SPEED 45 MPH			
FOG AHEAD SLOW DOWN			
I-80 IS TEMPORARILY CLOSED MILE POST 329-325	1	1:25	1:25
ICY SPOTS	56	2:35	145:34
ICY IN SPOTS			
ICY IN SPOTS FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD			
ICY ROAD BLOWING SNOW			
ICY ROAD BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD FOG BLOWING SNOW SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW MAX SPEED 55 MPH TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW			
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW LIMITED VISIBILITY ADVISE 45 MPH MAX SAFE SPEED			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG SPEED LIMIT 50 MPH IN AREAS OF FOG			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW STRONG WIND GUSTS 45+MPH SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW POOR VISIBILITY			
ICY SPOTS SNOWFALL STRONG WINDS			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW SNOWFALL ADVISE 45 MPH MAX SAFE SPEED			
ICY SPOTS STRONG WIND BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW			
ICY SPOTS TURN OFF CRUISE CONTROL			

SNOWFALL	11	1:15	13:51
SNOWFALL AHEAD SLOW DOWN			
SNOWFALL BLOWING SNOW SLOW DOWN			
SNOWFALL FOG			
SNOWFALL ICY SPOTS			
SNOWFALL ICY SPOTS BLOWING SNOW			
SNOWFALL ICY SPOTS LIMITED VISIBILITY			
STRONG WIND	26	5:47	150:42
STRONG WIND AHEAD			
STRONG WIND BLOWING SNOW			
STRONG WIND BLOWING SNOW LIMITED VISIBILITY ICY SPOTS DRIFTING SNOW SNOWFALL			
STRONG WIND GUSTS 30 MPH			
STRONG WIND GUSTS 45 MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW			
STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL	1	8:23	8:23

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
DENSE FOG AHEAD	1	6:55	6:55
ROAD WORK AHEAD SLOW DOWN	1	1:20	1:20
AMBER ALERT SYSTEM TEST	1	0:23	0:23

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	3	0:32	1:37
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
WET ROAD WITH SNOWFALL	1	2:28	2:28
ICY SPOTS	13	2:02	26:37
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL PLEASE SLOW DOWN			
ICY IN SPOTS			
ICY IN SPOTS WITH SNOWFALL			
ICY IN SPOTS WITH SNOWFALL PLEASE SLOW DOWN			
ICY IN SPOTS TURN OFF CRUISE CONTROL			
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
BLOWING SNOW	1	0:46	0:46
SNOWFALL	2	0:40	1:21
SNOWFALL AHEAD			

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD SLOW DOWN SNOWFALL	2	0:32	1:05
FOG AHEAD SLOW DOWN ICY ROADS SNOWFALL			
ICY SPOTS AHEAD	16	4:34	73:18
ICY SPOTS AHEAD SLOW DOWN			
ICY SPOTS AHEAD PLEASE SLOW DOWN			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROADS SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL POOR VISIBILITY SLOW DOWN			
ICY ROADS SNOWFALL LIMITED VISIBILITY			
LIVESTOCK ON ROAD	2	0:06	0:12
ROAD WORK AHEAD RIGHT LANE CLOSED	1	4:32	4:32
SNOWFALL	1	0:32	0:32
WRECK AHEAD SLOW DOWN	1	1:30	1:30
STRONG WIND GUSTS 40+ MPH	3	6:43	20:11
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLACK ICE SLOW DOWN ADVISE 35 MPH	1	2:26	2:26
BLOWING SNOW SLOW DOWN	2	0:28	0:56
BLOWING SNOW DRIFTING SNOW POOR VISIBILITY			
FOG AHEAD	1	0:33	0:33
ICY SPOTS	81	4:46	386:23
ICY IN SPOTS SNOWFALL			
ICY ROAD AHEAD BLOWING SNOW SLOW DOWN			
ICY ROAD FOG AHEAD			
ICY ROAD FOG AHEAD SLOW DOWN			
ICY ROAD FOG REDUCE SPEED			
ICY ROAD POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL 35 MPH MAX			
ICY ROAD SNOWFALL FOG POOR VISIBILITY			
ICY ROAD SNOWFALL FOG REDUCE SPEED			
ICY ROAD SNOWFALL FOG SLOW DOWN			
ICY ROAD SNOWFALL POOR VISIBILITY			
ICY ROAD SNOWFALL SLOW DOWN			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD WITH SNOWFALL AHEAD			
ICY SPOTS AHEAD			
ICY SPOTS AHEAD SLOW DOWN			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW 35 MPH MAX			
ICY SPOTS BLOWING SNOW MAX SPEED "" MPH			
ICY SPOTS BLOWING SNOW POOR VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW SNOWFALL			

ICY SPOTS BLOWING SNOW SNOWFALL POOR VISIBILITY			
ICY SPOTS BLOWING SNOW SNOWFALL SLOW DOWN			
ICY SPOTS BLOWING SNOW STRONG WIND			
ICY SPOTS BLOWING SNOW STRONG WIND SLOW DOWN			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW			
ICY SPOTS DRIFTED SNOW BLOWING SNOW POOR VISIBILITY			
ICY SPOTS FOG AHEAD			
ICY SPOTS FOG AHEAD SLOW DOWN			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW DRIFTING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL WRECK AHEAD KEEP RIGHT			
ICY SPOTS STRONG WIND SLOW DOWN			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND GUSTS 30+ MPH	10	2:34	25:41
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 65+ MPH			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW POOR VISIBILITY			
TRAFFIC STOPPED AHEAD	3	0:35	1:47
TRAFFIC STOPPED AHEAD BE PREPARED TO STOP			
PREPARE TO STOP WRECK AHEAD			

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
I-80 CLOSED WESTBOUND	1	22:37	22:37
ICY ROAD SNOWFALL SLOW DOWN	22	5:33	122:07
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND SLOW DOWN			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
LIMITED VISIBILITY BLOWING SNOW SLOW DOWN	2	0:27	0:54
SNOWFALL	2	0:49	1:39
SNOWFALL TURN OFF CRUISE CONTROL			
STRONG WIND AHEAD GUSTS 50+ MPH	2	3:26	6:52
STRONG WIND BLOWING SNOW			

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG POOR VISIBILITY SLOW DOWN	1	1:40	1:40
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL	34	3:54	132:54
ICY IN SPOTS TURN OFF CRUISE CONTROL			
ICY ROAD ADVISE 45 MPH MAX SPEED			
ICY ROAD POOR VISIBILITY SLOW DOWN			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD SNOWFALL STRONG WIND BLOWING SNOW			
ICY ROAD STRONG WIND			
ICY ROAD STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROADS			
ICY ROADS BLOWING SNOW			
ICY ROADS STRONG WINDS BLOWING SNOW			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW DRIFTED SNOW			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW SNOWFALL BLOWING SNOW			
ICY SPOTS POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD DRIFTING SNOW BLOWING SNOW			
ICY SPOTS SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW POOR VISIBILITY			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
STRONG WIND	6	15:55	95:35
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND ICY SPOTS TURN OFF CRUISE CONTROL			
WET ROAD ICY SPOTS AHEAD SLOW DOWN	1	0:59	0:59

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG	3	6:30	19:31
DENSE FOG POOR VISIBILITY SLOW DOWN			
FOG POOR VISIBILITY SLOW DOWN			
ICY ROAD SNOWFALL	38	2:09	81:54
ICY ROAD ADVISE 35 MPH FOG POOR VISIBILITY			
ICY ROAD ADVISE 35 MPH LIMITED VISIBILITY			
ICY ROAD SLOW DOWN ADVISE 35 MPH MAX			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW			
ICY ROAD SNOWFALL BLOWING SNOW AHEAD			
ICY ROAD SNOWFALL BLOWING SNOW POOR VISIBILITY			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW			

ICY ROAD STRONG WIND BLOWING SNOW POOR VISIBILITY			
ICY ROAD STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS FOG			
ICY SPOTS FOG TURN OFF CRUISE CONTROL			
ICY SPOTS POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL LIMITED VISIBILITY			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
SNOWFALL	1	1:58	1:58

Sign Name: 80 WB 343.7 (HARRIMAN)	SignId: 69	Milepost:	343.7
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
ADVISE 45 MPH MAX SAFE SPEED ICY ROAD BLOWING SNOW	3	1:41	5:05
ADVISE 45 MPH MAX SAFE SPEED SLOW MOVING TRAFFIC AHEAD			
ADVISE 45MPH TURN OFF CRUISE CONTROL			
FOG	3	0:58	2:55
FOG POOR VISIBILITY			
ICY SPOTS	36	2:29	95:51
ICY IN SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY ROAD			
ICY ROAD ADVISE 45MPH			
ICY ROAD AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW ADVISE 45 MPH MAX SAFE SPEED			
ICY ROAD BLOWING SNOW SLOW DOWN			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD POOR VISIBILITY ADVISE 45MPH			
ICY ROAD POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL			
ICY ROAD SNOWFALL BLOWING SNOW SLOW DOWN			
ICY ROAD SNOWFALL FOG			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTING SNOW BLOWING SNOW ADVISE 45 MPH			
ICY SPOTS DRIFTING SNOW BLOWING SNOW STRONG WIND			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW SLOW DOWN			
ICY SPOTS SNOWFALL FOG			
ICY SPOTS SNOWFALL FOG SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WINDS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROUGH ICE ADVISE 45 MPH	1	11:34	11:34
STRONG WIND	2	2:56	5:53
STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT OR EMPTY TRLRS			
WET ROAD SNOWFALL	5	1:02	5:11
WET ROAD ICY SPOTS SNOWFALL AHEAD			

WET ROAD SNOWFALL FOG			
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL			

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
SEPTEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	16	12:31	187:49
DENSE FOG AHEAD	3	4:21	13:04
DENSE FOG AHEAD LIMITED VISIBILITY REDUCE SPEED			
I80 WEST OF LARAMIE CLOSED	1	3:04	3:04
STRONG WIND AHEAD GUSTS 35+ MPH	4	2:03	8:13
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH I80 WEST OF LARAMIE CLOSED			
AMBER ALERT SYSTEM TEST	1	0:24	0:24

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
OCTOBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	28	9:23	262:49
DENSE FOG AHEAD	4	1:54	7:39
FOG AHEAD			
CAUTION FOGGY CONDITIONS MAY EXIST			
ICY SPOTS	14	1:43	25:32
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTOL			
ICY IN SPOTS			
ICY IN SPOTS WITH SNOWFALL			
ICY IN SPOTS WITH SNOWFALL PLEASE SLOW DOWN			
ICY IN SPOTS WITH SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROAD WITH SNOWFALL PLEASE SLOW DOWN			
STRONG WIND GUSTS 40+ MPH	17	4:26	75:33
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND GUSTS 60+ MPH			
STRONG WIND GUSTS 50+ MPH SNOWFALL			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
BLOWING SNOW	1	0:46	0:46
HEAVY SNOW LOW VISIBILITY ICY ROADS AHEAD	2	0:46	1:32
HEAVY SNOW LOW VISIBILITY SLICK ROADS AHEAD			
I-80 WESTBOUND CLOSED AT LARAMIE MP-310	1	0:22	0:22
WET ROAD WITH SNOWFALL	3	1:57	5:51
WET ROAD SNOWFALL AHEAD			

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
NOVEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
CAUTION WATCH FOR WILDLIFE ON ROAD	1	2:00	2:00
ICY SPOTS AHEAD	16	3:45	60:15
ICY SPOTS AHEAD SLOW DOWN			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS AND SNOWFALL AHEAD SLOW DOWN			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROADS SNOWFALL			
ICY ROADS SNOWFALL SLOW DOWN			
ICY ROADS SNOWFALL SLOW DOWN LIMITED VISIBILITY			
ICY ROAD DRIFTED SNOW TURN OFF CRUISE CONTROL			
SNOWFALL	1	1:14	1:14
BLOWING SNOW AHEAD	1	10:42	10:42
STRONG WIND GUSTS 40+ MPH	20	4:02	80:57
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 55+ MPH			
STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 60+ MPH			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS			
WRECK AHEAD SLOW DOWN	2	1:00	2:01
WRECK AHEAD LIVESTOCK ON ROAD			

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
DECEMBER 2007			
Message	**Frequency**	**Average Duration**	**Total Duration**
BLACK ICE SLOW DOWN ADVISE 35 MPH	1	2:29	2:29
BLOWING SNOW ICY SPOTS SLOW DOWN	3	8:50	26:31
BLOWING SNOW ICY SPOTS SLOW DOWN STRONG WIND GUSTS 40+ MPH			
BLOWING SNOW ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
FOG AHEAD	1	0:50	0:50
ICY SPOTS	117	3:01	354:36
ICY ROAD 35 MPH MAX			
ICY ROAD BLOWING SNOW 35 MPH MAX			
ICY ROAD BLOWING SNOW ADVISE NO LIGHT TRAILERS GUSTS 60+ MPH			
ICY ROAD BLOWING SNOW POOR VISIBILITY REDUCE SPEED 35 MPH SLOW DOWN			
ICY ROAD BLOWING SNOW POOR VISIBILITY REDUCE SPEED 45 MPH SLOW DOWN			
ICY ROAD BLOWING SNOW SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW TURN OFF CRUISE CONTROL NO PASSING			
ICY ROAD FOG AHEAD SLOW DOWN			
ICY ROAD FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD FOG SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD FOG TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN			
ICY ROAD SNOW FALL POOR VISIBILITY ADVISE NO LIGHT TRAILERS GUST 55+MPH			
ICY ROAD SNOWFALL 35 MPH MAX			

ICY ROAD SNOWFALL 35 MPH MAX STRONG WIND GUSTS 45+ MPH			
ICY ROAD SNOWFALL BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG LIMITED VISIBILITY SLOW DOWN			
ICY ROAD SNOWFALL FOG LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN 35 MPH MAX TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL STRONG WIND GUSTS 45+ MPH LIMITED VISIBILITY 35 MPH MAX			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ICY ROAD STRONG WIND BLOWING SNOW ADVISE 35 MPH MAX			
ICY ROAD STRONG WIND BLOWING SNOW SLOW DOWN			
ICY ROAD STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL NO PASSING			
ICY ROAD TURN OFF CRUISE CONTROL SNOWFALL			
ICY ROAD TURN OFF CRUISE CONTROL SNOWFALL LIMITED VISIBILITY			
ICY ROAD WITH SNOWFALL AHEAD			
ICY SPOTS AHEAD			
ICY SPOTS AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW			
ICY SPOTS BLOWING SNOW AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW POOR VISIBILITY NO UNNECESSARY TRAVEL ADVISORY			
ICY SPOTS BLOWING SNOW POOR VISIBILITY REDUCE SPEED 45 MPH			
ICY SPOTS BLOWING SNOW POOR VISIBILITY REDUCE SPEED 55 MPH			
ICY SPOTS BLOWING SNOW POOR VISIBILITY SLOW DOWN			
ICY SPOTS BLOWING SNOW SLOW DOWN			
ICY SPOTS BLOWING SNOW SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD SLOW DOWN			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL DRIFTING SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW			
ICY SPOTS STRONG WIND BLOWING SNOW POOR VISIBILITY MAX SPEED 45 MPH			
ICY SPOTS STRONG WIND BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			

ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 45+ MPH			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 65+ MPH BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH SLOW DOWN ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 55+ MPH SLOW DOWN ADVISE NO LIGHT TRAILERS			
ICY SPOTS STRONG WIND GUSTS 50+ MPH SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 50+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL I-80 & US-30 WEST OF LARAMIE CLOSED			
ICY SPOTS TURN OFF CRUISE CONTROL WRECK AHEAD SLOW DOWN			
SLICK IN SPOTS SNOWFALL SLOW DOWN			
SLOW DOWN ICY SPOTS AHEAD			
SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ROAD CLOSED	11	3:00	33:05
I-80 CLOSED			
I-80 CLOSED ALL TRAFFIC MUST EXIT			
I-80 CLOSED RETURN TO CHEYENNE NO PARKING ON ROADWAY			
I-80 CLOSED US-30 CLOSED AT LARAMIE ICY SPOTS TURN OFF CRUISE CONTROL			
I-80 CLOSED US-30 CLOSED AT LARAMIE MP 310 ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD CLOSED WYO 210 CLOSED			
WYO 210 CLOSED			
WYO 210 CLOSED STRONG WIND BLOWING SNOW			
ROUGH ICE SLOW DOWN	1	4:20	4:20
STRONG WIND	33	2:20	77:06
ADVISE NO LIGHT TRAILERS DUE TO STRONG WINDS GUSTS 45+ MPH			
ADVISE NO LIGHT TRAILERS DUE TO STRONG WINDS GUSTS 50+ MPH			
ADVISE NO LIGHT OR EMPTY TRAILERS STRONG WIND BLOWING SNOW			
ADVISE NO LIGHT OR EMPTY TRAILERS WY-210 CLOSED STRONG WIND BLOWING SNOW			
ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH			
ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH ICY ROAD STRONG WINDS			
ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH ICY SPOTS BLOWING SNOW			
STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS ""+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND BLOWING SNOW			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 60+ MPH			

STRONG WIND GUSTS 65+ MPH			
STRONG WIND GUSTS 35+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 70+ MPH ADVISE NO LIGHT TRAILERS			
STRONG WIND GUSTS 80+ MPH ADVISE NO LIGHT TRAILERS			

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
JANUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG AHEAD SLOW DOWN	2	0:46	1:33
FOG AHEAD LIMITED VISIBILITY SLOW DOWN			
I-80 & US 30 CLOSED	4	8:43	34:54
US 30 CLOSED OUT OF LARAMIE I-80 OPEN ICY SPOTS BLOWING SNOW			
US 30 & I80 WEST OUT OF LARAMIE CLOSED			
US 30 & I80 WEST OUT OF LARAMIE CLOSED STRONG WIND GUSTS 40+MPH			
ICY ROAD SNOWFALL SLOW DOWN	19	4:35	87:09
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW STRONG WINDS TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD			
ICY SPOTS SLOW DOWN			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL SLOW DOWN			
ICY SPOTS SNOWFALL STRONG WIND BLOWING SNOW			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND GUSTS 45+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
ICY SPOTS STRONG WIND SLOW DOWN			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
NO UNNECESSARY TRAVEL LIMITED VISIBILITY I-80 & US 30 CLOSED WEST	1	2:03	2:03
SNOWFALL	3	1:58	5:56
SNOWFALL AHEAD			
SNOWFALL TURN OFF CRUISE CONTROL			
STRONG WIND	38	4:42	173:59
ADVISE NO LIGHT OR EMPTY TRAILERS I-80 US 30 CLOSED WEST OF LARAMIE			
ADVISE NO LIGHT OR EMPTY TRAILERS LIMITED VISIBILITY I-80 US 30 CLOSED WEST OF LARAMIE			
ADVISE NO LIGHT OR EMPTY TRAILERS STRONG WIND GUSTS 50+ MPH			
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND AHEAD GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND AHEAD GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			

STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 60+ MPH BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 45+ MPH BLOWING SNOW			
STRONG WINDS			
STRONG WINDS GUSTS 55+ MPH			

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
FEBRUARY 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG POOR VISIBILITY SLOW DOWN	1	1:45	1:45
ICY IN SPOTS SNOW	28	2:44	76:35
ICY IN SPOTS TURN OFF CRUISE CONTROL			
ICY ROAD BLOWING SNOW STRONG WIND LIMITED VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL BLOWING SNOW STRONG WIND TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL LIMITED VISIBILITY			
ICY ROADS STRONG WINDS BLOWING SNOW			
ICY ROADS STRONG WINDS BLOWING SNOW 20 MILES AHEAD			
ICY SPOTS			
ICY SPOTS AHEAD I-80 CLOSED WEST OF LARAMIE			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW DRIFTING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTING SNOW SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS FOG POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND 20 MI AHEAD			
ICY SPOTS STRONG WIND 20 MI AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
SNOWFALL STRONG WIND GUSTS 35+ MPH TURN OFF CRUISE CONTROL	2	0:52	1:45
SNOWFALL STRONG WIND ICY SPOTS BLOWING SNOW LIMITED VISIBILITY			
STRONG WIND	23	6:51	157:43
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 45+ MPH			
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+ MPH			
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+MPH ICY ROAD AHEAD I-80 CLOSED WEST OF LARAMIE			
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 50+MPH ICY ROAD AHEAD SLOW DOWN			
STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+			
STRONG WIND AHEAD			

STRONG WIND AHEAD GUSTS 40+ MPH			
STRONG WIND AHEAD GUSTS 45+ MPH			
STRONG WIND AHEAD GUSTS 50+MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND I-80 & US-30 CLOSED AT LARAMIE			
STRONG WIND ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD CLOSED NO STOPPING ON ROADWAY	6	3:05	18:31
I-80 AND US-30 CLOSED AT LARAMIE STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 60+			
I-80 CLOSED			
I-80 CLOSED AT LARAMIE STRONG WIND			
I-80 CLOSED WEST OF LARAMIE			
US-30 CLOSED AT LARAMIE STRONG WIND ADVISE NO LIGHT TRAILERS GUSTS 50+			
WET ROAD SNOWFALL AHEAD SLOW DOWN	1	0:59	0:59

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
MARCH 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG SLOW DOWN	5	1:57	9:45
DENSE FOG POOR VISIBILITY SLOW DOWN			
DENSE FOG POOR VISIBILITY SNOWFALL ICY SPOTS TURN OFF CRUISE CONTROL			
FOG POOR VISIBILITY SLOW DOWN			
I-80 CLOSED ALL MUST EXIT	3	10:10	30:31
I-80 CLOSED ALL MUST EXIT ICY ROAD TURN OFF CRUISE CONTROL			
I80 CLOSED RETURN TO CHEYENNE DO NOT PARK ON ROADWAY OR SHOULDERS			
ICY ROAD TURN OFF CRUISE CONTROL	40	2:05	83:44
ICY IN SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL ADVISE 35 MPH MAX			
ICY ROAD SNOWFALL AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL FOG AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY ROAD STRONG WIND BLOWING SNOW SLOW DOWN TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL DENSE FOG AHEAD			
ICY ROADS FOG POOR VISIBILITY			
ICY ROADS POOR VISIBILITY			
ICY ROADS SNOWFALL FOG POOR VISIBILITY			
ICY ROADS SNOWFALL POOR VISIBILITY TURN OFF CRUISE CONTROL			
ICY ROADS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL WRECK AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS FOG AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS FOG POOR VISIBILITY SLOW DOWN			
ICY SPOTS FOG SLOW DOWN			
ICY SPOTS SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND BLOWING SNOW ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 45+MPH			

ICY SPOTS STRONG WIND BLOWING SNOW SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ICY SPOTS WRECK AHEAD SLOW DOWN TURN OFF CRUISE CONTROL			
NO UNNECESSARY TRAVEL	5	1:15	6:15
NO UNNECESSARY TRAVEL 20 MILES AHEAD			
NO UNNECESSARY TRAVEL ADVISORY ICY ROADS FOG POOR VISIBILITY ADVISE 35 MPH MAX			
NO UNNECESSARY TRAVEL ADVISORY ICY ROADS SNOWFALL FOG POOR VISIBILITY			
SNOWFALL	1	1:03	1:03
STRONG WIND	30	3:47	113:33
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 30+ MPH			
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 55+ MPH			
ADVISE NO LIGHT OR EMPTY TRAILERS GUSTS 60+ MPH			
ADVISE NO LIGHT OR EMPTY TRAILERS STRONG WIND GUSTS 45+ MPH			
STRONG WIND AHEAD			
STRONG WIND AHEAD ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND AHEAD GUSTS 45+MPH			
STRONG WIND AHEAD GUSTS 60+MPH			
STRONG WIND AHEAD GUSTS 60+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 35+ MPH			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 50+ MPH			
STRONG WIND GUSTS 50+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 55+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL	1	0:56	0:56

Sign Name: 80 WB 356.7 (CHEYENNE)	SignId: 67	Milepost:	356.7
APRIL 2008			
Message	**Frequency**	**Average Duration**	**Total Duration**
FOG	4	1:01	5:06
FOG LIMITED VISIBILITY			
FOG SLOW DOWN			
ICY SPOTS	30	1:40	50:17
ICY ROAD AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD DRIFTED SNOW BLOWING SNOW ROUGH ICE AHEAD ADVISE 45 MPH MAX SAFE SPEED			
ICY ROAD DRIFTED SNOW BLOWING SNOW ROUGH ICE AHEAD TURN OFF CRUISE CONTROL			
ICY ROAD DRIFTED SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY ROAD SNOWFALL AHEAD			
ICY ROAD SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY ROAD TURN OFF CRUISE CONTROL			
ICY SPOTS AHEAD TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTED SNOW BLOWING SNOW ROUGH ICE AHEAD ADVISE 45 MPH MAX SAFE SPEED			
ICY SPOTS DRIFTED SNOW BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS DRIFTING SNOW BLOWING SNOW ADVISE 45 MPH MAX SAFE SPEED			
ICY SPOTS DRIFTING SNOW BLOWING SNOW ADVISE 45 MPH MAX SAFE SPEED POOR VISIBILITY			

