ALASKA 511 DATABASE EVALUATION

An evaluation of the Alaska Condition Acquisition & Reporting System (CARS) and the road condition entry form

By

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Prepared for the

Alaska Department of Transportation & Public Facilities

October 2006

DISCLAIMER

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ACKNOWLEDGEMENTS

The authors would like to thank all of the participants who filled out surveys. Special thanks to Jill Sullivan of Alaska Department of Transportation and Public Facilities for her review of and input into the survey instrument as well as her guidance in this project.

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EXECUTIVE SUMMARY

The Alaska Department of Transportation & Public Facilities (ADOT&PF) initiated the Alaska Travel Information System by joining the Condition Acquisition & Reporting System/511 (CARS/511) Pooled Fund in October 2002. CARS is a multi-state database of road and traffic events supported by multiple, widely distributed web browser data input terminals. These multi-state travel information databases drive automated 511 messages without further manual intervention.

Alaska's 511 phone and web service was made available to the public in April 2003. The information provided by these systems is the responsibility of the ADOT & PF employees and partnering agencies such as the Alaska State Troopers, US Customs & Patrol, and the Municipality of Anchorage: Anchorage Police Department, Water and Wastewater Utility, and street maintenance personnel. These users report the driving conditions, accidents, closures, delays, alerts, roadwork, and ferry information into the Condition Acquisitions and Reporting System (CARS) database provided by CARS/511 pooled fund vendor, Castle Rock Consultants. A Road Condition Quick Entry Form is also provided for quicker entry of driving conditions during winter months.

To ensure that their employees and partnering agencies have the most efficient technology in which to do their jobs of providing up-to-date and accurate conditions, ADOT&PF decided to survey the users of the database and form to identify how well these instruments work and any challenges associated with them that may need to be updated.

The survey was created in Adobe Acrobat allowing respondents to check boxes and input written information and then submit the survey electronically. The survey was emailed to one hundred and forty employees of either ADOT & PF or partnering agencies. There was a response rate of 14 percent on this survey. To increase the response rate, the survey was transferred to a word document and redistributed to database users through an email sent by the ADOT&PF Maintenance Chief. This yielded an additional 8 surveys for a total of 25 responses. A response rate can not be calculated due to not knowing how many people were sent the second email.

This survey found that although the Road Condition Quick Entry Form was preferred over the CARS database, respondents felt favorably about both the CARS database (88 percent) and the Quick Entry Form (94 percent). As one respondents said, "overall, CARS is wonderful to have and it has enabled the public to know what is going on." Respondents felt that both the Quick Entry and CARS database saved them time compared to the older manual system.

Although respondents did not use the system as frequently as was expected, 56 percent used it at least weekly; the system was used most frequently on weekday mornings which corresponds to the peak usage for the Alaska 511 phone system. Also, although more respondents enter information about road work (74 percent) then driving conditions and closures (70 percent each), driving conditions were the most frequently reported which corresponds to the fact that the 511 phone system is used most frequently in the wintertime when driving conditions are needed.

The respondents had typically heard about the CARS database and/or the Quick Entry Form from their immediate supervisor (56 percent). At least one of the respondents had entered data

for all of the regions except Valdez and Cordova and Haines-Skagway. The sources they used for gathering the information that was input into the CARS database and/or Quick Entry Form tended to be human resources rather than technology resources with the most used sources being other ADOT & PF employees (82 percent), observations of existing conditions (55 percent), and other agencies (45 percent).

Lastly, respondents suggested numerous enhancements for the CARS database and Quick Entry Form, the 511 phone system, and the 511 Web Site.

1 INTRODUCTION

The Alaska Department of Transportation & Public Facilities (ADOT&PF) initiated the Alaska Travel Information System by joining the Condition Acquisition & Reporting System/511 (CARS/511) Pooled Fund in October 2002. CARS is a multi-state database of road and traffic events supported by multiple, widely distributed web browser data input terminals. These multi-state travel information databases drive automated 511 messages without further manual intervention.

Alaska's 511 phone and web service went live in April 2003. The information provided by these systems is the responsibility of the Alaska Department of Transportation and Public Facilities (ADOT & PF) employees, local law enforcement, and the Water and Wastewater Utility employees.

These employees log the driving conditions, accidents, closures, delays, alerts, roadwork, and ferry information into the Condition Acquisitions and Reporting System (CARS) database provided by ADOT & PF's 511 vendor, Castle Rock Consultants. A Road Condition Quick Entry Form is also provided for quicker entry of driving conditions during winter months. The information input into this form is automatically posted to the CARS database.