ICY SPOTS SNOWFALL			
ICY SPOTS SNOWFALL FOG TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL SLOW DOWN TURN OFF CRUISE CONTROL			
ICY SPOTS SNOWFALL TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND			
ICY SPOTS STRONG WIND GUSTS 45+ MPH TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WIND TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS BLOWING SNOW TURN OFF CRUISE CONTROL			
ICY SPOTS STRONG WINDS TURN OFF CRUISE CONTROL			
ICY SPOTS TURN OFF CRUISE CONTROL			
ROAD CLOSED NO STOPPING ON ROADWAY	3	10:51	32:34
I-80 IS TEMPORARILY CLOSED MILE POST 329-325			
STRONG WIND	18	4:52	87:46
STRONG WIND AHEAD			
STRONG WIND AHEAD GUSTS 45 MPH			
STRONG WIND BLOWING SNOW			
STRONG WIND GUSTS 40+ MPH			
STRONG WIND GUSTS 45+ MPH			
STRONG WIND GUSTS 45+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
STRONG WIND GUSTS 65+ MPH ADVISE NO LIGHT OR EMPTY TRAILERS			
WET ROAD	5	0:56	4:43
WET ROAD ICY SPOTS SNOWFALL			
WET ROAD SNOWFALL AHEAD			
WET ROAD SNOWFALL FOG			
WET ROAD SNOWFALL TURN OFF CRUISE CONTROL			

APPENDIX B: DMS MESSAGE BREAKDOWN

MESSAGE BREAKDOWN BY CONDITION: SEPTEMBER 2007 - APRIL 2008

CONDITIONS

FOG	**WIND**
AREAS OF FOG AHEAD	GUSTS 40+ MPH
DENSE FOG 7 MILES AHEAD	GUSTS 45+ MPH
DENSE FOG AHEAD	GUSTS 50+ MPH
FOG	GUSTS 55+ MPH
FOG 5 MILES AHEAD	GUSTS 60+ MPH
FOG 7 MILES AHEAD	STRONG WIND
FOG AHEAD	STRONG WIND 20 MI AHEAD
FOG WITH SNOWFALL AHEAD	STRONG WIND 7 MILES AHEAD GUSTS 40+ MPH
THICK FOG AHEAD	STRONG WIND 7 MILES AHEAD GUSTS 45+ MPH
ICE/ICY	STRONG WIND 7 MILES AHEAD GUSTS 50+ MPH
BLACK ICE	STRONG WIND AHEAD
ICY	STRONG WIND AHEAD GUSTS 30+ MPH
ICY IN SPOTS	STRONG WIND AHEAD GUSTS 30 MPH
ICY IN SPOTS AND BLOWING SNOW AHEAD	STRONG WIND AHEAD GUSTS 35+ MPH
ICY IN SPOTS WITH BLOWING SNOW	STRONG WIND AHEAD GUSTS 40+ MPH
ICY IN SPOTS WITH FOG	STRONG WIND AHEAD GUSTS 45+ MPH
ICY IN SPOTS WITH SNOWFALL	STRONG WIND AHEAD GUSTS 45 MPH
ICY IN SPOTS WITH SNOWFALL AHEAD	STRONG WIND AHEAD GUSTS 50+ MPH
ICY ROAD	STRONG WIND AHEAD GUSTS 55+ MPH
ICY ROAD 1 MILE AHEAD	STRONG WIND AHEAD GUSTS 60+ MPH
ICY ROAD AHEAD	STRONG WIND GUSTS 30+ MPH
ICY ROAD WITH SNOWFALL	STRONG WIND GUSTS 30 MPH
ICY ROADS	STRONG WIND GUSTS 35+ MPH
ICY ROADS AHEAD	STRONG WIND GUSTS 40+ MPH
ICY SPOTS	STRONG WIND GUSTS 45+ MPH
ICY SPOTS AHEAD	STRONG WIND GUSTS 45 MPH
ICY SPOTS AND FOG AHEAD	STRONG WIND GUSTS 50+ MPH
ICY SPOTS AND SNOWFALL AHEAD	STRONG WIND GUSTS 55+ MPH
ROUGH ICE	STRONG WIND GUSTS 60+ MPH
ROUGH ICE AHEAD	STRONG WIND GUSTS 65+ MPH
SLICK IN SPOTS	STRONG WIND GUSTS 70+ MPH
SLICK ROADS AHEAD	STRONG WIND GUSTS 75+ MPH
VISIBILITY	STRONG WIND GUSTS 80+ MPH
LIMITED VISIBILITY	STRONG WINDS
LOW VISIBILITY	**WET**
LOW VISIBILITY ON ROAD	ROADS WET WITH SNOWFALL
POOR VISIBILITY	WET ROAD
SNOW/SNOWFALL	WET ROAD AHEAD
BLOWING SNOW	WET ROAD WITH SNOWFALL
BLOWING SNOW 7 MILES AHEAD	WET ROAD WITH STRONG WIND AHEAD
BLOWING SNOW 20 MILES AHEAD	WET TO ICY IN SPOTS WITH SNOWFALL AHEAD
BLOWING SNOW AHEAD	WET WITH SNOW
DRIFTED SNOW	WET WITH SNOW AND FOG
DRIFTING SNOW	
HEAVY SNOW	
SNOW	
SNOW AHEAD	
SNOW AND FOG AHEAD	
SNOWFALL	
SNOWFALL AHEAD	

MESSAGE BREAKDOWN BY CONDITION: SEPTEMBER 2007 - APRIL 2008

CLOSURES

I-25 SOUTH IN COLORADO IS CLOSED
I-25 SOUTH IS CLOSED
I-25 SOUTH TO COLORADO IS CLOSED
I-25 SOUTHBOUND CLOSED CRASHES IN COLORADO
I-25 SOUTHBOUND IS CLOSED
I-80 & US 30 CLOSED
I-80 & US 30 CLOSED WEST
I-80 & US-30 CLOSED AT LARAMIE
I-80 & US-30 WEST OF LARAMIE CLOSED
I-80 AND US-30 CLOSED AT LARAMIE
I-80 CLOSED
I-80 CLOSED AHEAD RETURN TO LARAMIE NO PARKING ON ROADWAY
I-80 CLOSED AHEAD RETURN TO LARAMIE NO PARKING ON ROADWAYS
I-80 CLOSED ALL MUST EXIT
I-80 CLOSED ALL TRAFFIC MUST EXIT
I-80 CLOSED AT LARAMIE
I-80 CLOSED AT LARAMIE EXIT 316 FOR PARKING
I-80 CLOSED NO PARKING ON ROAD
I-80 CLOSED NO PARKING ON ROAD RETURN TO LARAMIE
I-80 CLOSED NO PARKING ON ROADWAY
I-80 CLOSED NO PARKING ON ROADWAY RETURN TO LARAMIE
I80 CLOSED RETURN TO CHEYENNE DO NOT PARK ON ROADWAY OR SHOULDERS
I-80 CLOSED RETURN TO CHEYENNE NO PARKING ON ROADWAY
I-80 CLOSED RETURN TO LARAMIE DO NOT PARK ON ROADWAY OR SHOULDER
I-80 CLOSED US-30 CLOSED AT LARAMIE
I-80 CLOSED US-30 CLOSED AT LARAMIE MP 310
I-80 CLOSED WEST OF LARAMIE
I-80 CLOSED WESTBOUND
I-80 CLOSED WY-210 CLOSED
I-80 EASTBOUND CLOSED ALL TRAFFIC EXIT
I-80 EAST CLOSED
I-80 IS TEMPORARILY CLOSED MILEPOST 329-325
I-80 US 30 CLOSED WEST OF LARAMIE
I80 WEST OF LARAMIE CLOSED
I-80 WESTBOUND CLOSED
I-80 WESTBOUND CLOSED AT LARAMIE MP-310
RIGHT LANE CLOSED AHEAD
ROAD CLOSED AHEAD AT MP 323
ROAD CLOSED 6 MILES AHEAD
ROAD CLOSED DUE TO WRECK
ROAD CLOSED NO PARKING ON ROADWAY
ROAD CLOSED NO STOPPING ON ROADWAY
ROAD CLOSED NO STOPPING OR PARKING ON ROADWAY
ROAD CLOSED RETURN TO LARAMIE
ROAD CLOSED RETURN TO LARAMIE NO STOPPING ON ROADWAY
ROAD CLOSED WRECK AHEAD
ROAD CLOSED WYO 210 CLOSED
US 30 & I80 WEST OUT OF LARAMIE CLOSED
US 30 CLOSED OUT OF LARAMIE I-80 OPEN
US-30 CLOSED AT LARAMIE
WY-210 CLOSED
WYO 210 CLOSED

MESSAGE BREAKDOWN BY CONDITION: SEPTEMBER 2007 - APRIL 2008
ADVISORY/CAUTION

SPEED	**WILDLIFE/LIVESTOCK**
35 MPH MAX	CAUTION 6 MILES AHEAD ANTELOPE ON ROAD
55 MPH MAX SPEED	CAUTION WATCH FOR WILDLIFE ON ROAD
ADVISE 35 MPH	LIVESTOCK ON ROAD
ADVISE 35 MPH MAX	WATCH FOR WILDLIFE
ADVISE 35 MPH MAX SPEED	WATCH FOR WILDLIFE ON HIGHWAY
ADVISE 40 MPH MAX SPEED	WATCH FOR WILDLIFE ON ROAD
ADVISE 45 MPH	**UNNECESSARY TRAVEL**
ADVISE 45 MPH MAX	NO UNNECESSARY TRAVEL
ADVISE 45 MPH MAX SAFE SPEED	NO UNNECESSARY TRAVEL 20 MILES AHEAD
ADVISE 45 MPH MAX SPEED	NO UNNECESSARY TRAVEL ADVISORY
ADVISE 45 MPH SPEED	**OTHER**
ADVISE 55 MPH	AMBER ALERT SYSTEM TEST
ADVISE 55 MPH MAX	AVOID WET ROAD CRASHES
ADVISE 55 MPH WHEN WET	BRIDGES MAY BE ICY
ADVISE 65 MPH	CAUTION FOGGY CONDITIONS MAY EXIST
ADVISE 65 MPH MAX	NO PASSING
ADVISE MAX SAFE SPEED 45 MPH	RIGHT LANES BLOCKED USE LEFT LANE
MAX 45 MPH IN AREAS OF FOG	SLOW MOVING TRAFFIC AHEAD
MAX 50 MPH	TRAFFIC STOPPED AHEAD
MAX 50 MPH IN AREAS OF FOG	TRAFFIC STOPPED AHEAD BE PREPARED TO STOP
MAX SPEED 45 MPH	TURN OFF CRUISE CONTROL
MAX SPEED 55 MPH	
REDUCE SPEED	
REDUCE SPEED 35 MPH	
REDUCE SPEED 45 MPH	
PLEASE SLOW DOWN	
SLOW	
SLOW DOWN	
SLOW DOWN 45 MPH	
SPEED LIMIT 40 MPH ON DOWN GRADE	
SPEED LIMIT 50 MPH IN AREAS OF FOG	
LIGHT TRAILERS	
ADVISE NO LIGHT OR EMPTY TRAILERS	
ADVISE NO LIGHT OR EMPTY TRLRS	
ADVISE NO LIGHT TRAILERS	
ADVISE NO LIGHT TRAILERS DUE TO STRONG WINDS	
ADVISE NO LIGHT TRAILERS GUSTS 30+ MPH	
ADVISE NO LIGHT TRAILERS GUSTS 45+ MPH	
ADVISE NO LIGHT TRAILERS GUSTS 50+ MPH	
ADVISE NO LIGHT TRAILERS GUSTS 50+	
ADVISE NO LIGHT TRAILERS GUSTS 55+ MPH	
ADVISE NO LIGHT TRAILERS GUSTS 60+ MPH	
ADVISE NO LIGHT TRAILERS GUSTS 60+	

MESSAGE BREAKDOWN BY CONDITION SEPTEMBER 2007 - APRIL 2008

WRECKS

CRASH 8 MILES AHEAD
CRASH AHEAD
CRASH AHEAD LANE BLOCKAGE
PREPARE TO STOP WRECK AHEAD
WRECK 2 MILES AHEAD KEEP RIGHT
WRECK 12 MILES AHEAD
WRECK 4 MILES AHEAD PREPARE TO STOP
WRECK 7 MILES AHEAD PREPARE TO STOP
WRECK 15 MILES AHEAD PREPARE TO STOP
WRECK AHEAD
WRECK AHEAD 4 MILES
WRECK AHEAD 8 MILES
WRECK AHEAD 1 LANE TRAFFIC USE CAUTION
WRECK AHEAD BE PREPARED TO STOP
WRECK AHEAD BOTH LANES BLOCKED
WRECK AHEAD DRIVING LANE BLOCKED
WRECK AHEAD KEEP LEFT
WRECK AHEAD KEEP RIGHT
WRECK AHEAD LANES BLOCKED BE PREPARED TO STOP
WRECK AHEAD LIVESTOCK ON ROAD
WRECK AHEAD MM 324 ALL LANES BLOCKED
WRECK AHEAD MM 324 BOTH LANES BLOCKED
WRECK AHEAD MM 324 LEFT LANE BLOCKED
WRECK AHEAD MOVE TO LEFT SLOW DOWN
WRECK AHEAD PLEASE SLOW DOWN
WRECK AHEAD PREPARE TO STOP
WRECK AHEAD RIGHT LANE BLOCKED
WRECK AHEAD RIGHT LANE CLOSED
WRECK AHEAD SLOW DOWN
WRECK AHEAD SLOW DOWN RIGHT LANE BLOCKED
WRECK AHEAD USE LEFT LANE
WRECK AHEAD USE RIGHT LANE
WRECK AHEAD USE RIGHT LANE LEFT LANE CLOSED

ROAD WORK

RIGHT LANE CLOSED 2 MILES AHEAD ROAD WORK
ROAD WORK 1 MILE AHEAD
ROAD WORK 4 MILES AHEAD
ROAD WORK 2 MILES AHEAD STRIPING CREW
ROAD WORK 7 MILES AHEAD LEFT LANE CLOSED
ROAD WORK AHEAD
ROAD WORK AHEAD BE PREPARED TO STOP
ROAD WORK AHEAD BE PREPARED TO STOP USE BOTH LANES
ROAD WORK AHEAD KEEP RIGHT
ROAD WORK AHEAD RIGHT LANE CLOSED

APPENDIX C: FREQUENT TRAVELER SURVEYS

Frequent Traveler Survey - Base

Page 1

Thank you for your participation in the Frequent Traveler Panel.
We appreciate your help in improving the quality of travel information provided by WYDOT.

According to your travel profile, an incident may have impacted you on:
Tuesday, December 20, 2007 between 7:45 and 8:15 a.m. on I-80 near milepost 335
for westbound travel towards Laramie.

Please share your experience by answering the questions below.

If you have any questions, comments, or suggestions about this survey please contact:
Rhonda Young at 307-766-2184 or rkyoung@uwyo.edu.

1. We would like to keep track of the number of unique responders to these surveys so please enter your name in the text box below. If you prefer to remain anonymous, please enter a user name of your own choosing as an identifier for all the surveys.*

2. Were you traveling or considering traveling on I-80 during the date/time of the incident (indicated above)? *
   - ◯ Yes
   - ◯ No

---

3. Were you aware of this incident BEFORE leaving for your scheduled trip?
   - ◯ Yes
   - ◯ No (Skip to Question #13)

4. How did you learn about the incident BEFORE your scheduled trip?
   Please mark all that apply.
   - ☐ 511 or 1-888-WYO-ROAD Phone Service
   - ☐ Broadcast radio
   - ☐ Television
   - ☐ WYDOT website
   - ☐ Other, please specify

5. How did the information about the incident affect your scheduled trip?
   Please mark all that apply.
   - ☐ I left earlier.
   - ☐ I postponed my trip and left later.

- [ ] I cancelled my trip.
- [ ] I was not affected—I left at my usual time.
- [ ] I took the action advised by the travel information (e.g., slow down, watch for ice, etc.).
- [ ] Felt less stress because better informed of the situation.
- [ ] Helped decide what actions to take.
- [ ] Other, please describe

6. For the "BEFORE" trip information, please rate your agreement/disagreement for the following statements:

	Completely Agree	Somewhat Agree	Neutral	Somewhat Disagree	Completely Disagree	Not Sure
The information was USEFUL for making travel decisions (e.g., go, no-go, delay trip).	○	○	○	○	○	○
The information was EASY to understand.	○	○	○	○	○	○
The information was ACCURATE.	○	○	○	○	○	○
The information was CREDIBLE.	○	○	○	○	○	○
You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.	○	○	○	○	○	○
The information was TIMELY and gave you enough time to decide what action to take (e.g., turn back, slow down, etc.).	○	○	○	○	○	○
You took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	○	○	○	○	○	○
You used the information to help have a safer trip.	○	○	○	○	○	○

7. What travel information sources were most important to you BEFORE this trip.
(1=Most Important, 2=Second most, 3=Third most, etc.)

511 or 1-888-WYO-ROAD Phone Service

Broadcast radio

TV

WYDOT website

Other (please specify in text box below):

8. Please specify the "other" information source from question #7, if ranked.

9. Referring to the information source you ranked first (i.e. most important) in question #7, why was it the most important information source to you?

10. What information was most useful to you?

11. What do you think could be improved?

12. Indicate the factors that were important when choosing information sources to use BEFORE this trip.

	Extremely Important	Very Important	Somewhat Important	Not Important	No Opinon
Accuracy	○	○	○	○	○
Easy Access	○	○	○	○	○
Convenience	○	○	○	○	○
Availability	○	○	○	○	○
Usefulness	○	○	○	○	○
Accessibility	○	○	○	○	○
Timeliness	○	○	○	○	○

Credibility	○	○	○	○	○

13. Did you find out about the incident DURING your scheduled trip?

- ○ Yes
- ○ No (Skip to the end of survey)

14. How did you learn about the incident DURING your scheduled trip?
Please mark all that apply.

- ☐ 511 or 1-888-WYO-ROAD Phone Service
- ☐ Broadcast radio
- ☐ Encountered while driving
- ☐ Flashing Caution Signs
- ☐ Highway Advisory Radio (1610 AM)
- ☐ Roadside Dynamic Message Sign
- ☐ Other, please specify

15. How did the information about the incident affect your trip?
Please mark all that apply.

- ☐ I took the action advised by the travel information (e.g., slow down, watch for ice, etc.).
- ☐ Felt less stress because better informed of the situation.
- ☐ Helped decide what actions to take.
- ☐ I postponed my trip until later.
- ☐ I cancelled my trip.
- ☐ The information did not affect me.
- ☐ Other, please describe

16. For the "DURING" trip information, please rate your agreement/disagreement for the following statements:

	Completely Agree	Somewhat Agree	Neutral	Somewhat Disagree	Completely Disagree	Not Sure
The information was USEFUL for making travel decisions (e.g., go, no-go, delay trip).	○	○	○	○	○	○
The information was EASY to understand.	○	○	○	○	○	○
The information was						

ACCURATE .	○	○	○	○	○	○
The information was CREDIBLE.	○	○	○	○	○	○
You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.	○	○	○	○	○	○
The information was TIMELY and gave you enough time to decide what action to take (e.g., turn back, slow down, etc.).	○	○	○	○	○	○
You took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	○	○	○	○	○	○
You used the information to help have a safer trip.	○	○	○	○	○	○
The roadside Dynamic Message Signs were effective for communicating with you	○	○	○	○	○	○

17. What travel information sources were most important to you DURING this trip.
(1=Most Important, 2=Second most, 3=Third most, etc.)

511 or 1-888-WYO-ROAD Phone Service

Broadcast radio

Flashing Caution Signs

Highway Advisory Radio

Roadside Dynamic Message Signs

Other (please specify in text box below):

18. Please specify the "other" information source from question #17, if ranked.

19. Referring to the information source you ranked first (i.e. most important) in question #17, why was it the most important information source to you?

20. What information was most useful to you?

21. What do you think could be improved?

22. Indicate the factors that were important when choosing information sources to use DURING this trip.

	Extremely Important	Very Important	Somewhat Important	Not Important	No Opinion
Accuracy	○	○	○	○	○
Easy Access	○	○	○	○	○
Convenience	○	○	○	○	○
Availability	○	○	○	○	○
Usefulness	○	○	○	○	○
Accessibility	○	○	○	○	○
Timeliness	○	○	○	○	○
Credibility	○	○	○	○	○

Thank you for your participation.

Fall 2007 Panel Member Survey Information

53 Total Members

Highest Level of Education

Less than High School Graduate	0.0%
High School Graduate	0.0%
Some College or Junior College Graduate	22.6%
College Gradute	32.1%
Post-Graduate Degree	45.3%
Other	0.0%

Gender

Male	43.4%
Female	56.6%

What is your current age?

18-24	3.8%
25-34	24.5%
35-44	17.0%
45-54	37.7%
55-64	15.1%
65+	1.9%

Which of the following best describes your current employment status?

Employed full-time	84.9%
Employed part-time	1.9%
Retired	1.9%
Not currently employed	0.0%
Full-time student/Not employed	9.4%

Are you a current employee of the Wyoming Department of Transportation?

Yes	0.0%
No	100.0%

Please select your preferred method for receiving and responding to these surveys.

E-mail Notification and Web Survey	88.7%
E-mail Notification and E-mail Survey	9.4%
Phone Notification and Mailed Paper Survey	1.9%

Number of trips typically taken between Cheyenne and Laramie per week:

Average:	7.22
Median:	10
High:	20
Low:	0

What is your most common reason for taking the trip?

Commuting to work or school	75.5%
Shipping or delivery	1.9%
Errands	7.5%
Vacation/Recreation	11.3%

In the table below, please indicate the days and times you typically take a WESTBOUND trip on I-80 from Cheyenne to Laramie:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Midnight-6 a.m.	1.9%	3.8%	3.8%	5.7%	3.8%	0.0%	1.9%
6-9 a.m.	0.0%	17.0%	22.6%	17.0%	22.6%	17.0%	0.0%
9 a.m.-Noon	5.7%	7.5%	0.0%	3.8%	0.0%	5.7%	7.5%
Noon-3 p.m.	1.9%	0.0%	0.0%	1.9%	1.9%	0.0%	0.0%
3-6 p.m.	9.4%	37.7%	35.8%	34.0%	37.7%	39.6%	3.8%
6-9 p.m.	9.4%	11.3%	11.3%	11.3%	7.5%	11.3%	3.8%
9 p.m.-Midnight	1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

In the table below, please indicate the days and times you typically take an EASTBOUND trip on I-80 from Laramie to Cheyenne:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Midnight-6 a.m.	1.9%	3.8%	0.0%	1.9%	5.7%	1.9%	0.0%
6-9 a.m.	0.0%	41.5%	43.4%	39.6%	37.7%	41.5%	0.0%
9 a.m.-Noon	3.8%	1.9%	1.9%	3.8%	3.8%	1.9%	7.5%
Noon-3 p.m.	0.0%	60.0%	20.0%	20.0%	20.0%	60.0%	0.0%
3-6 p.m.	11.3%	28.3%	22.6%	22.6%	22.6%	18.9%	5.7%
6-9 p.m.	3.8%	1.9%	3.8%	3.8%	3.8%	7.5%	7.5%
9 p.m.-Midnight	1.9%	1.9%	0.0%	1.9%	3.8%	1.9%	1.9%

Respond to the following statements regarding your past travel behavior on I-80 between Cheyenne and Laramie.

I use travel information to help have a safer trip.

Never	0.0%
Rarely	3.8%
Sometimes	24.5%
Routinely	52.8%
Always	15.1%

I use weather information to increase my ability to respond to changes in weather conditions.

Never	1.9%
Rarely	1.9%
Sometimes	9.4%
Routinely	62.3%
Always	20.8%

I use road condition information to increase my ability to repsond to changes in road conditions.

Never	0.0%
Rarely	0.0%
Sometimes	13.2%
Routinely	60.4%
Always	22.6%

I use traffic information to increase my ability to respond to changes in traffic conditions.

Never	13.2%
Rarely	7.5%
Sometimes	18.9%
Routinely	49.1%
Always	7.5%

I take action (e.g., slow down, watch for ice, etc.) when advised by the travel information.

Never	0.0%
Rarely	0.0%
Sometimes	5.7%
Routinely	41.5%
Always	49.1%

Fall Survey results – all 5 incidents

Total # sent: 208 Responses: 117 Yes on question 1: 57 No on question 1 but cancelled trip: 3

			How did you learn about the incident BEFORE your scheduled trip?				
Date Started	**Were you traveling on I-80 during the date/time of the incident (indicated above)?**	**Were you aware of this incident BEFORE leaving for your scheduled trip?**	**511 or 1-888-WYO-ROAD Phone Service**	**Broadcast radio**	**Television**	**WYDOT website**	**Other**
11/26/2007 14:41	Yes	No	0	0	0	0	
11/26/2007 14:42	Yes	No	0	0	0	0	
11/26/2007 14:44	No	Yes	0	0	0	1	
11/26/2007 14:46	Yes	No	0	0	0	0	
11/26/2007 14:50	Yes	No	0	0	0	0	
11/26/2007 14:54	Yes	Yes	0	0	0	0	weather report
11/26/2007 15:34	Yes	No	0	0	0	0	
11/26/2007 15:45	Yes	No	0	0	0	0	
11/27/2007 11:23	Yes	No	0	0	0	0	
11/27/2007 21:52	Yes	Yes	0	1	0	0	
11/28/2007 4:42	Yes	No	0	0	0	0	
12/3/2007 19:19	Yes	No	0	0	0	0	
12/4/2007 8:22	Yes	No	0	0	0	0	
12/4/2007 9:05	Yes	No	0	0	0	0	
12/5/2007 16:36	Yes	No	0	0	0	0	
12/6/2007 14:43	Yes	No	0	0	0	0	N/A
12/8/2007 9:49	Yes	Yes	0	0	0	0	Gated road on our return from …[1]
12/7/2007 14:28	Yes	No	0	0	0	0	
12/7/2007 14:36	Yes	Yes	0	0	1	0	
12/7/2007 14:40	Yes	Yes	0	1	0	0	
12/7/2007 14:40	Yes	Yes	1	0	0	0	
12/7/2007 14:45	No	Yes	0	0	0	0	You can see that there is a lot of snow.
12/7/2007 15:09	Yes	Yes	0	0	0	1	
12/8/2007 3:33	Yes	Yes	0	0	0	0	Weather report via web
12/8/2007 7:11	Yes	Yes	0	0	0	1	
12/8/2007 7:59	Yes	Yes	0	0	0	1	
12/8/2007 8:27	Yes	Yes	0	1	0	1	
12/8/2007 10:34	Yes	Yes	0	0	0	0	looked outside and saw bad weather
12/10/2007 8:14	Yes	Yes	1	1	0	1	
12/10/2007 9:57	No	Yes	1	0	0	0	
12/10/2007 10:17	Yes	Yes	0	1	0	0	
12/12/2007 9:20	Yes	No	0	0	0	0	
12/12/2007 10:37	Yes	No	0	0	0	0	
12/12/2007 18:03	Yes	No	0	1	0	0	
12/11/2007 17:57	Yes	Yes	0	1	0	0	
12/11/2007 18:46	Yes	Yes	0	0	0	1	
12/11/2007 19:06	Yes	Yes	1	0	0	0	
12/12/2007 0:20	Yes	Yes	0	0	0	0	The snow.
12/12/2007 6:53	Yes	Yes	1	0	0	0	
12/12/2007 7:37	Yes	Yes	0	0	0	0	530 AM and 1610 Am radio
12/12/2007 9:03	Yes	Yes	0	1	0	0	
12/12/2007 20:18	Yes	Yes	0	0	0	1	
12/14/2007 9:02	Yes	Yes	0	1	0	1	
12/17/2007 14:12	Yes	Yes	0	0	0	1	
12/13/2007 16:38	Yes	No	0	0	0	0	Road conditions deteriorated …[2]
12/13/2007 16:47	Yes	No	0	0	0	0	Behind the accident and stopped …[3]
12/13/2007 17:52	Yes	Yes	0	0	0	1	
12/13/2007 17:57	Yes	Yes	0	0	0	1	
12/13/2007 18:47	Yes	Yes	0	0	0	1	
12/13/2007 20:00	Yes	Yes	0	0	0	1	
12/14/2007 7:29	Yes	Yes	0	0	0	1	
12/14/2007 8:48	Yes	No	0	0	0	0	
12/14/2007 12:40	Yes	Yes	0	0	0	1	
12/15/2007 22:15	Yes	Yes	0	0	0	1	
12/16/2007 8:44	Yes	No	0	0	0	0	We wew on the interstate at …[4]
12/17/2007 6:28	Yes	Yes	1	0	1	0	
12/17/2007 11:13	Yes	No	0	0	0	0	
12/17/2007 21:58	Yes	Yes	0	0	0	1	
12/17/2007 23:20	Yes	Yes	1	0	0	1	Radio
12/18/2007 12:34	Yes	No	1	0	0	0	

[1] Gated road on our return from Ft Collins to cheyenne to Vedauwoo

[2] Road conditions deteriorated while enroute

[3] Behind the accident and stopped on the highway

[4] We wew on the interstate at 6:45am, so we didn't know until later

How did the information about the incident affect your scheduled trip?							
I left earlier.	I postponed my trip and left later.	I cancelled my trip.	I was not affected / I left at my usual time.	I took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	Felt less stress because better informed of the situation.	Helped decide what actions to take.	Other
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	1	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	1	weather report
0	0	0	0	0	0	0	
0	0	0	1	1	0	0	
0	0	0	0	0	0	0	
0	0	0	1	1	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	took an alternate route
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0		0	0	0	0
0	0	0		0	0	0	0
0	0	0	0	0	0	0	
0	0	0	1	1	1	1	
0	0	0	0	1	0	1	
0	1	0	0	1	0	0	
0	0	1	0	0	0	0	You can see that there is a lot of snow.
0	0	1	0	0	0	0	
1	0	0	0	0	0	0	The westbound trip was at scheduled time, but …[5]
0	0	0	0	1	0	1	
0	0	1	0	0	0	0	
1	0	0	0	1	0	1	
0	0	0		0	0	0	0
0	0	0	0	0	0	1	Delayed trip so roads could be cleared
0	0	1	0	0	0	0	
1	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	1	0	0	0	
0	0	0	0	1	0	0	
0	0	1	0	0	0	0	
1	0	0	0	1	0	0	
0	0	0	0	0	0	0	The westbound trip was on I-80--it was difficult with …[6]
1	0	0	0	1	1	0	
0	0	0		0	0	0	0
1	0	0	0	0	0	0	
1	0	0	0	1	0	1	
0	0	0	0	0	0	0	I got a hotel Tuesday night in Cheyenne
0	0	1	0	0	0	0	
0	0	0		0	0	0	0
0	0	0		0	0	0	0
0	0	0	0	0	0	1	
0	0	1	0	0	0	0	
0	0	0	1	1	0	0	
0	0	1	0	0	0	0	
0	0	0	0	0	0	1	I waited and left the next day
0	0	0	0	0	0	0	
0	1	0	0	1	0	0	
1	0	0	0	0	0	1	
0	0	0		0	0	0	0
1	0	0	0	1	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	requested permission to go home from highway patrol
0	0	0	0	0	0	0	Tried to go but could not get passed road closed.
0	0	0	0	0	0	0	

[5]The westbound trip was at scheduled time, but return eastbound trip I left earlier.

[6]The westbound trip was on I-80--it was difficult with the trucks. Eastbound return trip was easier on Happy Jack Road.

For the BEFORE trip information, please rate your agreement/disagreement for the following statements:							
The information was USEFUL for making travel decisions (e.g., go, no-go, delay trip).	**The information was EASY to understand.**	**The information was ACCURATE.**	**The information was CREDIBLE.**	**You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.**	**The information was TIMELY and gave you enough time to decide what action to take (e.g., turn back, slow down, etc.).**	**You took the action advised by the travel information (e.g., slow down, watch for ice, etc.).**	**You used the information to help have a safer trip.**
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
				Somewhat Agree	Not Sure	Completely Agree	Completely Agree
Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure
Somewhat Agree	Completely Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Somewhat Agree
Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Neutral	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree
Somewhat Agree	Somewhat Disagree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Somewhat Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Somewhat Agree
Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure
Completely Agree	Completely Agree		Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Somewhat Agree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree
Somewhat Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Disagree	Completely Agree	Completely Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Neutral	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Neutral	Neutral	Completely Agree	Completely Agree
	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Disagree	Somewhat Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Neutral	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Somewhat Agree	Somewhat Disagree	Somewhat Disagree	Completely Disagree	Somewhat Disagree	Neutral	Neutral
Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Agree	Completely Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Disagree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Not Sure	Not Sure
Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree			
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Neutral	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
	Neutral	Neutral	Completely Agree	Completely Agree	Somewhat Disagree	Neutral	Somewhat Disagree

What travel information sources were most important to you BEFORE this trip.					
511 or 1-888-WYO-ROAD Phone Service	Broadcast radio	TV	WYDOT website	Other (please specify in text box below)	Please specify the other information source from question #6, if ranked.
.					
.					
.	.	.	1		
.					
.					
3	2	1			
.					
3	1	2	4		
.					
4	1	3	5	2	Road banners
.					
.	.	.	.	1	I saw the road closed sign
.					
.					
.					
.					
.	.	.	1		
.					
.	.	2	1		
.	1				
2	1				
.	.	.	1		
2	4	3	1		
.	2	3	1		
2	3	4	1		
2	3	4	1		
3	2	4	1		
.	.	.	.	1	common sense
1	3	.	2		
1	2				
.	1	.	2		
.					
.					
.	1				
4	1	3	2		
2	4	3	1		
1	3	4	2		
.	.	.	1	2	The actual snowfall.
1	2	3	4		
2	1	4	3		
3	1	2	4		
4	3	5	1	2	weather radar and wind charts on the internet.
3	2	4	1		
2	.	.	1		
1	2	3	4		
.	.	.	1		
3	2	4	1		
.	.	2	1	3	Contact with a relative in Cheyenne
3	2	4	1		
.		.	1		
2	.	.	1		
.					
.	.	.	1		
2	3	4	1	5	
2	4	3	1	5	
1	3	2	4		I use the phone in the morning and the internet in the afternoon
.					
.	.	.	1		
2	1	4	3		
.					

Referring to the information source you ranked first (i.e. most important) in question #6, why was it the most important information source to you?	What information was most useful to you?
Because the web cameras allowed me to assess the situation on the pass before making the trip to …[7]	
It gave me the information I needed in order to prepare for my departure. In addition it formed the next …[8]	Weather report (radar).
Availability.	Signage on I-80 indicating ice and limited visibility ahead
My radio is always on when I wake up. I generly don't watch the tv, use the computer, or call wyoroad.	Icy patches watch information.
I left a Cheyenne hotel, headed west on I-80, saw the road closed sign.	the road closed sign
we checked for road closures before we went to Ft Collins. We did not have the closure info on our return	
Cameras available and up to date information.	Cameras.
the only one I checked	
I could see what the roads look like.	The webcams
Using the WYDOT website allows me to check for road closure or unusual conditions, and I can view …[9]	See above.
Able to get almost real time road conditions prior to leaving.	Road conditions and web cam shots.
Fast	visual, and at my control
road condition description and cameras	description, cameras, weather report
the wydot info, in general, is only slightly beneficial at best. WYDOT tends to try wolf often and it …[10]	on their website, it they would add information to the more info part …[15]
Easy to access	Road conditions
Easy access. Timely.	Specifics if situation and predictions of how it would be in near future.
Listen to Wyoming Public Radio every morning.	The highway was open, and roads were icy.
Had radio on	
It provides pictures so that I can make my own decisions and get more up to date information. The …[11]	Cameras and atmospheric sensors.
It is the most timely information	Web cams when it is light out and I can see the conditions
The WYDOT website is always up-to-date with the road cam pictures of the road.	All of it.
Because i don't have access to the web from home and can reach the roads report from my cell phone	Road conditions
Help me make the decision to leave 15 min ealier.	The road condition i.e. snow packed, icey, etc.
Assessibility	road conditions
It was easily available and the web camera's helped. The road conditions were better than the written report.	Web camera's and advisory.
Easy	Closure report and webcam
it's the easiest to access and you can actually look @ the road conditions for yourself	
I presume it is updated the most often.	
Information on conditions and web cam pictures.	Web cam pictures
had computer	open or closed
I used the web cameras and road closure information. It is quick, accurate, and very visual. I could see …[12]	Wydot Cameras--Huge!
Usally the most current.	Road conditions and web cams.
Easy to look up on the internet	
webcams showed the road conditions clearly. the Closures and Advisory section also provided a lot …[13]	webcams & closures and advisories
The website is up to date and the webcams are extremely helpful. The webcams provide information on …[14]	see #8 on webcams
Ease of use of website makes planning for trips easier.	Detailed information of sections of the highway
I always have access to my cell phone	
most current	closure notice and conditions
Assessibility	closures

[7]Because the web cameras allowed me to assess the situation on the pass before making the trip to Cheyenne. Based on past experience, I judged it to be not worth the risk of traveling.

[8]It gave me the information I needed in order to prepare for my departure. In addition it formed the next steps in my mind in gathering information. This time I didn't need to go down the full list.

[9]Using the WYDOT website allows me to check for road closure or unusual conditions, and I can view the web cameras to actually see in real time what the conditions are.

[10]the wydot info, in general, is only slightly beneficial at best. WYDOT tends to try wolf often and it decreases the effectiveness of all their info.

[11]It provides pictures so that I can make my own decisions and get more up to date information. The information/conditions listed on the website are frequently out of date for the fast changing weather/road condtions between Cheyenne and Laramie.

[12]I used the web cameras and road closure information. It is quick, accurate, and very visual. I could see exactly what was happening along my proposed route.

[13]webcams showed the road conditions clearly. the Closures and Advisory section also provided a lot of information

[14]The website is up to date and the webcams are extremely helpful. The webcams provide information on the road conditions and where to expect difficulties. For instance, this situation was one in which I-80 was fine until the Harriman area.

[15]on their website, it they would add information to the more info part at the top of the website. ie. let us know if accidents are happening and at what locations.

What do you think could be improved?
More complete descriptions of the weather conditions. For example, it would have helped to know that the road conditions were icey.
Where the incident is occuring, more specifically.
There was no way I could have known. I was at a party and did not check any of the other options.
The weather forcast on the same page.
Better road conditions, example: snow packed, icy ect.
Nothing at this time.
N/A
The information on the website needs to be up dated more, possibly every 15 mins.
I'd like to see a link to precipitation radar
More information on road conditions -- blowing snow and visibility
Some mention of Happy Jack Road conditions (b Friday afternoon, it had not been plowed at all).
The listed road conditons need to be updated more freqently and better terms need to be used. Slick in spots is used to define ...[16]
The 511 report is broken up into sections of roadway, although this is understandable,it is difficult to listen to.
Nothing at this time.
530 am and 1610 am needs to be updated on a regular basis plus updated when conditions changed.
not sure
When I left work in Cheyenne after 4 p.m. the radio report had not been updated since 7 a.m., which made it totally useless, again. I ...[17]
Frequency of the updates. In this situation, there was no indication on the road reports how trecherous the road conditions ...[18]
Have 1610 AM working.
Make sure it is up to date as possible
More cameras--Quicker road closures--and access to web cameras from the vehicle in which I am traveling.
N/A
Estimated time that it might reopen or say why it was closed.
The closures and advisory page could be a little clearer. I had to look at it for some time to figure out that Eastbound was closed ...[19]
The tv stations do not provide any information. When we have the news on at home, they very seldom report on the road being ...[20]
Hazardous sign with yellow flashing lights SHOULD have been used that morning and afternoon. I travel early in the morning and ...[21]
updates about opening of the road

[16]The listed road conditons need to be updated more freqently and better terms need to be used. Slick in spots is used to define anything from a single patch of ice to a roadway that is extremely icy and dangerous for more that 20 miles.

[17]When I left work in Cheyenne after 4 p.m. the radio report had not been updated since 7 a.m., which made it totally useless, again. I don't watch tv in the morning, so I wouldn't know how to rank it.

[18]Frequency of the updates. In this situation, there was no indication on the road reports how trecherous the road conditions were. Around 7:30 a.m., the visibility before Harriman Road was less than 20 yards.

[19]The closures and advisory page could be a little clearer. I had to look at it for some time to figure out that Eastbound was closed and westbound was open but ugly. Perhaps east bound information could be grouped together, as well as westbound. that way when we look at it, it is clearer.

[20]The tv stations do not provide any information. When we have the news on at home, they very seldom report on the road being closed. That evening, Channel 5, CBS, reported that I-25 was closed somewhere north of Cheyenne and never once mentioned that I-80 was closed. This is likely the ignorance of Ch.5 and not WYDOT but if we want to improve information dissemination, our local news should be reporting on current conditions.

[21]Hazardous sign with yellow flashing lights SHOULD have been used that morning and afternoon. I travel early in the morning and late in the afternoon. I just happened to travel when the road was re-opened in the afternoon but it was soon closed again (while I was traveling on it) The road was far worse Wed than Tuesday due to the high winds and ground blizzard conditions.

Indicate the factors that were important when choosing information sources to use BEFORE this trip.							
Accuracy	**Easy Access**	**Convenience**	**Availability**	**Usefulness**	**Accessibility**	**Timeliness**	**Credibility**
No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Very Important	Very Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important					
No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Extremely Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	
Extremely Important	Extremely Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Very Important	Very Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Very Important	Very Important	Extremely Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Very Important	Extremely Important
Somewhat Important	Very Important	Very Important	Very Important	Very Important	Very Important	Somewhat Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Very Important	Extremely Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Very Important

	How did you learn about the incident DURING your scheduled trip?						
Did you find out about the incident DURING your scheduled trip?	**511 or 1-888-WYO-ROAD Phone Service**	**Broadcast radio**	**Encountered while driving**	**Flashing Caution Signs**	**Highway Advisory Radio (1610 AM)**	**Roadside Dynamic Message Sign**	**Other**
No	0	0	0	0	0	0	
Yes	0	0	1	0	0	1	
No	0	0	0	0	0	0	
Yes	0	0	0	0	0	1	
Yes	0	0	1	0	0	0	
No	0	0	0	0	0	0	
Yes	0	1	1	1	0	0	
Yes	0	1	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	1	0	0	0	0	
Yes	0	0	1	0	0	0	
	0	0	1	1	0	0	took an alternate route
Yes	0	0	0	1	0	0	
No	0	0	1	0	0	0	
Yes	1	0	0	1	0	0	
Yes	0	0	1	0	0	0	N/A
Yes	0	0	1	0	0	0	Gated road on our return from Ft Collins to cheyenne to Vedauwoo
Yes	0	0	1	0	0	1	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
	0	0	0	0	0	0	
No	0	0	0	0	0	0	You can see that there is a lot of snow.
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	The westbound trip was at scheduled time, but return eastbound …[22]
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	0	0	1	looked outside and saw bad weather
No	0	1	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	1	0	1	
Yes	0	0	1	1	0	0	
No	0	0	0	1	0	0	
Yes	0	1	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	The westbound trip was on I-80--it was difficult with the trucks…[23]
No	0	0	0	0	0	0	
No	0	0	0	0	1	0	530 AM and 1610 Am radio
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
	0	0	0	0	0	0	I got a hotel Tuesday night in Cheyenne
No	0	0	0	0	0	0	
Yes	0	0	0	0	0	0	I witnessed multiple accidents, including a semi roll-over.
Yes	0	0	0	0	0	0	Traffic stopped on the interstate.
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	1	1	1	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	0	0	0	
Yes	0	0	0	0	1	0	
Yes	0	0	0	0	0	0	Called a friend who could look on the wydot website
Yes	0	0	0	0	0	0	Encountered while driving and HP that was helping us out of the ditch
No	0	0	0	0	0	0	
Yes	0	0	0	0	0	0	I was stopped in traffic by a wreck in front of me
No	0	0	0	0	0	0	requested permission to go home from highway patrol
No	0	0	0	0	0	0	Tried to go but could not get passed road closed.
Yes	0	0	0	0	0	0	There was no info on the full extend of the conditions.

[22]The westbound trip was at scheduled time, but return eastbound trip I left earlier.

[23]The westbound trip was on I-80--it was difficult with the trucks. Eastbound return trip was easier on Happy Jack Road.

How did the information about the incident affect your trip?						
I took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	Felt less stress because better informed of the situation.	Helped decide what actions to take.	I postponed my trip until later.	I cancelled my trip.	The information did not affect me.	Other
0	0	0	0	0	0	
0	0	0	0	0	1	
0	0	0	0	0	0	
1	1	0	0	0	0	
1	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	1	
1	0	0	0	0	0	
0	0	0	0	0	0	
1	0	0	0	0	0	
0	0	0	0	0	1	
0	0	0	0	0	0	I took an alternate route
0	0	0	0	0	0	I waited on the side of the road until the roads were open...
0	0	0	0	0	1	
0	0	0	0	0	0	I got stranded in Cheyenne
0	0	0	0	0	0	Took Happy Jack
0	0	0	0	0	0	the closure affected our return trip. We waited for permission to return home.
0	0	0	0	0	1	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	You can see that there is a lot of snow.
0	0	0	0	0	0	
0	0	0	0	0	0	The westbound trip was at scheduled time, but return eastbound trip I left earlier.
0	0	0	0	0	0	
0	0	0	0	1	0	
0	0	0	0	0	0	
1	0	0	0	0	0	
1	0	1	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	1	
1	0	0	0	0	0	
0	0	1	0	0	1	
1	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	The westbound trip was on I-80--it was difficult with the trucks. Eastbound ...[24]
0	0	0	0	0	0	
1	0	0	0	0	0	530 AM and 1610 Am radio
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	I got a hotel Tuesday night in Cheyenne
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	1	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	Had to return to Laramie via US 287
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	I was stuck in the middle of an accident for over an hour.
0	0	0	1	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	requested permission to go home from highway patrol
0	0	0	0	0	0	Tried to go but could not get passed road closed.
0	0	0	0	0	1	There was no info on the full extend of the conditions.

[24]The westbound trip was on I-80--it was difficult with the trucks. Eastbound return trip was easier on Happy Jack Road.

For the DURING trip information, please rate your agreement/disagreement for the following statements:								
The information was USEFUL for making travel decisions (e.g., go, no-go, delay trip).	**The information was EASY to understand.**	**The information was ACCURATE.**	**The information was CREDIBLE.**	**You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.**	**The information was TIMELY and gave you enough time to decide what action to take (e.g., turn back, slow down, etc.).**	**You took the action advised by the travel information (e.g., slow down, watch for ice, etc.).**	**You used the information to help have a safer trip.**	**The roadside Dynamic Message Signs were effective for communicating with you**
Completely Agree	Somewhat Agree	Completely Agree	Neutral	Somewhat Agree	Somewhat Agree	Somewhat Disagree	Neutral	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Neutral	Somewhat Agree	Neutral	Neutral
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree
Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree
	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Not Sure	Not Sure	Not Sure
	Completely Agree	Completely Agree	Neutral	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Somewhat Disagree	Completely Agree	Neutral	Completely Agree
	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Not Sure	Completely Agree	Completely Disagree
Neutral	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree
Completely Disagree	Somewhat Agree	Completely Disagree	Completely Disagree	Somewhat Disagree	Completely Disagree	Somewhat Agree	Completely Disagree	Completely Disagree
Somewhat Disagree	Somewhat Disagree	Neutral	Completely Disagree	Somewhat Agree	Somewhat Disagree	Somewhat Agree	Somewhat Agree	Neutral
Neutral	Neutral	Neutral	Neutral	Neutral	Somewhat Disagree	Neutral	Neutral	Not Sure
Neutral	Completely Agree	Somewhat Disagree	Somewhat Agree	Neutral	Neutral	Somewhat Agree	Somewhat Agree	Somewhat Agree
Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree			
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Agree	Completely Disagree	Completely Agree	Somewhat Agree	Somewhat Disagree
Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Agree	Completely Agree	Completely Disagree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree		Somewhat Agree
	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Neutral	Somewhat Agree	Somewhat Agree	Completely Disagree
Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure
Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure	Not Sure
Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree

What travel information sources were most important to you BEFORE this trip.						
511 or 1-888-WYO-ROAD Phone Service	Broadcast radio	Flashing Caution Signs	Highway Advisory Radio	Roadside Dyanmic Message Signs	Other (please specify in text box below)	Please specify the other information source from question #16, if ranked.
.						
		2		1		
.						
.	.	.	1	2		
.						
.						
5	2	4	6	3	1	website
5	1	2	4	3		
.						
5	2	3	4	1		
6	5	2	3	4	1	WYDOT Website
.	.	1				
1	3	4	2	5	6	WYDOT Website
4	3	2	5	1		
1	.	2				
5	4	1	2	3		
.						
		2		1		You are forcing me to rank sources that I didn't use so numbers 3-5 are meaningless
.						
.						
3	2	.	.	1		
.						
.						
.						
.						
.						
.						
.	.	.	.	2	1	common sense
.	1					
.						
.						
.	.	1	.	2		
5	3	2	4	1		
.	.	2	.	1		
.	1	2	4	3		
.						
.						
.						
.						
3	2	4	1	5		
.						
.						
.						
.						
5	4	2	3	1		Once a person is enroute, it is difficult to adjust travel plans. Conditions were so ...[25]
.	.	2	3	1		
1	2	3	4			
.						
.	.	2	3	1		
.						
.						
.	.	.	.	.	1	Had police scanner radio on in car. None of the other sources weree available to me
.	.	.	1			
2	6	3	4	5	1	cell phone call to friend
.						
6	5	4	3	2	1	the traffic was stopped. Nothing more I could do.
.						
.						
3	6	4	5	2	1	We had a scanner

[25] Once a person is enroute, it is difficult to adjust travel plans. Conditions were so poor, you could not stop or turn around.

Referring to the information source you ranked first (i.e. most important) in question #16, why was it the most important information source to you?	What information was most useful to you?
Because I didn't use #'s 3, 4. or 5	The information provided by the overhead message sign about a mile east of the Lincol
Easy to get to on AM dial	Dynamic message signs
timeliness, availability and ease of use	images
Timeliness	Warning of declining weather conditions.
Signs were very visible.	Icy roads ahead.
Easy to check from home prior to leaving.	None, On the morning in question did not check the web site and highway signs were da
It was there at the beginning of the trip.	
Because i can call the service from my cellphone. I cant always get radio on my car, and there arent enc	I like to know why i'm being forced to wait. Or if the roads are closed...etc. At one point o
After we were stranded in Cheyenne we checked the internet wyoroad.info and the phone 1-888-WYO-R	Whether the road was open or closed. The road conditions were not very accurate.
It was what I encountered when trying to return to Laramie.	Not sure why it was closed at the time, suspect accident.
Because I didn't use any other information except the signs and the feel of the snow as I drove.	The signs give me a hint of what to expect. They don't influence my driving that much as
I had already checked the WYO Roads and could see the roads were open. The sign said icy spots. To	My experience with the road.
Only information available	road conditions
Actually, both types of signs were equally useful	Informing me that there was ice.
Because it conveyed the appropriate information when I needed it.	ice
Radio on	
They were visible through the dense fog.	Flashing road signs.
up to date informaiton	road conditions
3	
Showed that the road was closed.	Closure information
Its all I had.	
the road was closed	
Because the other options make no sense. I got stuck behind the wreck before they shut the road.	The tail lights on the vehichle in front of me
We were able to get information from the scanner.	The information that WOULD have been most useful was an accurate description of the

Referring to the information source you ranked first (i.e. most important) in question #16, why was it the most important information source to you?	What information was most useful to you?
Because I didn't use #'s 3, 4. or 5	The information provided by the overhead message sign about a mile east of …[29]
Easy to get to on AM dial	Dynamic message signs
timeliness, availability and ease of use	images
Timeliness	Warning of declining weather conditions.
Signs were very visible.	Icy roads ahead.
Easy to check from home prior to leaving.	None, On the morning in question did not check the web site and highway signs …[30]
It was there at the beginning of the trip.	
Because i can call the service from my cellphone. I cant always get radio on my car, and there …[26]	I like to know why i'm being forced to wait. Or if the roads are closed...etc. At one …[31]
After we were stranded in Cheyenne we checked the internet wyoroad.info and the phone …[27]	Whether the road was open or closed. The road conditions were not very accurate.
It was what I encountered when trying to return to Laramie.	Not sure why it was closed at the time, suspect accident.
Because I didn't use any other information except the signs and the feel of the snow as I drove.	The signs give me a hint of what to expect. They don't influence my driving that …[32]
I had already checked the WYO Roads and could see the roads were open. The sign said icy …[28]	My experience with the road.
Only information available	road conditions
Actually, both types of signs were equally useful	Informing me that there was ice.
Because it conveyed the appropriate information when I needed it.	ice
Radio on	
They were visible through the dense fog.	Flashing road signs.
up to date informaiton	road conditions
3	
Showed that the road was closed.	Closure information
Its all I had.	
the road was closed	
Because the other options make no sense. I got stuck behind the wreck before they shut the road.	The tail lights on the vehichle in front of me
We were able to get information from the scanner.	The information that WOULD have been most useful was an accurate …[33]

[26] Because i can call the service from my cellphone. I cant always get radio on my car, and there arent enough road signs for me to know all the time (especially if traffic is at a stand still)

[27] After we were stranded in Cheyenne we checked the internet wyoroad.info and the phone 1-888-WYO-Road, too make sure the roads were open for traveling back to Laramie

[28] I had already checked the WYO Roads and could see the roads were open. The sign said icy spots. To me that means there will be spots that are icy, it was icy from Laramie to Cheyenne. The worse part of the road was 12 miles outside of Cheyenne were the road was snow covered, you couldn't see the lines and the semi's pasted and caused snow flurries. The signs were not on past the top of the summit. Why have 'em if we're not going to use 'em.