The most important part of any 511 system is to ensure that the information provided is accurate and up-to-date. The National 511 Market Research Study participants said that "if they used 511 and found the information to be inaccurate in their first few uses, they would be unlikely to give the service another chance" (1). To ensure that their employees have the most efficient technology in which to do their jobs of providing up-to-date and accurate conditions, ADOT&PF decided to survey the users of the database and form to identify how well these instruments work and any challenges associated with them that may need to be updated.

2 SURVEY DESIGN AND DISTRIBUTION

The survey was created in Adobe Acrobat allowing respondents to check boxes and input written information and then submit the survey electronically. The questions on the survey were in five parts. First, respondents were asked if they have used the CARS database followed by specific questions about this database. Secondly, respondents were asked if they have used the Road Condition Quick Entry Form followed by specific questions about this form. The third set of questions refers to both the database and form and were to be answered by any respondent who had used either of them. The fourth set of questions involved respondents identifying possible enhancements. Lastly, demographic questions were asked.

The survey was emailed to one hundred and forty employees of either ADOT & PF or partnering agencies. Users that attended the CARS/511 training course on how to input data into both the database and the quick entry form were emailed the survey. Of the surveys sent out, sixteen were returned due to emails that were no longer valid; two people responded that they no longer work with the database and quick entry form; and seventeen filled out the survey. This provides a response rate of 14 percent. Several factors may have influenced the low response rate, most notably the fact that the survey form was in a format (Adobe Acrobat) that was not accessible to some of the employees.

To increase the response rate, the survey was transferred to a word document and redistributed to database users through an email sent by the ADOT&PF Maintenance Chief. This yielded an additional 8 surveys for a total of 25 responses. A response rate can not be calculated due to not knowing how many people were sent the second email.

3 DEMOGRAPHICS

Agency, age and education information was included in the survey as part of the demographics. This information was collected to better understand who answered the survey.

3.1 Agency

Of the twenty five respondents, the majority (16 respondents) were from ADOT&PF. Four or these thirteen specifically identified themselves as Maintenance and Operation personnel. Three respondents are employed by the Anchorage Police Department, one by Anchorage Water and Wastewater Utility, one by the MOA Traffic Department, one by Soldotna AST Trooper Dispatch, and three did not answer the question.

3.2 Age

All of the respondents were between 25 and 64 years of age with 56 percent being 45 to 64 years old and 44 percent being 25 to 44 years old. None of the respondents were below 24 or above 65 years of age.

3.3 Highest Level of Education

Respondents were also asked the highest level of education they have attained. As shown in Figure 1, all of the respondents have finished high school and 52 percent had continued their education with some level of college.

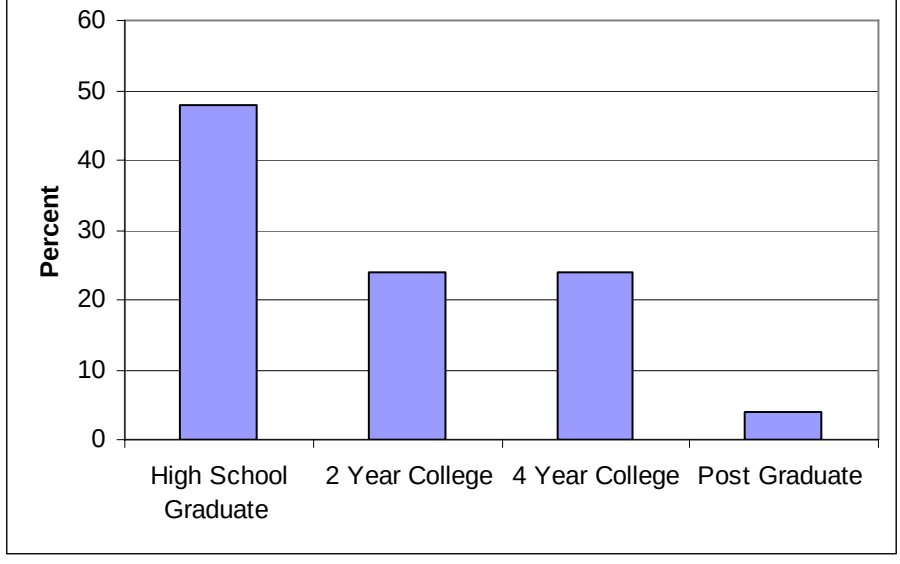

Figure 1: Highest Level of Education Attained

4 GENERAL QUESTIONS

To provide a better understanding of when and how the CARS database and the Road Condition Quick Entry Form are used, several general questions were asked about these systems. These questions were used to find out the most common time when the database was updated, the sources of information used to update the database, how often the database was updated, the most frequently used database input features, the most common portions of Alaska that were reported and the type of information reported. Several questions about potential enhancements were also asked and the responses were left open ended for respondents.