[29] The information provided by the overhead message sign about a mile east of the Lincoln Monument was accurate. However the information was obvious by the time I reached the sign.

[30] None, On the morning in question did not check the web site and highway signs were dark, i.e messages had not been posted yet. Note: My time of travel on this day was 5:35am to 6:20am. Was not expecting the slight ice conditions encountered but was surprised the signs wern't on yet. Conditions were worse on the return trip 4:00pm to 4:45pm due to wind blowing across highway and causing ice conditions between Buford and the summit.

[31] I like to know why i'm being forced to wait. Or if the roads are closed...etc. At one point on sunday, the website, the radio and the phone service said the roads were ALL open..when in reality, they were closed and i was waiting because officers wouldn't let anyone through. Was aggravating.

[32] The signs give me a hint of what to expect. They don't influence my driving that much as I adjust my driving based on my perception of the road, not what the signs warn me about.

[33] The information that WOULD have been most useful was an accurate description of the weather.

What do you think could be improved?
The sign at the base of the Summit just east of town was void of any road conditions further east. Since there was no snow in Laramie this morning …[34]
Maybe include message about possible window damage when sanding has taken place.
more specific warnings (i.e. left lane slick at mile marker 340)
More frequent radio announcements.
More specific locations.
Was surprised no signs lit during the early morning, usally are operational if conditions warrent.
It would have been good to know what the Happy Jack Road was like.
On the radio...they need a new person to say the conditions. I could NOT understand this chick. She kept cutting out, slurring words together. She …[35]
Quicker updates. I called the WYOROAD number and it was only updates between it seemed once every hour. That is not quick enough in bad conditions.
Highway advisory radio still reported I-80 westbound open, needs to be more current.
the signs are fine.
The communication. It should have advised no travel unless necessary.
More information provided on visibility
Might have mentioned the fog
Timely updates and information on mid-points such as Otto Road, Harriman Road, and Vedauwoo.
1610 AM radio should work!
N/A
Radio 1610am was not updated. It only said teh name of the station and no actual road information.
The roadside signs were not blinking - I always check the radio advisory if the weather is bad to get up to date information. Usually the signs are on but …[36]
Not much could have been done given the situation
Being more detailed about the conditions. WYO Roads and the dynamic signs never said No Unnecessary Travel. Blowing snow, icy spots, turn off …[37]

[34]The sign at the base of the Summit just east of town was void of any road conditions further east. Since there was no snow in Laramie this morning when I left, I really didn't feel inclined to check on the weather before I left.

[35]On the radio...they need a new person to say the conditions. I could NOT understand this chick. She kept cutting out, slurring words together. She needs to pronunciate properly. All i got was ible conditions irritable? terrible? horrible? i need to know!

[36]The roadside signs were not blinking - I always check the radio advisory if the weather is bad to get up to date information. Usually the signs are on but in this case, they were not operational at the Grand on-ramp in Laramie.It would be ideal, but I realize not always possible, to know when the road might open. I believe it was closed due to accidents and perhaps knowing that the road would be open in X hours would be good. I should note that the road was open going west but not east.

[37]Being more detailed about the conditions. WYO Roads and the dynamic signs never said No Unnecessary Travel. Blowing snow, icy spots, turn off cruise control can mean there's a mile of this to its this way the entire way to Cheyenne. If SOMETHING would have said No unnecessary travel we may not have been stuck on the road for over an hour with 2 preganant women. WE were driving in white out conditions for most of the way. Normally this type of weather stops at the Tree in the Rock. The road was closed AFTER we were on it.

Indicate the factors that were important when choosing information sources to use DURING this trip.							
Accuracy	**Easy Access**	**Convenience**	**Availability**	**Usefulness**	**Accessibility**	**Timeliness**	**Credibility**
Not Important	Not Important	Not Important	Not Important	Not Important	Not Important	Not Important	Not Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Very Important	Very Important	Extremely Important	Very Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Very Important	Somewhat Important	Extremely Important	Extremely Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Very Important
Somewhat Important	Somewhat Important	Not Important	Not Important	Somewhat Important	Somewhat Important	Very Important	Somewhat Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Somewhat Important	Somewhat Important	Somewhat Important	Very Important	Somewhat Important	Somewhat Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Extremely Important	Very Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Very Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important
No Opinion	No Opinion	No Opinion	No Opinion	No Opinion	No Opinion	No Opinion	No Opinion
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important

Spring 2008 Panel Member Survey Information

54 Total Members

Highest Level of Education

Less than High School Graduate	0.0%
High School Graduate	0.0%
Some College or Junior College Graduate	22.2%
College Gradute	31.5%
Post-Graduate Degree	46.3%
Other	0.0%

Gender

Male	46.3%
Female	53.7%

What is your current age?

18-24	3.7%
25-34	24.1%
35-44	20.4%
45-54	35.2%
55-64	14.8%
65+	1.9%

Which of the following best describes your current employment status?

Employed full-time	85.2%
Employed part-time	1.9%
Retired	1.9%
Not currently employed	0.0%
Full-time student/Not employed	9.3%

Are you a current employee of the Wyoming Department of Transportation?

Yes	1.9%
No	98.1%

Please select your preferred method for receiving and responding to these surveys.

E-mail Notification and Web Survey	87.0%
E-mail Notification and E-mail Survey	11.1%
Phone Notification and Mailed Paper Survey	1.9%

Number of trips typically taken between Cheyenne and Laramie per week:

Average:	7.65
Median:	10
High:	20
Low:	1

What is your most common reason for taking the trip?

Commuting to work or school	77.8%
Shipping or delivery	1.9%
Errands	5.6%
Vacation/Recreation	11.1%

In the table below, please indicate the days and times you typically take a WESTBOUND trip on I-80 from Cheyenne to Laramie:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Midnight-6 a.m.	1.9%	3.7%	3.7%	5.6%	3.7%	1.9%	1.9%
6-9 a.m.	0.0%	20.4%	25.9%	20.4%	25.9%	20.4%	0.0%
9 a.m.-Noon	5.6%	7.4%	0.0%	3.7%	0.0%	5.6%	7.4%
Noon-3 p.m.	1.9%	0.0%	0.0%	1.9%	1.9%	0.0%	0.0%
3-6 p.m.	9.3%	38.9%	37.0%	35.2%	38.9%	40.7%	5.6%
6-9 p.m.	11.1%	13.0%	11.1%	13.0%	9.3%	13.0%	5.6%
9 p.m.-Midnight	3.7%	1.9%	1.9%	1.9%	1.9%	1.9%	1.9%

In the table below, please indicate the days and times you typically take an EASTBOUND trip on I-80 from Laramie to Cheyenne:

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Midnight-6 a.m.	1.9%	3.7%	0.0%	1.9%	5.6%	1.9%	0.0%
6-9 a.m.	0.0%	44.4%	44.4%	42.6%	40.7%	44.4%	0.0%
9 a.m.-Noon	3.7%	1.9%	1.9%	3.7%	3.7%	1.9%	5.6%
Noon-3 p.m.	0.0%	5.6%	1.9%	1.9%	1.9%	3.7%	1.9%
3-6 p.m.	13.0%	29.6%	24.1%	24.1%	24.1%	20.4%	7.4%
6-9 p.m.	5.6%	1.9%	3.7%	3.7%	3.7%	7.4%	9.3%
9 p.m.-Midnight	3.7%	3.7%	1.9%	3.7%	5.6%	3.7%	3.7%

Respond to the following statements regarding your past travel behavior on I-80 between Cheyenne and Laramie.

I use travel information to help have a safer trip.

Never	0.0%
Rarely	3.7%
Sometimes	27.8%
Routinely	51.9%
Always	13.0%

I use weather information to increase my ability to respond to changes in weather conditions.

Never	1.9%
Rarely	3.7%
Sometimes	9.3%
Routinely	61.1%
Always	20.4%

I use road condition information to increase my ability to repsond to changes in road conditions.

Never	0.0%
Rarely	0.0%
Sometimes	14.8%
Routinely	61.1%
Always	20.4%

I use traffic information to increase my ability to respond to changes in traffic conditions.

Never	11.1%
Rarely	7.4%
Sometimes	20.4%
Routinely	50.0%
Always	7.4%

I take action (e.g., slow down, watch for ice, etc.) when advised by the travel information.

Never	0.0%
Rarely	0.0%
Sometimes	5.6%
Routinely	42.6%
Always	48.1%

Spring Survey results – all 6 incidents

Total # sent: 297 Responses: 128 Yes on question 1: 78 No on question 1 but cancelled trip: 1

			How did you learn about the incident BEFORE your scheduled trip?				
Date Started	Were you traveling or considering traveling on I-80 during the date/time of the incident (indicated above)?	Were you aware of this incident BEFORE leaving for your scheduled trip?	511 or 1-888-WYO-ROAD Phone Service	Broadcast radio	Television	WYDOT website	Other
3/28/2008 8:46	Yes	No	0	0	0	0	
3/28/2008 8:47	Yes	No	0	0	0	0	
3/28/2008 8:57	Yes	Yes	1	0	0	0	
3/28/2008 9:00	Yes	No	0	0	0	0	
3/28/2008 9:03	Yes	No	0	0	0	0	
3/28/2008 9:05	Yes	No	0	0	0	0	
3/28/2008 9:16	Yes	No	0	0	0	0	
3/28/2008 9:22	Yes	Yes	0	0	1	1	snow on the ground in Laramie
3/28/2008 9:25	Yes	Yes	0	1	0	0	
3/28/2008 10:06	Yes	No	0	0	0	1	
3/28/2008 10:22	Yes	No	0	0	0	0	
3/31/2008 6:38	Yes	No	0	0	0	0	
3/31/2008 8:53	Yes	No	0	0	0	0	
3/31/2008 9:30	Yes	No	0	0	0	0	
3/31/2008 20:49	Yes	Yes	0	0	0	1	
3/31/2008 14:24	Yes	Yes	0	0	0	1	
3/31/2008 14:32	Yes	Yes	0	0	0	1	
3/31/2008 14:39	Yes	Yes	0	0	0	1	
3/31/2008 14:41	Yes	Yes	0	1	0	0	
3/31/2008 19:20	Yes	Yes	0	0	0	1	
3/31/2008 19:56	Yes	Yes	0	0	0	1	
4/1/2008 19:41	Yes	Yes	1	0	0	0	
4/1/2008 22:20	Yes	No	0	0	0	0	
4/2/2008 9:21	Yes	Yes	1	0	0	0	
4/4/2008 9:43	Yes	No	0	0	0	0	
4/8/2008 11:15	Yes	Yes	0	0	0	0	
4/8/2008 11:17	Yes	Yes	0	0	0	1	Weather.com
4/8/2008 11:23	Yes	Yes	0	1	0	0	I live at Vedauwoo, so I looked out the window.
4/8/2008 11:23	Yes	Yes	1	0	0	0	
4/8/2008 11:45	Yes	Yes	0	0	0	1	
4/8/2008 11:52	Yes	Yes	0	1	0	0	
4/8/2008 11:56	Yes	Yes	0	0	0	1	
4/8/2008 12:03	Yes	Yes	1	0	0	1	
4/8/2008 12:12	Yes	Yes	0	0	0	1	
4/8/2008 12:14	Yes	Yes	0	0	0	1	
4/8/2008 13:30	Yes	Yes	0	0	0	0	Seeing the weather
4/8/2008 17:54	Yes	Yes	0	1	0	0	
4/8/2008 21:36	Yes	Yes	0	0	0	0	LED Message Boards
4/8/2008 22:19	Yes	Yes	0	0	0	1	
4/9/2008 9:32	Yes	No	0	0	0	0	
4/11/2008 15:35	Yes	Yes	1	1	1	0	
4/12/2008 12:42	Yes	Yes	1	0	0	0	
4/12/2008 14:15	Yes	Yes	0	0	1	0	
4/12/2008 15:31	Yes	Yes	0	0	0	1	
4/12/2008 15:56	Yes	Yes	0	0	0	1	
4/13/2008 7:31	Yes	Yes	0	1	0	1	
4/13/2008 7:50	Yes	Yes	0	0	0	1	
4/13/2008 8:58	Yes	Yes	0	0	0	1	
4/13/2008 11:41	Yes	Yes	0	1	0	1	
4/13/2008 16:55	Yes	Yes	1	1	1	0	
4/13/2008 19:55	Yes	Yes	0	0	0	1	
4/13/2008 22:24	Yes	Yes	0	1	1	1	
4/14/2008 6:20	Yes	Yes	1	0	0	0	
4/14/2008 7:48	Yes	Yes	1	0	0	0	
4/14/2008 9:21	Yes	Yes	0	1	0	1	
4/14/2008 12:30	Yes	Yes	0	1	0	1	looking out the window
4/14/2008 12:35	Yes	Yes	0	0	0	1	weather.com
4/15/2008 8:33	Yes	Yes	0	0	0	1	
4/16/2008 9:44	Yes	Yes	0	0	1	1	
4/18/2008 6:36	Yes	Yes	0	1	0	1	
4/16/2008 10:44	Yes	No	0	0	0	0	
4/16/2008 12:29	Yes	Yes	0	1	0	0	
4/16/2008 14:39	Yes	Yes	0	0	0	1	
4/16/2008 21:00	Yes	Yes	0	0	0	1	
5/5/2008 15:48	Yes	Yes	1	0	0	0	
5/5/2008 15:52	Yes	Yes	1	1	0	0	
5/5/2008 15:53	Yes	Yes	1	0	0	0	
5/5/2008 15:56	Yes	Yes	0	0	1	1	
5/5/2008 16:25	Yes	Yes	0	1	0	1	
5/5/2008 18:24	Yes	Yes	0	0	0	1	
5/5/2008 19:57	No	Yes	0	0	0	1	
5/6/2008 9:20	Yes	Yes	1	1	0	0	
5/6/2008 10:55	Yes	No	0	0	0	1	
5/6/2008 11:44	Yes	Yes	0	1	0	1	
5/6/2008 11:50	Yes	Yes	1	1	0	1	
5/6/2008 13:26	Yes	Yes	0	1	0	1	
5/6/2008 16:49	Yes	Yes	0	0	0	1	
5/6/2008 17:53	Yes	Yes	0	0	0	1	
5/8/2008 12:07	Yes	Yes	0	1	0	1	

How did the information about the incident affect your scheduled trip?							
I left earlier.	I postponed my trip and left later.	I cancelled my trip.	I was not affected / I left at my usual time.	I took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	Felt less stress because better informed of the situation.	Helped decide what actions to take.	Other
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	1	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	0	0	0	Left at usual time expecting it to be bad, just because the weather was ...[1]
0	0	0	0	0	0	0	
0	0	0	1	1	0	1	
0	1	0	0	0	0	0	
0	0	1	0	0	0	0	
0	0	0	1	0	0	0	
0	0	0	0	0	0	0	
0	0	0	0	1	0	0	
0	0	0	0	0	0	0	
1	0	0	0	0	0	0	
1	0	0	0	0	0	0	
0	1	0	0	0	1	1	
0	1	0	0	1	0	1	
1	0	0	0	1	0	0	
0	0	0	1	1	0	0	
0	0	1	0	0	0	0	
1	0	0	0	0	0	1	took alternate route
0	0	0	0	0	0	0	
0	0	0	0	0	0	1	called the state patrol and got permission to go around the barrier on I80 ...[2]
0	0	0	0	0	0	0	
0	0	0	1	0	0	0	
1	0	0	0	1	0	0	
1	0	0	0	1	0	0	
0	0	0	0	1	0	0	
0	0	0	1	0	0	0	
0	0	0	0	1	0	0	
0	0	1	0	0	0	0	
1	0	0	0	1	1	1	
0	0	0	0	0	0	1	Alterred travel route to Happy Jack
0	0	0	0	1	0	0	
0	0	0	1	0	0	0	
1	0	0	0	0	0	0	drove from Laramie to summit then took 210 Happy Jack to Cheyenne
0	0	0	0	1	0	1	
1	0	0	0	0	0	0	
0	0	0	0	0	0	0	
1	0	0	0	0	0	0	
0	0	0	0	0	0	0	
1	0	0	0	0	0	0	
1	0	0	0	1	0	1	
1	0	0	0	0	0	0	
0	0	0	1	0	0	1	
0	0	1	0	0	0	0	
0	0	0	0	1	0	0	
0	0	1	0	0	0	0	
1	0	0	0	0	0	1	
0	0	1	0	0	0	0	
0	0	1	0	1	0	0	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	1	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	0	0	0	0	0	had to wait for the road to open
0	0	0	0	0	0	0	
0	0	0	1	0	0	0	
0	0	0	1	1	0	0	
0	0	0	1	0	0	0	
0	0	1	0	0	0	0	
0	1	0	0	0	0	0	
0	0	0	0	0	0	0	
0	0	1	0	0	0	1	
0	0	1	0	0	0	0	
0	0	0	0	0	0	1	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	1	0	0	0	0	
0	0	0	0	0	0	0	I 80 Was closed so could not leave home
0	1	0	0	0	0	1	Could plan other arrangements
0	1	0	0	0	0	0	
0	0	1	0	0	0	0	
0	0	0	0	0	0	0	Took other Route

[1] Left at usual time expecting it to be bad, just because the weather was bad in Laramie

[2] called the state patrol and got permission to go around the barrier on I80 to travel from Laramie to our home in Vedauwoo

For the BEFORE trip information, please rate your agreement/disagreement for the following statements:							
The information was USEFUL for making travel decisions (e.g., go, no-go, delay trip).	The information was EASY to understand.	The information was ACCURATE.	The information was CREDIBLE.	You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.	The information was TIMELY and gave you enough time to decide what action to take (e.g., turn back, slow down, etc.).	You took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	You used the information to help have a safer trip.
Somewhat Agree	Somewhat Agree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Agree	Somewhat Agree
Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Not Sure	Somewhat Agree
Completely Disagree							
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Neutral		Somewhat Agree	Somewhat Disagree	Somewhat Disagree	Somewhat Agree	Neutral
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Somewhat Agree	Somewhat Agree	Neutral	Neutral	Somewhat Agree	Neutral	Neutral
Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree
Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Disagree	Somewhat Agree	Somewhat Agree	Neutral
Somewhat Agree	Somewhat Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Somewhat Disagree	Somewhat Agree	Somewhat Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree				Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Neutral	Completely Agree
Somewhat Agree	Completely Agree	Neutral	Somewhat Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Completely Agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Disagree	Somewhat Disagree	Neutral	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Neutral	Somewhat Agree	Somewhat Agree	Completely Disagree	Neutral	Somewhat Agree	Somewhat Agree
Somewhat Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree
Neutral	Somewhat Agree	Neutral	Somewhat Agree	Neutral	Neutral	Neutral	Somewhat Agree
Completely Agree	Completely Agree	Somewhat Disagree	Somewhat Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree
	Completely Agree	Completely Agree	Completely Agree				
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Neutral
Neutral	Neutral	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Somewhat Disagree	Neutral
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Neutral	Completely Agree	Neutral	Neutral
Somewhat Agree	Somewhat Agree	Somewhat Agree		Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Neutral	Completely Agree	Completely Agree	Neutral
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree

What travel information sources were most important to you BEFORE this trip.					
511 or 1-888-WYO-ROAD Phone Service	Broadcast radio	TV	WYDOT website	Other (please specify in text box below)	Please specify the other information source from question #6, if ranked.
.					
.					
1	.	.	.	2	Roadside warning signs
.					
.					
.	.	.	1		I always check the WYDOT website, but it was down and so I didn't have information
.					
.	.	2	1		
2	1	4	3		
.	.	.	1		
1					
.					
1	2	4	3		
.					
3	2	4	1		
2	3	4	1		
.	.	.	1		
.	2	.	1		
.	1				
3	2	4	1		
.	.	.	2	1	asked a highway patrol officer
1					
.					
1	3	5	4	2	direct contact with the state patrol
.					
.	.	.	.	1	cell phone conversation
5	4	3	1	2	weather.com
3	2	4	1		
1	3	4	2		
3	2	4	1		
.	1				
2	.	.	1	3	1610 am radio
1	3	4	2		
3	2	5	1	4	
.	.	.	1	2	Road Signs
.	.	.	.	1	Did not use a source to determine action.
.	1				
5	4	3	2	1	VMS Message Boards
.	.	.	1		
.					
1	2	3			
1	2				
3	4	1	2	5	
2	.	.	1		
2	3	4	1		
3	2	4	1		
.	.	.	1		
3	2	4	1		on road sings
.	1	.	2		
1	3	2			
.	.	2	1		
.	2	3	1		
1	2	3	4		
1	3	4	2		
3	1	4	2		
4	1	5	2	3	I live within 1/4 mi of the interstate at Vedauwoo and can see what is happening on the highway
5	4	3	1	2	weather.com
.	.	.	1		
.	.	2	1		
3	2	4	1		
.					
3	1	4	2		
3	5	4	1		
.	.	.	1		
1					
1	3	4	2		
.					
.	.	2	1		
.	1	.	2		
2	3	4	1		
.	.	.	1		
1	2				
2	3	4	1		
.	2	.	1		
2	3	4	1		
2	3	4	1		
3	4	2	1		
.	.	.	1		
3	2	4	1		

Referring to the information source you ranked first (i.e. most important) in question #6, why was it the most important information source to you?	What information was most useful to you?
The website is TYPICALLY most important because I look at the webcams to gain a sense of what ...[3]	
Cameras and road report. Helps to determine my route, what car to take, what precautions to take, etc.	WYDOT website, although there were connection problems in the early morning.
Easy accessiblity.	Road conditions.
The webcams showed fog and heavy snow on the summit. The road was clear beyond Harriman. Decided ...[4]	The webcams provide current information and you can usually determine ...[13]
I like to check road conditions on mornings with questionable weather and usually do not take time to plug ...[5]	
I listen to radio when traveling and especially if an incident occurs enroute.	Public Radio is the station I listen to most frequently.
It's the most easily available information.	The road condition ranking (slick, slick in spots), followed by the weather ...[14]
I check the web cams and road advisories before I leave my home.	Web cams. Amazing what you can see through them...or what you can't.
It is faster to use (as long as I have a computer handy) and I can check on the web cameras.	The text closure information
Because I could see the road conditions on the web cameras. I could also check for road closures and advisories.	The web cameras.
first one used	radio and smart signs
The information provided by the highway patrol who said the roads were very dangerous	Knowing that there had been accidents and the roads were dangerous/closing/closed
We were traveling from the Denver airport and used the number to find out road conditions before we ...[6]	closures
Because it was the only source I used.	The general condition of the road and the presence of fog.
Radar maps and web cameras.	Radar maps and web cameras.
The web page allows me to navigate directly to information that I am interested in. NOTE: THE DOT ...[7]	Road and weather conditions - fog and icy roads, and being able to see how ...[15]
The 511 number is quick, and although it is not always up-to-date, it is usually more up-to-date than TV or radio.	If road is closed, and what the conditions are. The 511 is fairly helpful, and I ...[16]
	Road surface conditions via the web cams
first one accessed	radio
As a frequent traveler to cheyenne, i check the website often for road conditions	closure and conditions
At home i dont have internet access for the morning commute so I rely on the 511 phone service. I use ...[8]	Knowing what the road conditions are like
Easy at home	Fog and ice info
I listen to KUWR in the morning and it gives regular road reports and has information on its web also.	description of weather conditions between Laramie and Cheyenne
Gives information while you are on the road and along the route of travel.	
It was the most accessible. I always check the website prior to leaving for work.	The description of conditions, the camera's, and the weather station.
For the road condition	
easiest to access	road closure and conditions
TV Weather ChannelIn	Information on the progress of incomming storm.
Most convenient source to check.	Road closure and road condition information.
Easiest to access before the trip. Was at work.	Web cams. Could see what was actually out there.
Most current, accessible when I want to access it	Road conditions, web cam
convenient	That Road was closed
current wind speed	
first source	web page because radio was not on the same page
to determine if I would be able to travel	
Easy to access, web cams, conditions, etc.	Road closure.
It is accurate and current information that is updated frequently.	The road closures.
Only have phone access in the mornings or the before trip.	That day was Road Closures
Always on.	road closures
I listen to NPR in the mornings, am still working out glitches on the wydot website or that would be my ...[9]	The WYDOT webpage is the most useful, with a combination of written ...[17]
Only source I used	closures
I always check the website before I leave. The roads were closed so then I also watched the early morning ...[10]	
most timely	road closure
Always on	
It is easy to access, and updated frequently.	Conditions, atmospheric sensors, temp.
Visual and information available	roads were clear
1-888-WYO-ROAD is the only one I have immediate access to so I rely on it to keep me informed of road condition	The notice that the road was closed (eastbound).
Because I have access to it anywhere from my cell phone.	If the road is closed and what time the last update was posted
Easy to access with web cams. Don't have to wait for TV.	WYDOT website.
first accessed then compared to web page to make sure it was accurate	web page
It told me the road was closed and the reason's why. On occasion the road is listed as closed, but local ...[11]	The road closed indication.
The answer to my question (Was the road closed?) was immediate.	That the road was closed
very easy to access and reliable. Usually pretty current	road closure, web camera and weather info
Easiest to check regularly. Phone can be busy, radio is not updated continuosly.	When closure ended.
The web cameras on the website point directly at the gate in Laramie and are updated every few minutes so ...[12]	The road closure info on WyDot website and the 511 are the next informative...[18]
It was the most accurate, current, and easily accessable source.	Road closures and web cameras
Convenience	Road Closed
Usally the most current	Closure info

[3]The website is TYPICALLY most important because I look at the webcams to gain a sense of what the roads LOOK like...but the problem is that is only one or two snapshots and the reality of the road you really NEVER know until you are on it.

[4]The webcams showed fog and heavy snow on the summit. The road was clear beyond Harriman. Decided to cancel my trip due to snow.

[5]I like to check road conditions on mornings with questionable weather and usually do not take time to plug in my laptop. Therefore, I rely on the 511 road report.

[6]We were traveling from the Denver airport and used the number to find out road conditions before we left the airport. We only use the phone service when we are out of town and returning to Wyoming. When at home or work, we use the web.

[7]The web page allows me to navigate directly to information that I am interested in. NOTE: THE DOT WEB PAGE HAS BEEN RECENTLY CHANGED SO THAT THE ROAD REPORT, WEB CAMERAS, AND ATMOSPHERIC SENSORS ARE NO LONGER ACCESSIBLE FROM MY HOME COMPUTER. THEY ARE STILL ACCESSIBLE TO MY WORK COMPUTER. THIS IS A PROBLEM!!!!!!!!!!!!!!!!!!!!!!!!!!

[8]At home i dont have internet access for the morning commute so I rely on the 511 phone service. I use the internet at work to get travel info before I head home.

[9]I listen to NPR in the mornings, am still working out glitches on the wydot website or that would be my highest rank.Dont have a television and I think the phone service is a bit awkward compared to the internet and so prefer not to use it.

[10]I always check the website before I leave. The roads were closed so then I also watched the early morning channel 5 news to keep up dated while continually checking the website.

[11]It told me the road was closed and the reason's why. On occasion the road is listed as closed, but local traffic is allowed through. In this instance it was obvious from the notation that it was closed due to wrecks and ice that it was the conditions, not the need to spread out the stuck trucks.

[12]The web cameras on the website point directly at the gate in Laramie and are updated every few minutes so I am able to get the most current information from the web cams.

[13]The webcams provide current information and you can usually determine the road conditions (snowpack, clear, icy, etc.)

[14]The road condition ranking (slick, slick in spots), followed by the weather conditions (wind velocity and direction) and the camera information.

[15]Road and weather conditions - fog and icy roads, and being able to see how the conditions change between Laramie and Cheyenne using the road conditions, web cameras and sensors. This allows you to determine if the conditions are bad all
the way to Cheyenne or just part of the way, which affects my decision regarding taking the happy jack road instead, how much time to allow, etc

[16]If road is closed, and what the conditions are. The 511 is fairly helpful, and I often use the webcams as well. They help show actual conditions better.

[17]The WYDOT webpage is the most useful, with a combination of written info, pictures and the atmospheric sensors.

[18]The road closure info on WyDot website and the 511 are the next informative, though it would be better if they would updated more frequently. They seem to update on the hour most of the time. An hour is a huge amount of time when you are traveling.

What do you think could be improved?
The roads need to be closed more when they are bad instead of waiting for accidents to occur before they close them. Many times people go on dangerous roads just because they ...[19]
Plowing was rather inadequate.
Forcasting
I believe the 511 road report needs to report accurate road conditions.
Road reports on more local stations when an incident occurs. It would be helpful to indicate that the road conditions are not good at marker #, etc. and describe what it is. Of course ...[20]
The camera's don't always work or are fogged over or coated with snow.
The road information. They highlight certain highways with colors (each color indicating what is happening at the time). The problem is: what do you put when you have 5 different advisories?
Put a direct link to the relevant web pages on the State Government's website.
To know more about what is between the webcams. It would be helpful to know how much icy/snowy/etc miles there are
The phone service is painfully slow when negotiating through the menu to the information you need. One way to shorten the menu choices is to leave out the exit number. How many ...[21]
Nothing
Eliminate the trucks from driving in poor driving conditions. Speeds vary so much between semis and cars that they always pull out to pass in front of a faster vehicle that is ...[22]
1. Post recommended/mandatory speed limits based on poor conditions on the flashing signs and the overhead information signs, and ENFORCE THEM. The most significant ...[23]
More clear definition of road conditions, and more accurate. As an example, sometimes when they say it's icy, there is an occasional patch here and there, and sometimes it's ...[24]
Adding wind speed and direction to the WyDOT web page
Not really sure since the new cams are up and running. I rely on looking at the cams in the afternoon hours. I do think that a few new snow fences near the tavern might be useful as the ...[25]
don't know
I never use the phone service or the AM 1610 radio because that is most always wrong and/or outdated information.
The slick in spots could be more defined. At times the spots are 10 miles long. Maybe something like a notation that conditions begin to improve around mile post 335 or slick to ...[26]
go back to road reports by area, like souteast wyo, so on echeck on alternate routes like happy jack. If road is open to local traffic, such as laramie is full, but you can get from ...[27]
Computer access to weather information from inside my automobile.
Timeliness of help from snow plows. But with regard to the website, probably more cameras, updated more often, with all the advisories posted and easily accessible.
more specific information regarding exactly where problem areas exist. Some were pretty obvious during this incident.
Try to keep ALL WEB Cameras working
radio and web page need to agree
n/a
???
We often observe that the road is open before the internet, radio, etc report that it is open. Having that information be timely would be helpful. Although I suspect you are doing ...[28]
nothing on this one.
we often can observe traffic before the closure is removed on the website.when traffic is being held in cheyenne, but road conditions are not severe, it would be helpful if local traffic ...[29]
It could be updated more frequently.
I feel that the website and phone service should be updated on the hour not at 12 after or some random time
ok
More reliable camera's and road weather information (Vedauvou and Pumpkin Vine were not functioning). Probably not and rightly so a high priority for WYDOT at the time.
Nothing
We see traffic on I80 before the web is updated. Could closure be removed when road opens?
The road closure info on WyDot website and the 511 are the next informative, though it would be better if they would updated more frequently. They seem to update on the hour most of ...[30]
More web cameras and accessability to this wydot website from my automobile.

[19]The roads need to be closed more when they are bad instead of waiting for accidents to occur before they close them. Many times people go on dangerous roads just because they are open (communters especially)but if they were closed it would take that risk out of it. Many times I have driven to work in Cheyenne on roads that I had no business being on,but they were open so I assumed I could make it...

[20]Road reports on more local stations when an incident occurs. It would be helpful to indicate that the road conditions are not good at marker #, etc. and describe what it is. Of course the electronic road reports/signs would be useful if the message could indicate what is happening ahead.

[21]The phone service is painfully slow when negotiating through the menu to the information you need. One way to shorten the menu choices is to leave out the exit number. How many people rely on this information when the message also indicates it is for road conditions between Laramie and Cheyenne?Also, DOT has changed their web page so that we can no longer enter the crucial web pages (distric level road conditions, web cameras, weather data) from our home computer. we can open the wydot web page, but then it doesnt successfully load the other pages. Other web pages work from our home computer - there is no evidence that it is our computer. The DOT web pages do open on my work computer. This is a big problem for us.

[22]Eliminate the trucks from driving in poor driving conditions. Speeds vary so much between semis and cars that they always pull out to pass in front of a faster vehicle that is passing. Maybe another lane that trucks are prohibited from driving in. Electronic ticketing of the cars and trucks on the road, as the infrastructure is being built, but laws should be changed. With the volume of roads that the highway patrolmen have to cover and the rising costs of fuel the video surveillance and ticketing makes sense. Maybe a lower speed limit, like going down the summit, should be in affect between Laramie and Cheyenne as the difference in time is only 6 minutes.

[23]1. Post recommended/mandatory speed limits based on poor conditions on the flashing signs and the overhead information signs, and ENFORCE THEM. The most significant danger on the road are the truck drivers who drive much faster than is safe for the given road conditions. This is evidenced by the two major pile-ups that we have had in the last few years involving trucks driving too fast (white out or fog). I am grateful to arrive alive when conditions are bad and have been run off the road more than once by trucks. This is especially the case when the roads are not so bad, but it is foggy or whiteout conditions as it was on Monday. The trucks do not slow down and endanger everyone.2. Please fix the web page

[24]More clear definition of road conditions, and more accurate. As an example, sometimes when they say it's icy, there is an occasional patch here and there, and sometimes it's snowpacked, and sometimes it really is icy.I think a rating system would be helpful. Something that describes the conditions more specifically and accurately (including how much wind there is), and then gives an overall driving condition, like conditions favorable for travel or very hazardous conditions

[25]Not really sure since the new cams are up and running. I rely on looking at the cams in the afternoon hours. I do think that a few new snow fences near the tavern might be useful as the snow tends to drift in the driving lane.

[26]The slick in spots could be more defined. At times the spots are 10 miles long. Maybe something like a notation that conditions begin to improve around mile post 335 or slick to mile post 335, then improving.Just a note on the survey, it seems like Accessibilty/Availability are the same thing, as are Credibility/Accuracy and the same for Easy Access/Convenience.

[27]go back to road reports by area, like souteast wyo, so on echeck on alternate routes like happy jack. If road is open to local traffic, such as laramie is full, but you can get from chian to alramie if you live there.

[28]We often observe that the road is open before the internet, radio, etc report that it is open. Having that information be timely would be helpful. Although I suspect you are doing the best that you can.

[29]we often can observe traffic before the closure is removed on the website.when traffic is being held in cheyenne, but road conditions are not severe, it would be helpful if local traffic could be sent though without calling the sheriff's dispatch.

[30]The road closure info on WyDot website and the 511 are the next informative, though it would be better if they would updated more frequently. They seem to update on the hour most of the time. An hour is a huge amount of time when you are traveling. Updating every 20 minutes seems more reasonable.

Indicate the factors that were important when choosing information sources to use BEFORE this trip.							
Accuracy	**Easy Access**	**Convenience**	**Availability**	**Usefulness**	**Accessibility**	**Timeliness**	**Credibility**
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Not Important	Not Important	Not Important	Not Important	Not Important	Not Important	Not Important	Not Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Extremely Important	Extremely Important	Very Important	Very Important	Extremely Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Very Important				
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Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Somewhat Important	Somewhat Important	Extremely Important	Extremely Important	Extremely Important		Extremely Important
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Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Extremely Important	Very Important	Extremely Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	
Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Very Important	Extremely Important	Extremely Important
Very Important	Very Important	Very Important	Somewhat Important	Very Important	Somewhat Important	Very Important	Very Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
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Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	
No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon	No Opinon
Very Important	Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Very Important
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Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Somewhat Important	Very Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
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	How did you learn about the incident DURING your scheduled trip?						
Did you find out about the incident DURING your scheduled trip?	511 or 1-888-WYO-ROAD Phone Service	Broadcast radio	Encountered while driving	Flashing Caution Signs	Highway Advisory Radio (1610 AM)	Roadside Dynamic Message Sign	Other
Yes	0	0	1	0	0	0	
Yes	0	0	1	0	0	1	
Yes	1	0	1	1	0	0	
Yes	0	0	1	1	0	0	
Yes	0	0	0	0	0	1	
Yes	0	0	1	0	0	0	
Yes	0	0	1	1	0	1	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
	0	0	0	0	0	0	did not take the trip
Yes	0	0	1	0	0	0	
Yes	0	0	1	1	0	1	
Yes	0	0	1	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	0	0	0	0	Hit a patch of black ice. Was worst experience possible.
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	1	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	0	0	0	
Yes	0	0	0	0	0	1	
No	0	0	0	0	0	0	
Yes	0	0	1	1	0	1	
No	0	0	0	0	0	0	
Yes	0	0	1	0	0	1	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	1	0	1	
Yes	0	0	1	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	0	0	0	1	
No	0	0	0	0	0	0	
Yes	0	0	1	1	0	1	
No	0	0	0	0	0	0	
Yes	1	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	1	0	0	
No	0	0	0	0	0	0	
Yes	0	0	1	1	0	1	
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No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	
No	0	0	0	0	0	0	

How did the information about the incident affect your trip?						
I took the action advised by the travel information (e.g., slow down, watch for ice, etc.).	Felt less stress because better informed of the situation.	Helped decide what actions to take.	I postponed my trip until later.	I cancelled my trip.	The information did not affect me.	Other
0	0	0	0	0	0	
1	0	1	0	0	0	
1	0	0	0	0	0	
1	0	1	0	0	0	
1	0	0	0	0	0	
0	0	0	0	0	1	
1	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	did not take the trip
0	0	0	0	0	0	
1	1	0	0	0	0	
1	0	0	0	0	0	
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For the DURING trip information, please rate your agreement/disagreement for the following statements:								
The information was USEFUL for making travel decisions (e.g., go, no-go, delay trip).	**The information was EASY to understand.**	**The information was ACCURATE.**	**The information was CREDIBLE.**	**You were BETTER PREPARED to react to changing weather, road and traffic conditions because of the information.**	**The information was TIMELY and gave you enough time to decide what action to take (e.g., turn back, slow down, etc.).**	**You took the action advised by the travel information (e.g., slow down, watch for ice, etc.).**	**You used the information to help have a safer trip.**	**The roadside Dynamic Message Signs were effective for communicating with you**
Completely Disagree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Completely Agree
Somewhat Agree	Somewhat Agree	Somewhat Disagree	Somewhat Disagree	Somewhat Agree	Somewhat Disagree	Somewhat Agree	Somewhat Agree	Completely Agree
	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Neutral	Completely Agree
Somewhat Agree	Somewhat Agree	Somewhat Disagree	Neutral	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree	Completely Disagree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Somewhat Agree	Neutral	Not Sure
Neutral	Somewhat Agree	Completely Agree	Completely Agree	Somewhat Disagree	Neutral	Completely Agree	Completely Agree	Not Sure
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree	Somewhat Agree
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Somewhat Agree	Neutral	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Completely Agree	Completely Agree	Completely Agree
Neutral	Completely Agree	Completely Agree	Completely Agree	Somewhat Agree	Completely Agree	Somewhat Agree	Somewhat Agree	Neutral
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral

What travel information sources were most important to you BEFORE this trip.						
511 or 1-888-WYO-ROAD Phone Service	Broadcast radio	Flashing Caution Signs	Highway Advisory Radio	Roadside Dyanmic Message Signs	Other (please specify in text box below)	Please specify the other information source from question #16, if ranked.
.	3	1	.	2		
5	6	3	4	2	1	The actual feel of the conditions as I was driving on them.
1	.	.	.	2		
.	.	2	.	1		
4	3	2	5	1		
.						By the time you see a flashing sign that says, snowfall and slick roads you are already in it and know that.
.	.	2	.	1		
.						
.						
.						
.						
1	5	3	4	2		
1	4	3	5	2		
.						
.						
1	2	3	4	5		
.						
.						
.						
.						
.						
.						
1						
.						
1	5	4	3	2		
5	3	2	4	1		
.						
.						
.						
5	2	3	4	1		
.						
.						
.						
.						
.	.	1	.	2		
.	.	.	.	1		
.						
.	.	2	.	1		
.						
4	1	3	5	2		
.						
1	.	2				
.						
.						
.						
.	2	1				
.						
5	4	2	3	1		
.						
.						
.						
.						
.						
.						
.						
5	3	2	4	1		
.						
.						
.						
.						
6	5	3	4	2	1	The signs told me how hard the wind was blowing but the car rocking was sufficient in inself.
.						
.						
.						
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.						
.	.		.	1		
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.						

Referring to the information source you ranked first (i.e. most important) in question #16, why was it the most important information source to you?	What information was most useful to you?
The flashing signs were the first indication that there were any problems ahead.	
The signs provide general guidance. The extent of the hazard(s) needs to be experienced to be properly evaluate	The road was open.
Convenience, I was already traveling, so I was able to call the phone service for information	Just the warning of possible slick conditions on the road ahead
It was most important because it was visible. I did not listen to the radio or check the road report (or web ...[31]	The dynamic message sign.
It lets me know what weather conditions exist ahead.	Road surface conditions.
Because it is the first source as I get on I-80. I live very close to MM 316.	Road conditions
did not take the trip	
Because i don't have internet access at home so my phone is invaluable.	Knowing the road conditions
The signs aren't placed in the best locations. Sometimes i go miles without seeing them. The radio isn't ...[32]	That the road was/wasn't closed
I was coming home from S. Dakota and only had my phone available	
We were already traveling by car and could not use internet.	Closure info
It confirmed what the cell phone call said	that the road was icy and fog existed
	The things most useful during the trip are the Roadside Dynamic Message signs
Usefull	Flashing cautions signs
Produces current information about the road conditions.	Notation of blowing snow and icy roads.
Message Signs displayed weather/road conditions, but most importantly displayed the maximum safe ...[33]	Speed Limit Advisory on Message Boards
Always have the radio on.	Upcoming road conditions.
most accurate	one used to be able to use the 1610 am staion in cheyenne, but now it is a spanish channel.
Showed EXACTLY where an incident may occur	To be prepared to for the accident, slow traffic.
It reflects the current conditions ahead, such as accident or icy conditions	same as 19 - the dynamic message signs indicate any conditions or events that you need to take into account
Nothing like hands on data	My steering wheel being stationary while the car rocked

[31] It was most important because it was visible. I did not listen to the radio or check the road report (or web cameras) before I left. I had no idea the roads were bad until I saw it on the dynamic message sign. Although the sign normally has accurate information, it didn't really prepare me for degree to which the roads were bad.

[32] The signs aren't placed in the best locations. Sometimes i go miles without seeing them. The radio isn't reliable, as i dont get radio service all the time. Most of hte time my phone works.

[33] Message Signs displayed weather/road conditions, but most importantly displayed the maximum safe speed, which slowed most motorists down to a reasonable speed for the conditions.

What do you think could be improved?
Nothing. The sign descriptions were accurate.
I don't think the report was accurate enough. It was reporting slick conditions, however traveling west in the am from Buford, the road conditions had …[34]
Identify not only highway conditions (ics, slick spots) but also visibility and wind. Be more accurate with highway conditions. On March 27 around 6:45 am …[35]
Again, closing roads more often to keep people home and off of them By the time you see the flashing slick roads and snowfall signs you are already in it …[36]
Worked pretty well I thought.
This time was much better with informing us on the road conditions.
Honestly..this was the worst trip i've ever had to taken on I-80. I've traveled this road over 300 times in the past 6 years. This was the first time I felt really …[37]
Nothing
Better notice of poor visibility ahead on the road.
No idea.
Faster updates on the 1610 radio station and toll free number.
?
get the radio back on the air in cheyenne
The same thing I say every time. Include maximum speed limits for the conditions, especially for the big trucks, and enforce them! There are too many …[38]
Nothing

[34] I don't think the report was accurate enough. It was reporting slick conditions, however traveling west in the am from Buford, the road conditions had worsened. Instead of slick, as the phone report had alluded to, the actual conditions were icy and snowpacked, with heavy snowfall.

[35] Identify not only highway conditions (ics, slick spots) but also visibility and wind. Be more accurate with highway conditions. On March 27 around 6:45 am the signs said the highway was slick in spots when in fact it was snow packed and the outside lane up the to the top of the summit was not useable due to snow accumulation. If the road is completely covered then say so.

[36] Again, closing roads more often to keep people home and off of them By the time you see the flashing slick roads and snowfall signs you are already in it and practicing defensive winter driving---the signs don't do much to change that. When the website is down you can't do much either. And frankly, the website and radio usually say the same thing, slick in spots, snow fall, wind and limited visiblity. Well that is Wyoming winter. When the verbiage never changes you tend to ignore it.

[37] Honestly..this was the worst trip i've ever had to taken on I-80. I've traveled this road over 300 times in the past 6 years. This was the first time I felt really unprepared. I hit a patch of horrible black ice and did two 360 degree turns in the middle of traffic. Cops were everywhere helping other people who had been in accidents. Lanes were shut down at certain parts because of all the cop cars and accidents.I saw huge red spots on the ground (presumably blood from an accident) and was scared out of my mind when i hit the patch of ice going 40 mph.The signs need to be more frequent as do lights and railings (if a car plummeted off of a cliff..it would be even worse). It took me an hour and 45 minutes to drive from laramie back to cheyenne. The signs did not say no unnecessary travel at 8 p.m. I did not see one snow plow or salt truck.Which..i might add..is ridiculous that Wyoming highways only use SAND or DIRT. Salt has extreme benefits for cold weather (snow and ice) that salt does not have. It's ridiculous.

[38] The same thing I say every time. Include maximum speed limits for the conditions, especially for the big trucks, and enforce them! There are too many truckers who go way too fast for the conditions with complete disregard to the endangerment of others.

Indicate the factors that were important when choosing information sources to use DURING this trip.							
Accuracy	**Easy Access**	**Convenience**	**Availability**	**Usefulness**	**Accessibility**	**Timeliness**	**Credibility**
Extremely Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important	Extremely Important
Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important	Somewhat Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	
Very Important	Somewhat Important	Very Important	Very Important	Extremely Important	Very Important	Very Important	Extremely Important
Very Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Very Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Very Important
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Very Important	Very Important	Very Important	Very Important	Extremely Important	Extremely Important
Extremely Important	Extremely Important	Very Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important	Extremely Important
No Opinion	No Opinion	No Opinion	No Opinion	No Opinion	No Opinion	No Opinion	No Opinion
Extremely Important	Extremely Important	Extremely Important	Extremely Important	Very Important	Very Important	Extremely Important	Extremely Important

[FOR SURVEY 04_09_2008 ONLY] In the box below, please approximate the date and time of your trip which you referred to throughout this survey.
friday, april 11th 3 am
4/10 - 12:30 pm
Friday at 3 p.m. until 5 p.m.
5:30 PM, Friday, April 11
4/10/2008 - 4/11/2008
Thursday morning and Friday morning.
Thursday, April 10 & 11, 2008
Thursday and Friday am
Thursday, April 10, 6:30 am
Friday, 8:00am-road closed
Wednesday evening 6:00 Cheyenne to Vedau, chose to stay home thursday 4/10 because of roads, traveled to (noon) and from (6:30pm)Cheyenne friday 4/11
6AM and 4PM
I canceled trips wed, thurs and fri from laramie to cheyenne
wed apr 9 10:30 am fri apr 11 10am

APPENDIX D: DISPATCH OFFICE LOG BOOKS

Dispatcher Log Legend

Wyoming Department of Transportation
Form RS-12
Rev. 3/99

OFFICIAL SIGNAL CODES

10-0 —Caution
10-1 —Unable to copy—change location
10-2 —Signal good
10-3 —Stop transmitting
10-4 —Acknowledgment (OK)
10-5 —Relay
10-6 —Busy—unless urgent
10-7 —Out of service
10-8 —In service
10-9 —Repeat
10-10—Fight in progress
10-11—Dog case
10-12—Stand by (one)
10-13—Weather—road report
10-14—Prowler report
10-15—Civil disturbance
10-16—Domestic problem
10-17—Meet complainant
10-18—Quickly
10-19—Return to . . . . . .
10-20—Location
10-21—Call . . . . . by telephone
10-22—Disregard
10-23—Arrived at scene
10-24—Assignment completed

10-25—Report in person (meet) . . . .
10-26—Detaining subject, expedite
10-27—(D)river license information
10-28—Vehicle registration information
10-29—Check for wanted
10-30—Unnecessary use of radio
10-31—Crime in progress
10-32—Man with gun
10-33—EMERGENCY
10-34—Riot
10-35—Major crime alert
10-36—Correct time
10-37—(I)nvestigate suspicious vehicle
10-38—Shopping investigation vehicle
10-39—Urgent—use light, siren
10-40—Silent run—no light, siren
10-41—Beginning tour of duty
10-42—Ending tour of duty
10-43—Information
10-44—Permission to leave . . . for . . .
10-45—Animal carcass at . . . . . .
10-46—Assist motorist
10-47—Emergency road repair at . . . .
10-48—Traffic standard repair at . . . .
10-49—Traffic light out at . . . . . .