4.1 Date Respondents Began Using the Database/Form

Respondents were asked when they started using the Alaska's CARS database or the Road Condition Quick Entry Form. The respondents wrote down different times ranging from fall 2002 to 2006. One of the respondents said that they started in 2002, although it was not available until 2003. Nine of the respondents began using the database/form in 2003, although only two of the respondents have been using the database/form since the beginning (April 2003). Eight respondents started in 2004, four started in 2005, as well as two respondents not providing dates and two not responding. The seasonal breakdown for the respondents is shown in Table 1.

Table 1: Seasons and Years Respondents Started Using the Database/Form

Times of the Year	2002	2003	2004	2005	2006
Spring		2	1	1	
Summer		2	1		
Fall	1	2	1		
Winter		1	5	3	
Did Not Specify Season		2			1
TOTAL	1	9	8	4	1
Did Not Answer		1		1	

4.2 How Respondents Heard of the Database/Form

Participants were then asked how they heard about the CARS database or the Road Condition Quick Entry Form. As shown in Figure 2, 56 percent of respondents heard about the database/form from their immediate supervisors, 16 percent specified other sources, 20 percent from co-workers, and 8 percent from other agencies. The other sources identified were from the database instructor and an Alaska DOT & PF Intelligent Transportation Systems (ITS) project.

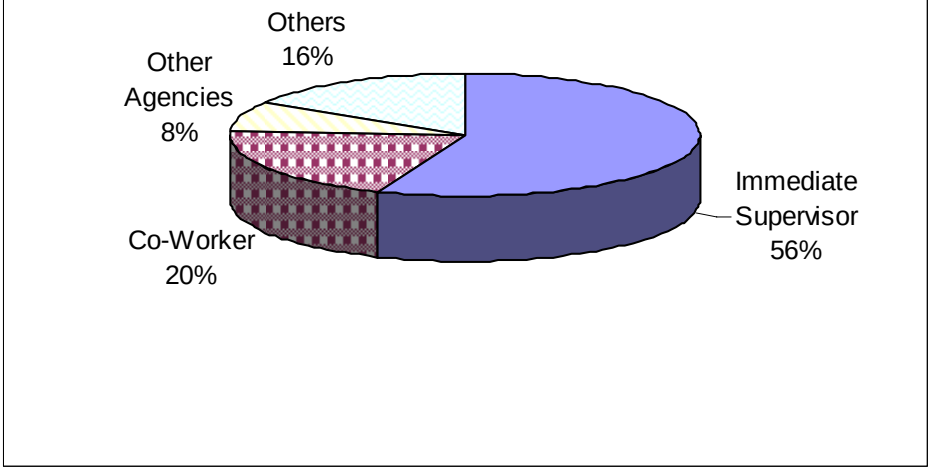

Figure 2: How Respondents Heard of the Database/Form

4.3 Frequency

Respondents were asked how often they enter data into the database or quick entry form. As shown in Figure 3, most respondents entered data at least weekly (56 percent) with 36 percent entering information daily, 8 percent multiple times per day, and 12 percent one to three times per week. The remaining respondents said they enter data sometimes but not every week (40 percent) or never (4 percent). Although the frequency of respondents entering data multiple times a day seems low, most of the CARS users are ADOT&PF M&O personnel who enter the driving conditions once, in the early AM, before they go out in the field. They will only update the information again that same day if the weather changes drastically.