10-50—Accident (F, PI, PD)
10-51—Wrecker needed
10-52—Ambulance needed
10-53—Road blocked at . . . . . .
10-54—Livestock on highway
10-55—Intoxicated driver
10-56—Intoxicated pedestrian
10-57—Hit and run (F, PI, PD)
10-58—Direct traffic
10-59—Convoy or escort
10-60—Sched in vicinity
10-61—Personnel in area
10-62—Reply to message
10-63—Prepare to copy written copy
10-64—Message for local delivery
10-65—Net message assignment
10-66—Message cancellation
10-67—Clear for net message
10-68—Dispatch information
10-69—Message received
10-70—Fire alarm
10-71—Advise nature of fire
10-72—Report progress on fire
10-73—Smoke report
10-74—Negative

10-75—In contact with . . . . . .
10-76—En route . . . . . .
10-77—ETA (Estimated Time Arrival)
10-78—Need assistance
10-79—Notify coroner
10-80—Chase in progress
10-81—Chemical test report
10-82—Reserve lodging
10-83—Work school zone at . . . . . .
10-84—If meeting . . . advise ETA
10-85—Delayed due to . . . . . .
10-86—Officer/operator on duty
10-87—Pick up/distribute checks
10-88—Present telephone # of . . .
10-89—Bomb threat
10-90—Bank alarm at . . . . . .
10-91—Pick up prisoner/subject
10-92—Unit/disability perked vehicle
10-93—Blockade
10-94—Drag racing
10-95—Prisoner/subject in custody
10-96—Mental subject
10-97—Check (test) signal
10-98—Prison/jail break
10-99—Wanted/stolen indicated

ROAD AND WEATHER CODE

0-1 Dry
0-2 Wet
0-3 Slippery
0-4 Slippery in Spots
0-5 Drifted Snow
0-6 Closed
0-1 Fair/mild
0-2 Snowing
0-3 Rain
0-4 Strong Winds
0-5 Fog
0-6 Blowing Snow
0-7 Visibility Poor
0-8 No Report

Dispatcher Radio Log – 4/15/2007

PAGE 004

WYOMING DEPARTMENT OF TRANSPORTATION

RADIO STATION LOG

FORM HS-4 REV. 11-81

DATE 4-15-08

Mark ✱ column if call is outgoing from radio room.

✱	UNIT CALLING	10-CODE 41	42	7	8	LOCATION or MESSAGE	TIME
✱	WRR					Sent	0027
✱	WRR					SENT	0250
✱	WRR					SENT	0429
	1045	X				130W	0458
	224	X				90W LAR	0502
	1052	X				80E LAR	0504
	PAT 1-9					312 WB TRACTOR TRAILER HIT CABLE &	0511
						STRETCHED CABLE ACROSS BOTH LANES & CAUSE	
						SNOWY RANGE RD	
	MARTY MAYFIELD					10-5	0518
	ERIC ANDERSON					NO ANSWER	
	1179					86E/W 853 210W 8191 ✓	0521
	LANCE ADAMS					149 8191 ✓	0523
	224					80W JON JAN 8194 ✓	0525
	DUDIE BAUER					10-5 (CABLE BARRIER)	0526
	414					SAR 891 ✓	0540
	241					EM 8191	0541
	617					CABLE IS APART & OFF INTERSTATE	0542
	EM SHOP					10W ARE? 34/48 EM 8194 ✓	0544
	1052					10W AV VED? 16/26 14/31 80E 210E 2873	0545
						230W 8191 ✓	
	DOW BRIDGES					25N/S 85N 8191 ✓	
	PB SHOP					891 PB ✓	0545
	1045					130W 8191 L 891 R ✓	0547
	785					ALL 894 AULT ✓	0555
	617					CABLE GUARD RAIL CLEANED UP EM	
						RAMP & SNOWY RANGE ROAD NOW	0609
	224		X				0611

PAGE 005

DATE 15 Apr 08

WYOMING DEPARTMENT OF TRANSPORTATION

FORM RS-2 REV. 11-93

RADIO STATION LOG

Mark ✱ column if call is outgoing from radio room.

✱	UNIT CALLING	10-CODE 41	42	7	8	LOCATION or MESSAGE	TIME
✱	WRR					SENT (W/ANLET ON ADD'L COMM)	0620
	ERIC ANDERSON					CALL HIGHWAY TECHNOLOGIES + TELL	
						THEM ABOUT DAMAGE @ MP 310-311	0628
✱	WRR					SENT	0631
	1052		X				0636
✱	RYAN SCHNEIDER					10-5 CABLE GUARDRAIL	0633
✱	ERIC ANDERSON					10-5 ↑	0640
✱	CHUCK MULLER					VED 6-41 80EL ↑ ADD 94 (8194)	0736
✱	[illegible]					VED 6-41 80WL ↑ ADD 94 (8194)	0736
✱	WRR					SENT	0737
	1045				X	130 WL ↑↓ 8194	0745
	PAT 16					ANLET EXTEND [illegible]? / NOT	
						YET / MAYBE IF SHOULD? / I'LL SEE	
						WHAT I CAN DO	0801
	1118					[illegible]? / 18/24 /	0813
✱	[illegible]					([illegible]) 10-5 ANLET 80E, 670	0816
✱	[illegible]					([illegible]) 10-5 ANLET 80W, 670	0817
✱	WRR					sent OK	0818
	632					MB 8194 30E RAW ALSO	0829
✱	WRR					SENT	0830
	1117		X			130 E	0842
	Bridger					pls post on PDMS-12 (mp 297 NB)	
						ROAD WORK AHEAD / 2 WAY TRAFFIC / START-	
						ING APRIL 15 / OK / I WILL ACTIVATE	
						PDMS-6 TO READ: ROAD WORK AHEAD	
						/ LEFT LANE CLOSED / OK	0848
	ARLEIGH [illegible]					ED ECKER ON CALL UNTIL 22 APR	0850
						ALSO - IF RAD ROOM NEEDS TO CALL	→

PAGE ~~999~~ 006 WYOMING DEPARTMENT OF TRANSPORTATION FORM FS-2 REV. 11-69

DATE 15 Apr 08

RADIO STATION LOG

Mark * column if call is outgoing from radio room.

*	UNIT CALLING	10-CODE 41	42	7	8	LOCATION or MESSAGE	TIME
	AGL MGR LOOK					RAW MECH SHOP DURING THE DAY	
						PLS LET IT RING A LOT - WE MAY	
						BE OUT OF THE OFFICE - LEAVE	
						NOTE FOR DISPATCHERS / OK	0859
	BRIDGES					PDMS-6 EN: SAYS ROAD WORK	
						AHEAD / LEFT LANE CLOSED	0936
						(ALSO DISCUSSED PDMS-14 &	
						ACTIVATED FROM HERE	
*	LORR					SENT	1126
*	WRR					SENT	1226
*	RAW SHOP					10-5 CD C=40+ SINCE 1045 / PUT	
						8194 80E-W RAW + 28TN RAW / OK	1238
	BAGGS					10-5 CD C=40+ SINCE 1045 / PUT	
						8194 BAGGS 78SW / OK	1242
*	WRR					SENT	1242
	414					SARA 8194	1304
*	WRR					SENT	1305
	321 TIM MCGINTY					FM 8194	1307
						SIGNALS ARE INTERMITTENT @	
						3RD + IVINSONS + GRAND - ALL	1311
						SIGNALS ARE OUT	
*	RYE FIX					10-5 ↑ / NO SUBPOWER OUTAGE - I'LL	
						CALL HEATH	1313
	1239					ARL 8194 ANLET	1314
	632					MB 8194 + 30 E RAW	1314
	412					Heath & Carey on way to traffic	1319
						light	

PAGE 007

DATE 4/15/08

WYOMING DEPARTMENT OF TRANSPORTATION

RADIO STATION LOG

FORM RS-2
REV. 11-93

Mark ✱ column if call is outgoing from radio room.

✱	UNIT CALLING	10-CODE 41	42	7	8	LOCATION or MESSAGE	TIME
	Fort Bridger					I-25 NB S to 855 8191	1324
	Heath					Signals what?/along 3rd / Just drove	1332
						through there & are fine, will	
						check them one more time / OK	
	Mall - tracking					historical $ data needed - gave me e-mail	1408
						to send template to him $	
						ridemyson@jckexpress.com	
	Baggs shop					8:54 Baggs	1455
	Marty Mayfield					Eric Anderson 760-4449 guard rail guy needs	1508
						to be notified about guard rail as well	
						Dubie Bonner 760-4421 as Marty	
	1117			X			1514
	Vance Johnson					10-13 for Dec 31st 20 & 487? 8:1946 Nut or 3d	1525
✱	WRE					sent	1526
✱	WRR					Sent	1827
✱	WRR					Sent	2027
✱	Dave Helton					Appears 92 on Sum/keep an eye	
						on it & if appears coming down	
						fast or getting white let me	
						know/10-4	2312

NFETP

Dispatcher ITS Log – 4/15/2007

Page No. [illegible] ITS LOG DISTRICT I Date: 4-15-07

UNIT	EQUIP	CLR	MSG/REMARKS	TIME
	SCAN		ARL 29/41 @ [illegible] PV 7/4 @ [illegible]	
			VED 11/21 @ [illegible] WHS 7/17 @ [illegible]	[illegible]
	HARS		updated	0004
	SCAN		ARL 31/41 @ 0100 PV 9/8 @ 0103	
			VED 21/38 @ 0102 WHS 4/4 @ 0103	0100
	SCAN		IOWA ARL 9/15 @ 0200 VED 22/34 @ 0202	0200
			PV 7/10 @ 0203 WASH 11/12 @ 0205	
	CAMS		PV-891 ALL OTHERS – TOO DARK	0203
	PTZ		[illegible] SUN, SNW, VED – 891 WASH – TOO DARK	
	SCAN		SENTRY ARL [illegible]	0257
	SCAN		IOWA ARL 35/50 @ 0300 VED 24/25 @ 0302	0300
			PV 5/12 @ 0303 WASH 7/12 @ 0305	
	PTZ		ALL 891	
	CAMS		PV-891 ALL OTHERS – TOO DARK	0302
	SCAN		IOWA ARL 34/50 @ 0400 VED 22/38 @ 0402	0400
			PV 10/20 @ 0403 WASH 4/8 @ 0405	
	CAMS		ALL – TOO DARK	0402
	PTZ		SUN, SNW, VED – 891 WASH – TOO DARK	
	SCAN		IOWA ARL 40/34 @ 0500 VED 22/42 @ 0502	0501
			PV 6/13 @ 0503 WASH 11/14 @ 0505	
	CAMS		ALL – TOO DARK	0502
	PTZ		ALL – 891	
	HARS		UPDATED	0523
	SCAN		SENTRY ARL 3 [illegible]	0553
	SCAN		IOWA ARL 30/40 @ 0600 VED 17/29 @ 0602	0600
			PV 16/24 @ 0603 WASH 8/11 @ 0605	
	PTZ		ALL – 891	0601
	CAMS		ALL 891	
[illegible]	DMS		2314311 94 G50+ / ANLET	0611
	HARS		updated, incl ANLET	0620
	COMP		WRR RESTARTED	0622
	SCAN		SENTRY VED ° 39	0647
	SCAN		IOW Arl 18/28 @ 0700 Ved 18/37 @ 0702	0700
			PV 5/12 @ 0700 Wash 7/9 @ 0700	
			CD 25/32 @ 0700 Wait 15/21 @ 0700	
			Sky 12/23 @ 0700 GB 10/14 @ 0700	

Confidential WSDOT use ONLY Destroy after 3 years

ITS LOG DISTRICT 1

Date: 4/15/08

UNIT	EQUIP	CLR	MSG/REMARKS	TIME
	HARS		Comm RPTS UPDATED	
Jensen	DMS		317, 324 + 336 94 &40+	0720
	SCAN		SENTRY VED = 54	0739
	SCAN		low Arl 19/35@0800 Ved 26/54@0802	0757
			PV 6/16@0803 Wyott 4/6@0800	0800
	COMP		restarted ITS + Camera 1	
	iBoot		323-341 Poll OK	0802
	Cams		PTZ all 4 streaming OK	0805
			Webcams - all are current - OK	0807
	SCAN		all are current	
	DMS		234-356 + 1.2-15.6 Poll OK	0808
			322 Comm fail x1 then OK	0810
Jensen	DMS		356, 317, 324, + 336 94 &65+ / ANLET OK	0815
	HARS		Comm RPTS UPDATED	
Jensen	DMS		343 94 &65+ / ANLET (Chey)	0826
	HAR		WI Comm RPT UPDATED OK	0833
	SCAN		SENTRY ARL = 37	0838
	SCAN		low ARL 19/35@0900 VED 37/58@0902	0852
			CD 22/30@0900	
	HARS		GEN RPTS COMPLETED - ANLET	0900
			CHEY - WI G = 65+	
	SCAN		SENTRY CD = 37	0908
Bridger	DMS		PDMS-12 "Rd Work Ahead / 2 Way Traffic April 15"	0917
				0930
			PDMS-6 "Rd Work Ahead / Left Lane Closed"	
	SCAN		SENTRY VED = 45	0935
	SCAN		low ARL 19/34@1000 VED 19/35@1002	0947
			CD 24/38@1002	
	SCAN		SENTRY ARL = 50	1002
	SCAN		SENTRY SKY = 41	1012
	SCAN		low ARL 34/47@1100 VED 22/32@1102	1022
			CD 30/42@1100	
Jensen	DMS		317, 324, 336, + 356 94 &40+	1100
		X	343 (was 94 &65+ / ANLET Valid?)	1132

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WYDOT use ONLY

Destroy after 3 years

UNIT	EQUIP	CLR	MSG/REMARKS	TIME
	HARS		GRN RPTS UPDATED	1138
	SCAN		SENTRY PV = 40	1142
	SCAN		Sentry: Arl = 47 mph	1152
	SCAN		10W ARL 29/44 @ 1200 VED 24/37 @ 1202	
			PV 24/35 @ 1203 CD 34/44 @ 1200	
			SKY 26/43 @ 1200	1200
	SCAN		SENTRY CD = 47	1217
	SCAN		SENTRY VED = 45 X 2	1252
	DMS		324, 336, 317, 356 G = 48+	1252
	SCAN		10W ARL 25/43 @ 1300 VED 28/45 @ 1302	
			CD 32/43 @ 1300 SKY 37/58 @ 1300	1300
	[illegible]			
	PTZS		SDM, TAN, VED LOST CONNECTION	1309
			NO RESTART - NO VIDEO	
	PTZS		SDM, TAN, VED RESTARTED	1316
	SCAN		SENTRY SKY = 56	
			" " ARL = 51	1322
	Scan		Arl 28-43 @ 1500 PV 20-33 @ 1503	1459
			Ved 25-40 @ 1502 WYO 22-32 @ 1500	
	SCAN		" VED = 40 mph	1552
	SCAN		Arl 34/50 @ 1600 VED 29/38 @ 1600	1600
			PV 24/37 @ 1600 Wyo H 20/29 @ 1600	
	SCAN		10W Skyline = 50 mph	1622
			10W GB = 35 mph	1622
			10W Arl = 53 mph	1622
	SCAN		VED = 45 mph	1632
	SCAN		PV = 53 mph	1657
	Scan		Arl 29-52 @ 1700 PV 26-38 @ 1703	1701
			VED 27-48 @ 1702 WYO 25-38 @ 1705	
	DMS		125 & 3.75 94	1722
	Scan		Arl 29-55 @ 1805 PV 14-24 @ 1806	1802
			VED 27-43 @ 1802 WYO 32-42 @ 1805	
	Sentry		125 - 45	1827

Page No. 116 ITS LOG DISTRICT 1 Date: 5/15/08

UNIT	EQUIP	CLR	MSG/REMARKS	TIME
	Scan		Arl 16/24 @ 19:07 PV 13/21 @ 19:07	
			Ved 19/30 @ 19:09 WyO 32/46 @ 19:07	1903
	Sentry		CO = 35 mph	2002
	Scan		Arl 25/34 @ 20:06 PV 16/27 @ 20:06	
			Ved 17/29 @ 20:07 WyO 18/27 @ 2007	2050
	Sentry		PV = 45	2042
	Sentry		Whit = 42	2057
	Sentry		Arl = 36	2102
	Scan		Arl 25/37 @ 21:08 PV 20/31 @ 21:09	
			Ved 23/31 @ 21:09 WyO 17/25 @ 21:05	2108
	Sentry		Whit = 50	2107
	SCAN		10W Arl 32/44 @ 2210 PV 21/30 @ 2212	
			Ved 15/28 @ 22:12 Bord 25/35 @ 2205	
			GB 19/32 @ 2210 WyoH 28/35 @ 2210	2209
	CAMS		All appear current - 8191	2209
	PTZ		All current - 8191	2218
	Sentry		Wyo H = 45. 36 mph	
	Sentry		Ved = 36.666 mph	
	Sentry		Arl = 49.71 mph	2306
	SCAN		10W Arl 24/39 @ 2310 PV 31/40 @ 2316	
			Ved 21/29 @ 2307 Whit 32/43 @ 2310	
			Bord 29/34 @ 2305 GB 21/31 @ 2312	
			WyoH 33/40 @ 2310	2309
	CAMS		All appear current - dark	2309
	PTZ		Sum - 92? WED, THU - 8191 WyoH dark	2310
	Sentry		PV = 41.01 mph	2342
Ross	CAMS		311 & 234 - Chang 10W 40+	2353
			356, 336, 317, 324 remove gusts	

NFETP

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APPENDIX E: RANDOM TRAVELER SURVEYS

I-80 Traveler Intercept Survey:
Travel Plaza

We are doing a survey in conjunction with the WY Dept. of Transportation to get traveler opinions about the Dynamic Message Signs along I-80 between Laramie and Cheyenne. The survey takes a few minutes and your responses will be used to help to improve the system and guide future enhancements.

1. Can I ask you the questions? (If yes, continue. If no, thank them and Stop)
2. Are you the driver on I-80 today? (If yes, continue. If no, thank them and Stop)
3. Did you see or use any travel information today?
(If yes, continue. If no, thank them and Stop)
4. What direction are you traveling on I-80?
___East (toward Cheyenne) ___West (toward Laramie)
5. What type of vehicle are you driving?
(Car, Pickup, Passenger Van, Bus, or Commercial Vehicle)

6. HOW OFTEN do you travel on this section of I-80?
- ❑ Almost every day.
- ❑ 1-4 times per week.
- ❑ A few times a month.
- ❑ Once a month or less.
- ❑ This is my first time.

7. For WHICH REASON do you **most often** travel this section of I-80?
- ❑ Commuting to/from school or work.
- ❑ Shipping or delivery.
- ❑ Errands.
- ❑ Traveling through on vacation.
- ❑ Traveling through on business.
- ❑ Other (please specify): _____

8. From which of the following did you get your travel information from today?
(Choose all that apply)
- ❑ 511 Phone Service
- ❑ Broadcast radio
- ❑ Dynamic Message Signs
- ❑ Flashing Caution Signs
- ❑ Highway Advisory Radio (530 or 1610 AM Radio)
- ❑ Television
- ❑ WYDOT website
- ❑ Other_____

9. For each source of information you used, please rank the top 3 according to: *Accuracy, Timeliness,* and *Credibility* (*Place a "1" for the most, a "2" for the next most, and so on.)*

	Accurate	**Timely**	**Credible**
511 Phone Service			
Broadcast Radio			
Dynamic Message Signs			
Flashing Caution Signs			
Highway Advisory Radio (530 or 1610 AM Radio)			
Television			
WYDOT website			
Other:_____			

10. How did you hear about the I-80 road closure?

_____

11. What information source(s) will you use to find out when the roads are open?

_____

12. Did you READ about the road closure on the **Dynamic Message Signs** (DMS) in this section of I-80?

___ Yes (please rate your level of agreement/disagreement with the following statements)

___ No (please skip to # 13)

Statement	Completely Agree	Somewhat Agree	Neutral	Somewhat Disagree	Completely Disagree	Not Sure
The DMS signs were clearly VISIBLE.						
The DMS messages were EASY to understand.						
The DMS messages were USEFUL.						
The DMS messages were ACCURATE.						
The DMS messages were SPECIFIC/ DETAILED enough to help make decisions about your trip.						
The DMS messages BETTER PREPARED you for changing travel conditions.						
The DMS signs were appropriately spaced to keep you informed about travel conditions.						
Because of the DMS messages, you took the action advised by slowing down, watching for ice, etc.						

13. Has the information on the Dynamic Message Signs ever caused you to: (Please mark all that apply.)

- ❑ Cancel or not take the trip.
- ❑ Turn back and wait until conditions change.
- ❑ Drive more carefully.
- ❑ Drive slower.
- ❑ None of the above, you ignore the Dynamic Message Signs.
- ❑ Other (please specify):

_____

14. Do you think other driver's respond appropriately to the travel advisories?

___ Yes
___ No

15. Is there any additional information that should be displayed on the signs?

Please specify:

_____

16. Please identify your age group:

❑ 16 – 25 ❑ 26 – 35 ❑ 36 – 45 ❑ 46 – 55 ❑ Over 55.

Date:	**Time:**	**Location:**	**Driver's Gender:** Male / Female (Circle One)	**Interviewer Name:**

I-80 Traveler Intercept Survey:
Rest Area

We are doing a survey in conjunction with the WY Dept. of Transportation to get traveler opinions about the Dynamic Message Signs along I-80 between Laramie and Cheyenne. The survey takes a few minutes and your responses will be used to help to improve the system and guide future enhancements.

1. Were you the driver on I-80 today between Cheyenne and Laramie?

☐ Yes ☐ No

2. List the date and approximate time of your trip.

Date:_____ Time:_____ AM/PM (circle one)

3. Please identify your age group:

❑ 16 – 25 ❑ 26 – 35 ❑ 36 – 45 ❑ 46 – 55 ❑ Over 55.

4. Did you see or use any travel information today? (Travel information can be in the form of a radio broadcast, phone message, roadside dynamic message signs, flashing caution signs, television, or the WYDOT travel website.)

☐ Yes ☐ No

5. What direction are you traveling on I-80?

___East (toward Cheyenne) ___West (toward Laramie)

6. What type of vehicle are you driving? (Circle one below.)

Car / Pickup / Passenger Van / Bus / Commercial Vehicle / Other [list in space below]

7. Is Interstate 80 Closed today between Laramie and Cheyenne?

8. How did you hear about the I-80 road closure?

_____

9. What information source(s) will you use to find out when the roads are open?

_____

10. HOW OFTEN do you travel on this section of I-80?

- ❑ Almost every day.
- ❑ 1-4 times per week.
- ❑ A few times a month.
- ❑ Once a month or less.
- ❑ This is my first time.

11. For WHICH REASON do you **most often** travel this section of I-80?

- ❑ Commuting to/from school or work.
- ❑ Shipping or delivery.
- ❑ Errands.
- ❑ Traveling through on vacation.
- ❑ Traveling through on business.
- ❑ Other (please specify): _____

12. From which of the following did you get your travel information from today? (Choose all that apply)

- ❑ 511 Phone Service
- ❑ Broadcast radio
- ❑ Dynamic Message Signs
- ❑ Flashing Caution Signs
- ❑ Highway Advisory Radio (530 or 1610 AM Radio)
- ❑ Television
- ❑ WYDOT website
- ❑ Other_____

13. For each source of information you used, please rank the top 3 according to: *Accuracy, Timeliness,* and *Credibility* (*Place a "1" for the most, a "2" for the next most, and so on.)*

	Accurate	**Timely**	**Credible**
511 Phone Service			
Broadcast Radio			
Dynamic Message Signs			
Flashing Caution Signs			
Highway Advisory Radio (530 or 1610 AM Radio)			
Television			
WYDOT website			
Other: _____			

14. How did you hear about the I-80 road closure?

_____

15. What information source(s) will you use to find out when the roads are open?

_____

16. Did you READ about the road closure on the **Dynamic Message Signs** (DMS) in this section of I-80?

___ Yes (please rate your level of agreement/disagreement with the following statements)
___ No (please skip to # 13)

Statement	Completely Agree	Somewhat Agree	Neutral	Somewhat Disagree	Completely Disagree	Not Sure
The DMS signs were clearly VISIBLE.						
The DMS messages were EASY to understand.						
The DMS messages were USEFUL.						
The DMS messages were ACCURATE.						
The DMS messages were SPECIFIC/ DETAILED enough to help make decisions about your trip.						
The DMS messages BETTER PREPARED you for changing travel conditions.						
The DMS signs were appropriately spaced to keep you informed about travel conditions.						
Because of the DMS messages, you took the action advised by slowing down, watching for ice, etc.						

17. Has the information on the Dynamic Message Signs ever caused you to: (Please mark all that apply.)

- ❑ Cancel or not take the trip.
- ❑ Turn back and wait until conditions change.
- ❑ Drive more carefully.
- ❑ Drive slower.
- ❑ None of the above, you ignore the Dynamic Message Signs.
- ❑ Other (please specify):

  _____

18. Do you think other driver's respond appropriately to the travel advisories?

___ Yes
___ No

19. Is there any additional information that should be displayed on the signs?

Please specify: _____

Travel Plaza Survey Results – 42 Surveys

What direction were you traveling on I-80 today?	Total	Trucks	Cars, Pickups, etc.
East (toward Cheyenne)	7.14%	5.56%	16.67%
West (toward Laramie)	85.71%	86.11%	83.33%
Both/Neither	7.14%	8.33%	0.00%

What type of vehicle are you driving?	Total	Trucks	Cars, Pickups, etc.
Car	2.38%	0.00%	16.67%
Pickup	9.52%	0.00%	66.67%
Passenger Van	2.38%	0.00%	16.67%
Bus	0.00%	0.00%	0.00%
Commercial Vehicle	78.57%	91.67%	0.00%

HOW OFTEN do you travel on this section of I-80?	Total	Trucks	Cars, Pickups, etc.
Almost every day	0.00%	0.00%	0.00%
1-4 times per week	28.57%	27.78%	33.33%
A few times a month	45.24%	44.44%	50.00%
Once a month or less	21.43%	25.00%	0.00%
This is my first time	4.76%	2.78%	16.67%

For WHICH REASON do you most often travel this section of I-80?	Total	Trucks	Cars, Pickups, etc.
Commuting to/from school or work	4.76%	2.78%	16.67%
Shipping or delivery	69.05%	80.56%	0.00%
Errands	0.00%	0.00%	0.00%
Traveling through on vacation	4.76%	0.00%	33.33%
Traveling through on business	16.67%	11.11%	50.00%
Other (please specify)	4.76%	5.56%	0.00%
Driving Through			
Work Truck Driver (Swift)			

From which of the following did you get your travel information from today? (Choose all that apply)

	Total	Trucks	Cars, Pickups, etc.
511 Phone Service	42.86%	41.67%	50.00%
Broadcast radio	14.29%	13.89%	16.67%
Dynamic Message Signs	64.29%	72.22%	16.67%
Flashing Caution Signs	33.33%	38.89%	0.00%
Highway Advisory Radio (530 or 1610 AM)	30.95%	33.33%	16.67%
Television	11.90%	13.89%	0.00%
WYDOT website	16.67%	16.67%	16.67%
Other	33.33%	33.33%	33.33%
Other Travelers			
CB Radio			
Truck satellite			
Other Drivers			
weigh station			
Port of entry officer			
DOT read out, POE			
internet, friends			
company camera			

For Each source of information you used, please rank the top 3 according to: *accuracy, timeliness and Credibility* (place a '1' for the most, a '2' for the next most, and so on.)

	Total	Trucks	Cars, Pickups, etc.
Accuracy: 511	2.14	2.11	2.33
Accuracy: Broadcast Radio	1.86	2.00	1.00
Accuracy: Dynamic Message Signs	1.69	1.68	2.00
Accuracy: Flashing Caution Signs	1.55	1.55	0.00
Accuracy: HAR	2.13	2.20	1.00
Accuracy: TV	1.40	1.50	1.00
Accuracy: WYDOT website	2.20	2.25	2.00
Accuracy: Other	1.50	1.43	2.00
Timeliness: 511	2.40	2.47	2.00
Timeliness: Broadcast Radio	1.67	1.80	1.00
Timeliness: Dynamic Message Signs	1.79	1.78	2.00
Timeliness: Flashing Caution Signs	1.50	1.50	0.00
Timeliness: HAR	1.94	2.00	1.00
Timeliness: TV	1.50	1.50	0.00

Timeliness: WYDOT website	2.00	1.00	3.00
Timeliness: Other	1.29	1.29	0.00
Credibility: 511	2.11	2.13	2.00
Credibility: Broadcast Radio	2.20	2.50	1.00
Credibility: Dynamic Message Signs	1.96	2.00	1.00
Credibility: Flashing Caution Signs	1.75	1.75	0.00
Credibility: HAR	1.77	1.83	1.00
Credibility: TV	1.33	1.33	0.00
Credibility: WYDOT website	1.50	1.00	2.00
Credibility: Other	1.57	1.57	0.00

Did you READ the advisory on the Dynamic Message Signs (DMS) in this section of I-80?

	Total	Trucks	Cars, Pickups, etc.
Yes	88.10%	88.89%	83.33%
No	9.52%	8.33%	16.67%

Please rate your level of agreement/disagreement with the following statements

The DMS signs were clearly VISIBLE

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	91.89%	90.63%	100.00%
Somewhat Agree	5.41%	6.25%	0.00%
Neutral	0.00%	0.00%	0.00%
Somewhat Disagree	2.70%	3.13%	0.00%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	0.00%	0.00%	0.00%

The DMS messages were EASY to understand

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	94.59%	93.75%	100.00%
Somewhat Agree	2.70%	3.13%	0.00%
Neutral	2.70%	3.13%	0.00%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	0.00%	0.00%	0.00%

The DMS messages were USEFUL

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	89.19%	87.50%	100.00%
Somewhat Agree	5.41%	6.25%	0.00%
Neutral	0.00%	0.00%	0.00%
Somewhat Disagree	2.70%	3.13%	0.00%
Completely Disagree	2.70%	3.13%	0.00%
Not Sure	0.00%	0.00%	0.00%

The DMS messages were ACCURATE

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	70.27%	65.63%	100.00%
Somewhat Agree	18.92%	21.88%	0.00%
Neutral	2.70%	3.13%	0.00%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	5.41%	6.25%	0.00%
Not Sure	0.00%	0.00%	0.00%

The DMS messages were SPECIFIC/DETAILED enough to help make decisions about your trip.

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	59.46%	56.25%	80.00%
Somewhat Agree	18.92%	21.88%	0.00%
Neutral	2.70%	0.00%	20.00%
Somewhat Disagree	5.41%	6.25%	0.00%
Completely Disagree	8.11%	9.38%	0.00%
Not Sure	0.00%	0.00%	0.00%

The DMS messages BETTER PREPARED you for changing travel conditions

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	75.68%	75.00%	80.00%
Somewhat Agree	16.22%	15.63%	20.00%
Neutral	5.41%	6.25%	0.00%
Somewhat Disagree	0.00%	0.00%	0.00%

Completely Disagree	0.00%	0.00%	0.00%
Not Sure	0.00%	0.00%	0.00%

The DMS signs were appropriately spaced to keep you informed about travel conditions

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	56.76%	53.13%	80.00%
Somewhat Agree	35.14%	37.50%	20.00%
Neutral	5.41%	9.38%	0.00%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	2.70%	3.13%	0.00%
Not Sure	0.00%	0.00%	0.00%

Because of the DMS messages, you took the action advised by slowing down, watching for ice, etc.

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	86.49%	87.50%	80.00%
Somewhat Agree	10.81%	9.38%	20.00%
Neutral	0.00%	0.00%	0.00%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	2.70%	3.13%	0.00%
Not Sure	0.00%	0.00%	0.00%

Has the information on the Dynamic Message Signs ever caused you to: (Please mark all that apply.)

	Total	Trucks	Cars, Pickups, etc.
Cancel or not take the trip	11.90%	11.11%	16.67%
Turn back and wait until conditions change	42.86%	50.00%	0.00%
Drive more carefully	83.33%	88.89%	50.00%
Drive slower	76.19%	77.78%	66.67%
None of the above, you ignore the Dynamic Message Signs	2.38%	0.00%	16.67%
Other (please specify)	7.14%	8.33%	0.00%
Speed Limit			
Get off road			
Find Alt. route			

Do you think other drivers respond appropriately to the travel advisories?			
	Total	Trucks	Cars, Pickups, etc.
Yes	69.05%	72.22%	50.00%
No	28.57%	25.00%	50.00%
Both	2.38%	2.78%	0.00%

Is there any additional information that should be displayed on the signs?
Where the problem really is (m/m)
Update signs fast
If road is closed West of Laramie
Wind speeds help
If road is closed West of Laramie
Road Closures ahead at what mile marker
Closures farther up the road
Salt than sand
Visual Legends
Last updated, time stamps
Run broadcast over channel 19 of CB radio
tune into channel "such and such"
More Signs, Time of Update
More Signs, Time of Update
Speed that needs to be traveled
Weight class breakdown advisory
Wildlife warning
Open/Closed further ahead, seatbelts, be curtious, DWI -How to get in touch with a state trooper
What is a Light Load? # of pounds
where roads are blocked, 1610 radio sign

Please identify your age group:			
	Total	Trucks	Cars, Pickups, etc.
16-25	2.38%	2.78%	0.00%
26-35	11.90%	11.11%	16.67%
36-45	26.19%	30.56%	0.00%
46-55	38.10%	33.33%	66.67%
Over 55	19.05%	19.44%	16.67%

Rest Area Survey Results – 147 Surveys

Were you the driver on I-80 today?			
	Total	Trucks	Cars, Pickups, etc.
Yes	80.95%	93.10%	77.97%
No	19.05%	6.90%	22.03%

Did you see or use any travel information today?			
	Total	Trucks	Cars, Pickups, etc.
Yes	78.23%	93.10%	74.58%
No	21.77%	6.90%	25.42%

What direction were you traveling on I-80 today?			
	Total	Trucks	Cars, Pickups, etc.
East (toward Cheyenne)	30.61%	62.07%	62.71%
West (toward Laramie)	63.27%	37.93%	29.66%
Both/Neither/Typo	6.12%	0.00%	7.63%

What type of vehicle are you driving?			
	Total	Trucks	Cars, Pickups, etc.
Car	47.62%	0.00%	59.32%
Pickup	16.33%	0.00%	20.34%
Passenger Van	14.97%	0.00%	18.64%
Bus	0.68%	0.00%	0.85%
Commercial Vehicle	19.73%	100.00%	0.00%
Other	0.68%	0.00%	0.85%

Was Interstate 80 closed between Laramie and Cheyenne during the time you wished to travel?			
	Total	Trucks	Cars, Pickups, etc.
Yes	11.56%	6.90%	4.24%
No	88.44%	93.10%	95.76%

HOW OFTEN do you travel on this section of I-80?			
	Total	Trucks	Cars, Pickups, etc.
Almost every day	4.76%	0.00%	5.93%
1-4 times per week	8.16%	24.14%	4.24%

A few times a month	17.01%	34.48%	12.71%
Once a month or less	41.50%	20.69%	46.61%
This is my first time	23.13%	10.34%	26.27%

For WHICH REASON do you <u>most often</u> travel this section of I-80?

	Total	Trucks	Cars, Pickups, etc.
Commuting to/from school or work	5.44%	3.45%	5.93%
Shipping or delivery	14.29%	62.07%	2.54%
Errands	6.80%	3.45%	7.63%
Traveling through on vacation	35.37%	3.45%	43.22%
Traveling through on business	15.89%	20.69%	15.25%
Other (please specify)	14.57%	0.00%	18.64%
pleasure			
looking at the beauty			
moving			
moving			
Family in cheyenne			
hiking			
a drive			
it's pretty			
family			
Visiting folks in KC?			
visit friends			
Because I can			
just for fun			
UW Athletice games and support activities			
family			
thrash metal concert			
family			
sam's lowes, etc			
day trip			
visit			

From which of the following did you get your travel information from today? (Choose all that apply)

	Total	Trucks	Cars, Pickups, etc.
511 Phone Service	26.96%	33.33%	25.00%
Broadcast radio	16.52%	11.11%	18.18%
Dynamic Message Signs	39.13%	37.04%	39.77%

Flashing Caution Signs	36.52%	55.56%	30.68%
Highway Advisory Radio (530 or 1610 AM)	12.17%	7.41%	13.64%
Television	15.65%	3.70%	19.32%
WYDOT website	17.39%	14.81%	18.18%
Other	12.17%	7.41%	13.64%
WYDOT Phone			
Driving by			
people			
signs on roadways			
Word of mouth			
internet			
Visitor center in Cheyenne			
truckers			
fellow at walmart			
map			
1-800-WYO-ROAD			
Nat'l Weather Service Website			
internet			
cb			

For Each source of information you used, please rank the top 3 according to: *accuracy, timeliness and Credibility* (place a '1' for the most, a '2' for the next most, and so on.)

	Total	Trucks	Cars, Pickups, etc.
Accuracy: 511	1.89	1.27	2.17
Accuracy: Broadcast Radio	1.81	1.00	1.95
Accuracy: Dynamic Message Signs	1.52	1.21	1.67
Accuracy: Flashing Caution Signs	1.71	1.55	1.78
Accuracy: HAR	2.04	1.25	2.20
Accuracy: TV	2.13	1.00	2.29
Accuracy: WYDOT website	1.44	1.29	1.50
Accuracy: Other	2.00	2.00	2.00
Timeliness: 511	2.04	1.71	2.18
Timeliness: Broadcast Radio	1.92	1.00	2.09
Timeliness: Dynamic Message Signs	1.52	1.63	1.48
Timeliness: Flashing Caution Signs	2.04	2.14	2.00
Timeliness: HAR	1.86	2.00	1.85
Timeliness: TV	2.57	1.50	2.75
Timeliness: WYDOT website	1.41	1.33	1.43
Timeliness: Other	1.50	0.00	1.50

Credibility: 511	1.32	1.00	1.44
Credibility: Broadcast Radio	1.93	0.00	2.08
Credibility: Dynamic Message Signs	1.59	1.63	1.58
Credibility: Flashing Caution Signs	2.36	2.40	2.35
Credibility: HAR	1.93	2.50	1.85
Credibility: TV	2.50	0.00	2.69
Credibility: WYDOT website	1.32	1.33	1.31
Credibility: Other	0.75	0.00	1.00

Did you READ the advisory on the Dynamic Message Signs (DMS) in this section of I-80?

	Total	Trucks	Cars, Pickups, etc.
Yes	61.74%	62.96%	61.36%
No	38.26%	37.04%	38.64%

Please rate your level of agreement/disagreement with the following statements

The DMS signs were clearly VISIBLE

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	84.51%	82.35%	85.19%
Somewhat Agree	9.86%	5.88%	11.11%
Neutral	1.41%	5.88%	0.00%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	1.41%	0.00%	1.85%

The DMS messages were EASY to understand

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	77.46%	70.59%	79.63%
Somewhat Agree	14.08%	23.53%	11.11%
Neutral	1.41%	0.00%	1.85%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	2.82%	0.00%	3.70%

The DMS messages were USEFUL

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	73.24%	70.59%	74.07%
Somewhat Agree	14.08%	17.65%	12.96%
Neutral	7.04%	11.76%	5.56%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	1.41%	0.00%	1.85%

The DMS messages were ACCURATE

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	61.97%	52.94%	64.81%
Somewhat Agree	25.35%	35.29%	22.22%
Neutral	1.41%	0.00%	1.85%
Somewhat Disagree	2.82%	0.00%	3.70%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	1.41%	0.00%	1.85%

The DMS messages were SPECIFIC/DETAILED enough to help make decisions about your trip.

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	52.11%	47.06%	53.70%
Somewhat Agree	19.72%	29.41%	16.67%
Neutral	11.27%	5.88%	12.96%
Somewhat Disagree	2.82%	5.88%	1.85%
Completely Disagree	2.82%	5.88%	1.85%
Not Sure	1.41%	0.00%	1.85%

The DMS messages BETTER PREPARED you for changing travel conditions

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	57.75%	64.71%	55.56%
Somewhat Agree	21.13%	17.65%	22.22%
Neutral	5.63%	5.88%	5.56%
Somewhat Disagree	4.23%	5.88%	3.70%
Completely Disagree	0.00%	0.00%	0.00%
Not Sure	4.23%	0.00%	5.56%

The DMS signs were appropriately spaced to keep you informed about travel conditions

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	56.34%	64.71%	53.70%
Somewhat Agree	18.31%	11.76%	20.37%
Neutral	5.63%	11.76%	3.70%
Somewhat Disagree	5.63%	0.00%	7.41%
Completely Disagree	1.41%	5.88%	0.00%
Not Sure	4.23%	0.00%	5.56%

Because of the DMS messages, you took the action advised by slowing down, watching for ice, etc.

	Total	Trucks	Cars, Pickups, etc.
Completely Agree	67.61%	58.82%	70.37%
Somewhat Agree	15.49%	23.53%	12.96%
Neutral	5.63%	5.88%	5.56%
Somewhat Disagree	0.00%	0.00%	0.00%
Completely Disagree	1.41%	5.88%	0.00%
Not Sure	1.41%	0.00%	1.85%

Has the information on the Dynamic Message Signs ever caused you to: (Please mark all that apply.)

	Total	Trucks	Cars, Pickups, etc.
Cancel or not take the trip	6.96%	3.70%	7.95%
Turn back and wait until conditions change	15.65%	18.52%	14.77%
Drive more carefully	50.43%	51.85%	50.00%
Drive slower	46.96%	37.04%	50.00%
None of the above, you ignore the Dynamic Message Signs	6.09%	7.41%	5.68%
Other (please specify)	6.09%	3.70%	6.82%

if message signs were flashing, I would turn back and wait until the conditions change
Visit Rest stop - maybe wind will let down
find place to park/stay
signs not on
yes, when I see them
took off cruise control when advised
turned off cruise control

Do you think other drivers respond appropriately to the travel advisories?			
	Total	Trucks	Cars, Pickups, etc.
Yes	62.77%	55.00%	64.86%
No	29.79%	45.00%	25.68%
Both	7.45%	0.00%	9.46%

Is there any additional information that should be displayed on the signs?
warn when snow plows are out, especially if visabilty is low
Road trip cool and scary and cold
Remove all ice from the roadway that is in the shadows
Faster updates, also include road work with mile posts
Mountains ahead
Temp, time to next city
no maps of wyo
up to the minute closure info for the entire state
estimated re-open of roads
road closed
more timely, accurate info
when road closed- please inform on cross highway (I-25). Signs are often placed after exits that could be used to turn/park.
good as is
if turn back/safe haven opts
wrecks ahead
no, it's very good. Thank you -DR
more signs
update 511 more often and be accurate!
"chains required" instead of closing freeway

Please identify your age group:			
	Total	Trucks	Cars, Pickups, etc.
16-25	23.81%	6.90%	27.97%
26-35	8.84%	17.24%	6.78%
36-45	22.45%	34.48%	19.49%
46-55	21.77%	24.14%	21.19%
Over 55	23.13%	17.24%	24.58%

APPENDIX F: SAS STATISTICAL MODELING

All data modeling results – Initial model

```
                                The SAS System                                1

                              The GLM Procedure

                           Class Level Information

Class          Levels  Values

Day                11  1 2 3 4 5 6 7 8 9 10 11

Sensor             26  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
                       23 24 25 26

MsgCategory         4  1 2 3 9


                     Number of Observations Read       26740
                     Number of Observations Used       25682
```

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Weight: w

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	47	357.3300164	7.6027663	968.32	<.0001
Error	25634	201.2658767	0.0078515		
Corrected Total	25681	558.5958931			

R-Square	Coeff Var	Root MSE	AvgSpeed Mean
0.639693	0.127235	0.088609	69.64180

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Sensor	25	178.6517745	7.1460710	910.15	<.0001
AirTemp	1	100.2697797	100.2697797	12770.7	<.0001
Dewpoint	1	2.7832491	2.7832491	354.49	<.0001
RH	1	21.1489670	21.1489670	2693.61	<.0001
AvgWindSpeed	1	0.0735268	0.0735268	9.36	0.0022
GustWindSpeed	1	0.0265242	0.0265242	3.38	0.0661
SfStatus	1	11.0552728	11.0552728	1408.04	<.0001
SfTemp	1	2.5053564	2.5053564	319.09	<.0001
Dist	1	0.0102070	0.0102070	1.30	0.2542
MsgCategory	3	7.2804062	2.4268021	309.09	<.0001
Night_Day	1	14.5102738	14.5102738	1848.08	<.0001
Day	10	19.0146790	1.9014679	242.18	<.0001

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Sensor	25	148.5935896	5.9437436	757.02	<.0001
AirTemp	1	0.0951658	0.0951658	12.12	0.0005
Dewpoint	1	0.4802759	0.4802759	61.17	<.0001
RH	1	0.3608553	0.3608553	45.96	<.0001
AvgWindSpeed	1	0.0169568	0.0169568	2.16	0.1417
GustWindSpeed	1	0.1438674	0.1438674	18.32	<.0001
SfStatus	1	2.5073258	2.5073258	319.34	<.0001
SfTemp	1	0.1155283	0.1155283	14.71	0.0001
Dist	1	0.0086886	0.0086886	1.11	0.2928
MsgCategory	3	5.7278753	1.9092918	243.17	<.0001
Night_Day	1	13.9187885	13.9187885	1772.75	<.0001
Day	10	19.0146790	1.9014679	242.18	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		63.17531206	B	0.97339884	64.90	<.0001
Sensor	1	0.80604355	B	0.19120260	4.22	<.0001
Sensor	2	7.03556036	B	2.83693959	2.48	0.0131
Sensor	3	-0.14690798	B	0.19171994	-0.77	0.4435
Sensor	4	5.49275555	B	0.38804603	14.15	<.0001
Sensor	5	3.86242107	B	0.36858066	10.48	<.0001
Sensor	6	4.34834307	B	0.50319912	8.64	<.0001
Sensor	7	9.29018806	B	2.38150261	3.90	<.0001
Sensor	8	7.95287016	B	2.79331419	2.85	0.0044
Sensor	9	7.46563990	B	3.04753545	2.45	0.0143
Sensor	10	-1.48454863	B	3.21507096	-0.46	0.6443
Sensor	11	9.10187070	B	3.93817311	2.31	0.0208
Sensor	12	13.38712374	B	4.90286734	2.73	0.0063
Sensor	13	7.80377953	B	0.90500440	8.62	<.0001
Sensor	14	6.17815277	B	2.41535461	2.56	0.0105
Sensor	15	5.59380880	B	3.04833171	1.84	0.0665

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Sensor	16	5.11033198	B	2.71032037	1.89	0.0594
Sensor	17	4.50084377	B	2.28907989	1.97	0.0493
Sensor	18	-3.68336215	B	1.83690025	-2.01	0.0450
Sensor	19	2.23028020	B	0.54304869	4.11	<.0001
Sensor	20	0.18650785	B	0.27634276	0.67	0.4997
Sensor	21	1.67957303	B	0.27363632	6.14	<.0001
Sensor	22	-1.19713741	B	0.19141192	-6.25	<.0001
Sensor	23	-5.14520960	B	3.00319269	-1.71	0.0867
Sensor	24	5.99260678	B	2.40036677	2.50	0.0125
Sensor	25	0.70633198	B	1.32123704	0.53	0.5929
Sensor	26	0.00000000	B	.	.	.
AirTemp		0.08251542		0.02370127	3.48	0.0005
Dewpoint		0.16848931		0.02154288	7.82	<.0001
RH		-0.07687101		0.01133895	-6.78	<.0001
AvgWindSpeed		0.02517745		0.01713235	1.47	0.1417
GustWindSpeed		-0.05484447		0.01281234	-4.28	<.0001
SfStatus		-1.77760117		0.09947314	-17.87	<.0001
SfTemp		-0.02211097		0.00576422	-3.84	0.0001
Dist		-0.44441710		0.42246809	-1.05	0.2928
MsgCategory	1	0.21431745	B	0.15003499	1.43	0.1532
MsgCategory	2	-5.65256048	B	0.21441354	-26.36	<.0001
MsgCategory	3	-3.28001529	B	0.99881312	-3.28	0.0010
MsgCategory	9	0.00000000	B	.	.	.
Night_Day		2.89357377		0.06872436	42.10	<.0001
Day	1	-0.14774619	B	0.55013323	-0.27	0.7883
Day	2	-1.31806512	B	0.58266039	-2.26	0.0237
Day	3	1.24386879	B	0.35164888	3.54	0.0004
Day	4	2.01259733	B	0.32919574	6.11	<.0001
Day	5	1.67488982	B	0.26850426	6.24	<.0001
Day	6	0.36613435	B	0.12992607	2.82	0.0048
Day	7	3.78290265	B	0.31065708	12.18	<.0001
Day	8	2.42760584	B	0.24809580	9.78	<.0001

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Parameter		Estimate	Standard Error	t Value	Pr > |t|
Day	9	5.55616048 B	0.27013407	20.57	<.0001
Day	10	6.11340749 B	0.25215371	24.24	<.0001
Day	11	0.00000000 B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

All data modeling results – Final model

```
                                The SAS System                                1


                             The GLM Procedure

                          Class Level Information

Class          Levels  Values

Day                11  1 2 3 4 5 6 7 8 9 10 11

Sensor             26  1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
                       23 24 25 26

MsgCategory         4  1 2 3 9


                    Number of Observations Read       26740
                    Number of Observations Used       25682
```

Dependent Variable: AvgSpeed AvgSpeed

Weight: w

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	43	356.7031048	8.2954210	1053.42	<.0001
Error	25638	201.8927883	0.0078747		
Corrected Total	25681	558.5958931			

R-Square	Coeff Var	Root MSE	AvgSpeed Mean
0.638571	0.127423	0.088740	69.64180

Source	DF	Type I SS	Mean Square	F Value	Pr > F
Sensor	25	178.6517745	7.1460710	907.47	<.0001
AirTemp	1	100.2697797	100.2697797	12733.1	<.0001
Dewpoint	1	2.7832491	2.7832491	353.44	<.0001
GustWindSpeed	1	0.1408276	0.1408276	17.88	<.0001
SfStatus	1	28.2769622	28.2769622	3590.84	<.0001
MsgCategory	3	8.9613381	2.9871127	379.33	<.0001
Night_Day	1	17.2782892	17.2782892	2194.14	<.0001
Day	10	20.3408844	2.0340884	258.31	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Sensor	25	149.8919760	5.9956790	761.38	<.0001
AirTemp	1	4.1107197	4.1107197	522.01	<.0001
Dewpoint	1	0.0398486	0.0398486	5.06	0.0245
GustWindSpeed	1	0.7465250	0.7465250	94.80	<.0001

The GLM Procedure 3

Dependent Variable: AvgSpeed AvgSpeed

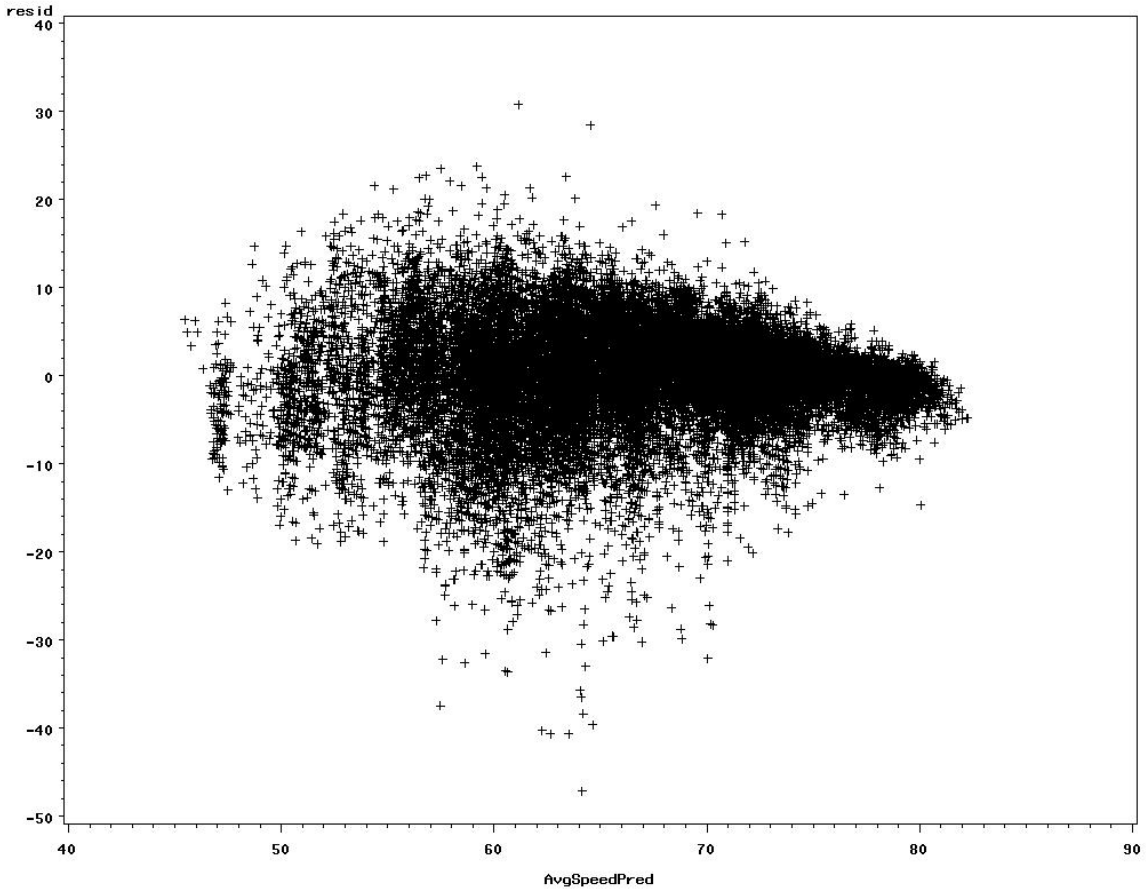
Source	DF	Type III SS	Mean Square	F Value	Pr > F
SfStatus	1	3.5364470	3.5364470	449.09	<.0001
MsgCategory	3	6.4455734	2.1485245	272.84	<.0001
Night_Day	1	15.1367627	15.1367627	1922.19	<.0001
Day	10	20.3408844	2.0340884	258.31	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		59.17410668	B	0.37320535	158.56	<.0001
Sensor	1	0.80710751	B	0.19148494	4.21	<.0001
Sensor	2	4.06055592	B	0.22273215	18.23	<.0001
Sensor	3	-0.13456361	B	0.19199627	-0.70	0.4834
Sensor	4	5.14958100	B	0.19152816	26.89	<.0001
Sensor	5	3.58677105	B	0.26555825	13.51	<.0001
Sensor	6	3.87047938	B	0.19418319	19.93	<.0001
Sensor	7	6.81250385	B	0.27702708	24.59	<.0001
Sensor	8	5.03111732	B	0.17494583	28.76	<.0001
Sensor	9	4.27683712	B	0.19167438	22.31	<.0001
Sensor	10	-4.85121359	B	0.17513857	-27.70	<.0001
Sensor	11	4.82660497	B	0.61020549	7.91	<.0001
Sensor	12	8.24309951	B	0.17466447	47.19	<.0001
Sensor	13	6.86856321	B	0.17410838	39.45	<.0001
Sensor	14	3.64595161	B	0.19145324	19.04	<.0001
Sensor	15	2.40127511	B	0.22142365	10.84	<.0001
Sensor	16	2.26885331	B	0.19158252	11.84	<.0001
Sensor	17	2.10341635	B	0.19133382	10.99	<.0001
Sensor	18	-5.60193463	B	0.26565352	-21.09	<.0001
Sensor	19	1.69806047	B	0.19398587	8.75	<.0001
Sensor	20	0.17619990	B	0.27674256	0.64	0.5243
Sensor	21	1.47337632	B	0.17500439	8.42	<.0001
Sensor	22	-1.18456165	B	0.19168769	-6.18	<.0001
Sensor	23	-8.29936505	B	0.17432135	-47.61	<.0001

Dependent Variable: AvgSpeed AvgSpeed

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Sensor	24	3.38249810	B	0.61978819	5.46	<.0001
Sensor	25	-0.67164201	B	0.17391316	-3.86	0.0001
Sensor	26	0.00000000	B	.	.	.
AirTemp		0.15586320		0.00682186	22.85	<.0001
Dewpoint		0.01118510		0.00497224	2.25	0.0245
GustWindSpeed		-0.05585193		0.00573633	-9.74	<.0001
SfStatus		-1.95213920		0.09211822	-21.19	<.0001
MsgCategory	1	0.17551768	B	0.14995011	1.17	0.2418
MsgCategory	2	-5.92969388	B	0.21169641	-28.01	<.0001
MsgCategory	3	-3.12609267	B	1.00000587	-3.13	0.0018
MsgCategory	9	0.00000000	B	.	.	.
Night_Day		2.96136706		0.06754513	43.84	<.0001
Day	1	-2.45162522	B	0.47059888	-5.21	<.0001
Day	2	-2.03735556	B	0.56477709	-3.61	0.0003
Day	3	0.55073804	B	0.33659476	1.64	0.1018
Day	4	0.76087957	B	0.29525012	2.58	0.0100
Day	5	0.47174788	B	0.22940387	2.06	0.0398
Day	6	0.28322493	B	0.12169669	2.33	0.0200
Day	7	3.73911790	B	0.30946396	12.08	<.0001
Day	8	2.85741204	B	0.23022820	12.41	<.0001
Day	9	5.11899869	B	0.25635792	19.97	<.0001
Day	10	5.78780874	B	0.24364731	23.75	<.0001
Day	11	0.00000000	B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.


resid
40
30
20
10
0
-10
-20
-30
-40
-50
40
50
60
70
80
90
AvgSpeedPred

The SAS System

The REG Procedure
Model: MODEL1
Dependent Variable: AvgSpeed AvgSpeed

Number of Observations Read	26740
Number of Observations Used	25682
Number of Observations with Missing Values	1058

Weight: w

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	153.98632	25.66439	1628.57	<.0001
Error	25675	404.60958	0.01576		
Corrected Total	25681	558.59589			

Root MSE	0.12553	R-Square	0.2757
Dependent Mean	69.64180	Adj R-Sq	0.2755
Coeff Var	0.18026		

NOTE: Model is not full rank. Least-squares solutions for the parameters are not unique. Some statistics will be misleading. A reported DF of 0 or B means that the estimate is biased.
NOTE: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

S1 = Intercept
D1 = Intercept

The SAS System

The REG Procedure
Model: MODEL1
Dependent Variable: AvgSpeed AvgSpeed

Parameter Estimates

Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	B	56.50102	1.31074	43.11	<.0001
S1		0	0	.	.	.
AirTemp	AirTemp	1	0.13941	0.00489	28.50	<.0001
Dewpoint	Dewpoint	1	-0.03051	0.00609	-5.01	<.0001
GustWindSpeed	GustWindSpeed	1	0.02642	0.00535	4.94	<.0001
SfStatus	SfStatus	1	-3.30118	0.08222	-40.15	<.0001
M1		1	6.55735	1.28281	5.11	<.0001
Night_Day	Night_Day	1	2.39536	0.08748	27.38	<.0001
D1		0	0	.	.	.

Parameter Estimates

Variable	Label	DF	Variance Inflation
Intercept	Intercept	B	0
S1		0	.
AirTemp	AirTemp	1	2.67150
Dewpoint	Dewpoint	1	1.85780
GustWindSpeed	GustWindSpeed	1	1.62532
SfStatus	SfStatus	1	1.86743
M1		1	1.00948
Night_Day	Night_Day	1	1.16167
D1		0	.

Speed Sensor 325.8 – Eastbound modeling results – Initial model

The GLM Procedure

Class Level Information

Class	Levels	Values
Day	4	1 2 3 9
MsgCategory	3	1 2 9

Number of Observations Read	844
Number of Observations Used	828

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Weight: w

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	13	52214368.60	4016489.89	156.00	<.0001
Error	814	20958401.02	25747.42		
Corrected Total	827	73172769.62			

R-Square	Coeff Var	Root MSE	AvgSpeed Mean
0.713576	223.7446	160.4600	71.71571

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AirTemp	1	33808017.58	33808017.58	1313.06	<.0001
RH	1	717263.56	717263.56	27.86	<.0001
Dewpoint_	1	2934603.18	2934603.18	113.98	<.0001
AvgWindSpeed	1	116905.31	116905.31	4.54	0.0334
GustWindSpeed	1	105442.44	105442.44	4.10	0.0433
SfStatus	1	2146776.93	2146776.93	83.38	<.0001
SfTemp	1	2243854.62	2243854.62	87.15	<.0001
MsgCategory	2	6842388.27	3421194.14	132.88	<.0001
Night_Day	1	2892259.33	2892259.33	112.33	<.0001
Day	3	406857.36	135619.12	5.27	0.0013

Source	DF	Type III SS	Mean Square	F Value	Pr > F
AirTemp	1	354511.512	354511.512	13.77	0.0002
RH	1	334375.347	334375.347	12.99	0.0003

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Dewpoint_	1	214208.966	214208.966	8.32	0.0040
AvgWindSpeed	1	0.067	0.067	0.00	0.9987
GustWindSpeed	1	77125.507	77125.507	3.00	0.0839
SfStatus	1	342200.351	342200.351	13.29	0.0003
SfTemp	1	322980.267	322980.267	12.54	0.0004
MsgCategory	2	5115714.447	2557857.224	99.34	<.0001
Night_Day	1	2484112.883	2484112.883	96.48	<.0001
Day	3	406857.364	135619.121	5.27	0.0013

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		93.21261490	B	5.82061724	16.01	<.0001
AirTemp		-0.51079021		0.13765572	-3.71	0.0002
RH		-0.23318201		0.06470604	-3.60	0.0003
Dewpoint_		0.33670673		0.11673466	2.88	0.0040
AvgWindSpeed		0.00013451		0.08331972	0.00	0.9987
GustWindSpeed		-0.11463369		0.06623387	-1.73	0.0839
SfStatus		-2.37243060		0.65075897	-3.65	0.0003
SfTemp		0.09972495		0.02815676	3.54	0.0004
MsgCategory	1	2.39289469	B	0.69166627	3.46	0.0006
MsgCategory	2	-8.51584227	B	0.80027060	-10.64	<.0001
MsgCategory	9	0.00000000	B	.	.	.
Night_Day		3.55536416		0.36196393	9.82	<.0001
Day	1	-3.34932048	B	1.41227023	-2.37	0.0179
Day	2	-2.32099569	B	1.02182267	-2.27	0.0234
Day	3	1.49925974	B	0.55308190	2.71	0.0069
Day	9	0.00000000	B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

Speed Sensor 325.8 – Eastbound modeling results – Final model

The GLM Procedure

Class Level Information

Class	Levels	Values
Day	4	1 2 3 9
MsgCategory	3	1 2 9

Number of Observations Read	844
Number of Observations Used	828

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Weight: w

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	10	51844643.75	5184464.37	198.60	<.0001
Error	817	21328125.87	26105.42		
Corrected Total	827	73172769.62			

R-Square	Coeff Var	Root MSE	AvgSpeed Mean
0.708524	225.2947	161.5717	71.71571

Source	DF	Type I SS	Mean Square	F Value	Pr > F
SfTemp	1	27365288.82	27365288.82	1048.26	<.0001
Dewpoint_	1	3528594.75	3528594.75	135.17	<.0001
GustWindSpeed	1	3171173.09	3171173.09	121.48	<.0001
SfStatus	1	7239226.92	7239226.92	277.31	<.0001
MsgCategory	2	7131582.46	3565791.23	136.59	<.0001
Night_Day	1	2728846.40	2728846.40	104.53	<.0001
Day	3	679931.31	226643.77	8.68	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SfTemp	1	239672.385	239672.385	9.18	0.0025
Dewpoint_	1	126111.337	126111.337	4.83	0.0282
GustWindSpeed	1	317094.367	317094.367	12.15	0.0005
SfStatus	1	887639.162	887639.162	34.00	<.0001
MsgCategory	2	5973220.910	2986610.455	114.41	<.0001

The SAS System

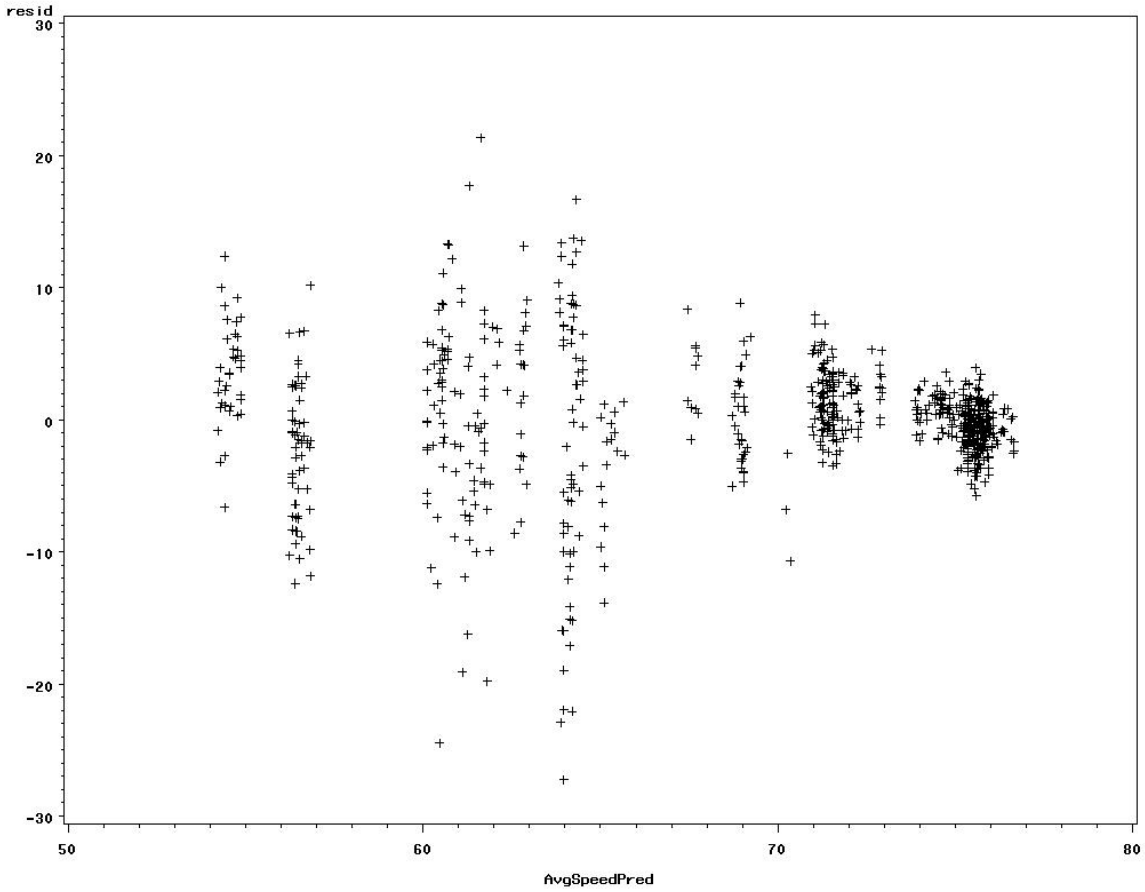
The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Night_Day	1	2426183.218	2426183.218	92.94	<.0001
Day	3	679931.307	226643.769	8.68	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		71.64432859	B	0.76786701	93.30	<.0001
SfTemp		0.04642111		0.01532046	3.03	0.0025
Dewpoint_		-0.05262065		0.02394112	-2.20	0.0282
GustWindSpeed		-0.12654760		0.03630989	-3.49	0.0005
SfStatus		-3.42658497		0.58763628	-5.83	<.0001
MsgCategory	1	1.65694439	B	0.66676206	2.49	0.0132
MsgCategory	2	-9.49101736	B	0.74462664	-12.75	<.0001
MsgCategory	9	0.00000000	B	.	.	.
Night_Day		3.50403793		0.36347314	9.64	<.0001
Day	1	-2.27882254	B	1.22014331	-1.87	0.0622
Day	2	-3.22581456	B	0.78847853	-4.09	<.0001
Day	3	1.20355396	B	0.54431097	2.21	0.0273
Day	9	0.00000000	B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.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Speed Sensor 325.8 – Westbound modeling results – Initial model

The GLM Procedure

Class Level Information

Class	Levels	Values
Day	4	1 2 3 9
MsgCategory	2	2 9

Number of Observations Read	844
Number of Observations Used	834

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Weight: w

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	12	34399997.84	2866666.49	94.80	<.0001
Error	821	24827450.24	30240.50		
Corrected Total	833	59227448.08			

R-Square	Coeff Var	Root MSE	AvgSpeed Mean
0.580812	251.7412	173.8980	69.07807

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AirTemp	1	20685419.05	20685419.05	684.03	<.0001
RH	1	335627.89	335627.89	11.10	0.0009
Dewpoint_	1	1959456.04	1959456.04	64.80	<.0001
AvgWindSpeed	1	139883.67	139883.67	4.63	0.0318
GustWindSpeed	1	42993.52	42993.52	1.42	0.2335
SfStatus	1	1182284.41	1182284.41	39.10	<.0001
SfTemp	1	1685626.98	1685626.98	55.74	<.0001
MsgCategory	1	6754.53	6754.53	0.22	0.6366
Night_Day	1	5482909.50	5482909.50	181.31	<.0001
Day	3	2879042.25	959680.75	31.73	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
AirTemp	1	490165.655	490165.655	16.21	<.0001
RH	1	890374.621	890374.621	29.44	<.0001

The GLM Procedure

Dependent Variable: AvgSpeed AvgSpeed

Source	DF	Type III SS	Mean Square	F Value	Pr > F
Dewpoint_	1	751104.644	751104.644	24.84	<.0001
AvgWindSpeed	1	3768.710	3768.710	0.12	0.7242
GustWindSpeed	1	102319.129	102319.129	3.38	0.0662
SfStatus	1	1850456.525	1850456.525	61.19	<.0001
SfTemp	1	51460.033	51460.033	1.70	0.1924
MsgCategory	1	500210.692	500210.692	16.54	<.0001
Night_Day	1	3959331.410	3959331.410	130.93	<.0001
Day	3	2879042.246	959680.749	31.73	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		93.59861985	B	5.93873070	15.76	<.0001
AirTemp		-0.56988059		0.14154903	-4.03	<.0001
RH		-0.35093258		0.06467431	-5.43	<.0001
Dewpoint_		0.59730618		0.11985089	4.98	<.0001
AvgWindSpeed		0.03177240		0.09000118	0.35	0.7242
GustWindSpeed		-0.12970809		0.07051526	-1.84	0.0662
SfStatus		-5.23959826		0.66981216	-7.82	<.0001
SfTemp		0.03865624		0.02963324	1.30	0.1924
MsgCategory	2	-5.99321248	B	1.47359341	-4.07	<.0001
MsgCategory	9	0.00000000	B	.	.	.
Night_Day		4.51597747		0.39467109	11.44	<.0001
Day	1	11.91971794	B	1.36495509	8.73	<.0001
Day	2	6.77523921	B	0.93084429	7.28	<.0001
Day	3	2.60346681	B	0.57471270	4.53	<.0001
Day	9	0.00000000	B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.

Speed Sensor 325.8 – Westbound modeling results – Final model

The GLM Procedure

Class Level Information

Class	Levels	Values
Day	4	1 2 3 9
MsgCategory	2	2 9

Number of Observations Read	844
Number of Observations Used	834

The GLM Procedure 2

Dependent Variable: AvgSpeed AvgSpeed

Weight: w

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	10	34341766.82	3434176.68	113.57	<.0001
Error	823	24885681.26	30237.77		
Corrected Total	833	59227448.08			

R-Square	Coeff Var	Root MSE	AvgSpeed Mean
0.579829	251.7298	173.8901	69.07807

Source	DF	Type I SS	Mean Square	F Value	Pr > F
AirTemp	1	20685419.05	20685419.05	684.09	<.0001
RH	1	335627.89	335627.89	11.10	0.0009
Dewpoint_	1	1959456.04	1959456.04	64.80	<.0001
GustWindSpeed	1	177066.96	177066.96	5.86	0.0157
SfStatus	1	1186780.69	1186780.69	39.25	<.0001
MsgCategory	1	57423.61	57423.61	1.90	0.1686
Night_Day	1	6423048.95	6423048.95	212.42	<.0001
Day	3	3516943.63	1172314.54	38.77	<.0001

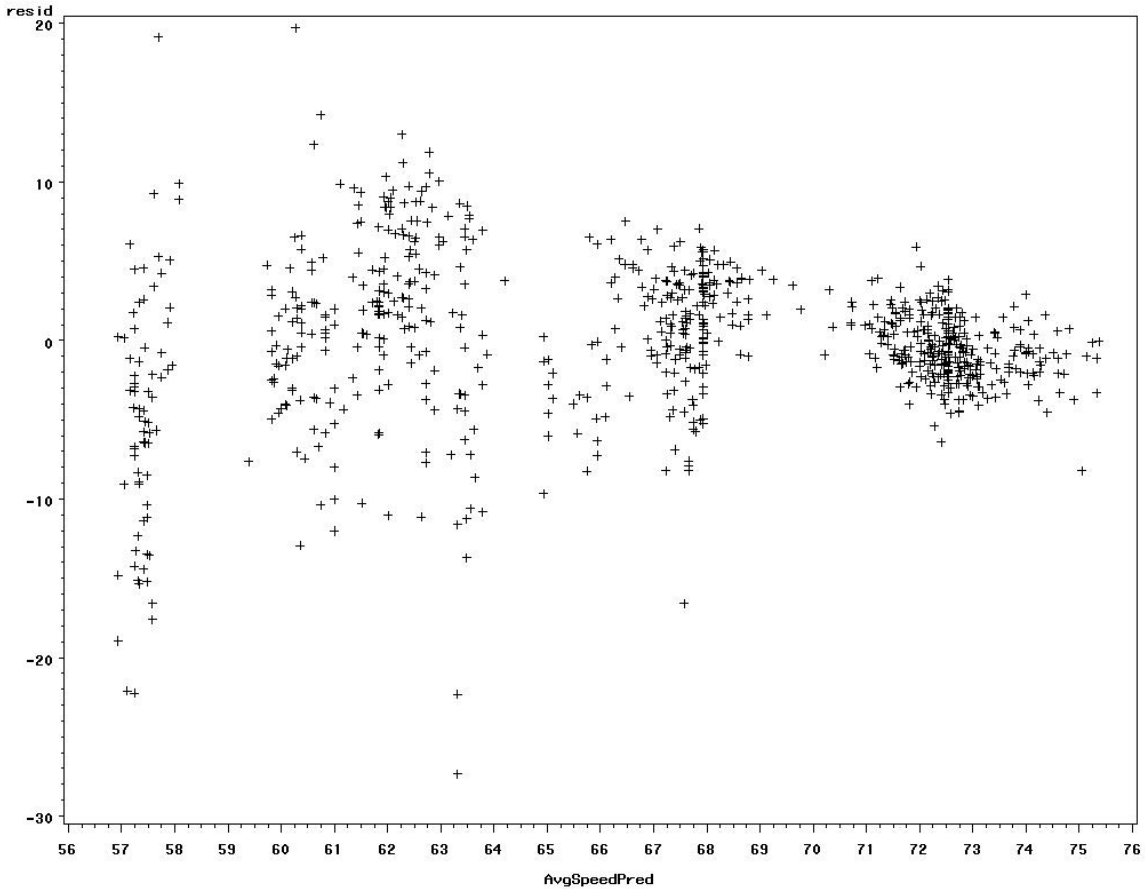
Source	DF	Type III SS	Mean Square	F Value	Pr > F
AirTemp	1	509720.051	509720.051	16.86	<.0001
RH	1	857385.333	857385.333	28.35	<.0001
Dewpoint_	1	761992.391	761992.391	25.20	<.0001
GustWindSpeed	1	155431.544	155431.544	5.14	0.0236

Dependent Variable: AvgSpeed AvgSpeed

Source	DF	Type III SS	Mean Square	F Value	Pr > F
SfStatus	1	2313797.788	2313797.788	76.52	<.0001
MsgCategory	1	476799.694	476799.694	15.77	<.0001
Night_Day	1	4250421.416	4250421.416	140.57	<.0001
Day	3	3516943.626	1172314.542	38.77	<.0001

Parameter		Estimate		Standard Error	t Value	Pr > |t|
Intercept		90.32753653	B	5.17456616	17.46	<.0001
AirTemp		-0.47659353		0.11607993	-4.11	<.0001
RH		-0.33529784		0.06296766	-5.32	<.0001
Dewpoint_		0.59755709		0.11903617	5.02	<.0001
GustWindSpeed		-0.08504687		0.03751143	-2.27	0.0236
SfStatus		-5.53118394		0.63231029	-8.75	<.0001
MsgCategory	2	-5.82715160	B	1.46744956	-3.97	<.0001
MsgCategory	9	0.00000000	B	.	.	.
Night_Day		4.60606459		0.38849808	11.86	<.0001
Day	1	12.66020816	B	1.24149276	10.20	<.0001
Day	2	7.11795091	B	0.87933350	8.09	<.0001
Day	3	2.38304686	B	0.53361393	4.47	<.0001
Day	9	0.00000000	B	.	.	.

NOTE: The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.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