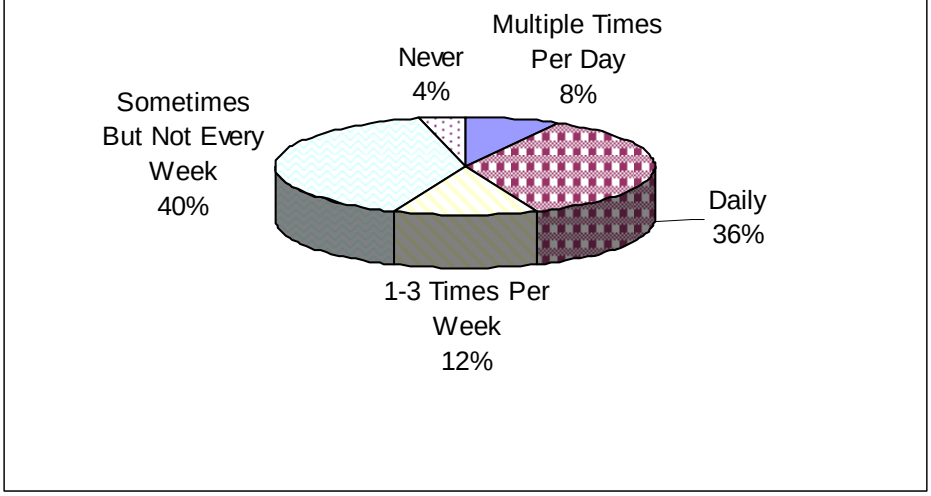

Figure 3: How Often they Entered Information into the Systems

4.4 Time of Day

Respondents were also asked what time of day they most commonly enter information into the system. Respondents were allowed to check more than one option for this question. As shown in Figure 4, weekday mornings from 6 AM to noon was the most common time of day when data was entered into the system (87 percent), followed by weekday afternoons from noon to 5 PM (61 percent), weekends (30 percent), holidays (26 percent), and weekday evenings after 5 pm (22 percent).

The fact that the majority of employees input information into the system on weekday mornings correlates to when travelers are using the system. Peak usage of the Alaska 511 phone system occurs from 8 to 11 AM (2). This indicates that the peak time users are calling the system also has the most up-to-date conditions.

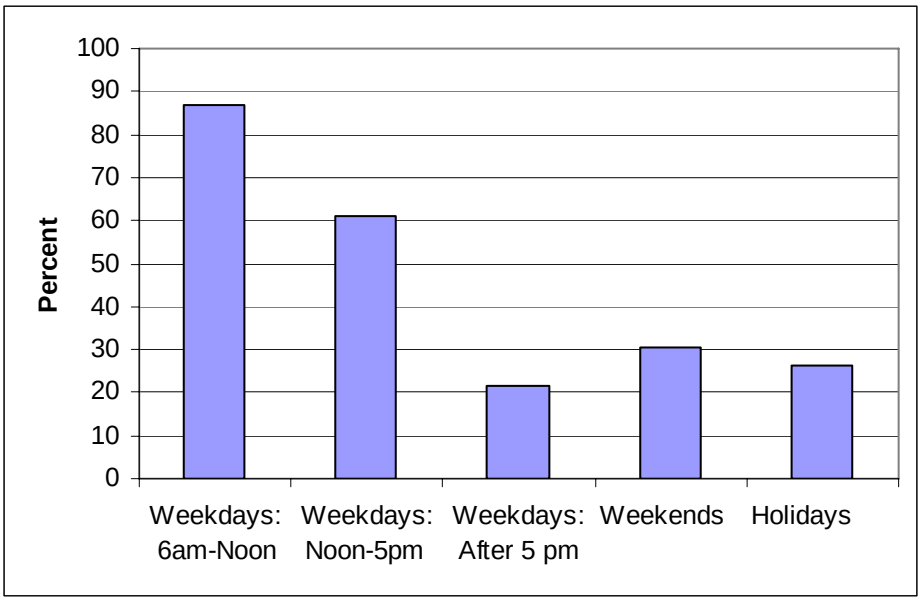

Figure 4: Times When Data is Entered into the System

4.5 Regions

This question was asked to determine which portions of Alaska were updated most often (respondents were allowed to choose more than one answer). As shown in Table 2, the most common regions in Alaska that respondents input data for include: Anchorage, Kenai Peninsula, South Central Alaska, and East Central Alaska. None of the respondents enter data for Haines-Skagway or Valdez and Cordova. Figure 5 is a map of Alaska detailing these regions.

Table 2: Ranking of Regions in Alaska Data is Input For

Regions in Alaska	Rank	Percentage
Anchorage	1	25
South Central Alaska	2	21
Kenai Peninsula	2	21
East Central Alaska	4	17
Fairbanks	5	13
Northern Alaska	5	13
North Central Alaska	5	13
Statewide	8	8
Mat-Su Area	8	8
Seward Peninsula	10	4
Southeast Alaska	10	4
Valdez and Cordova	12	0
Haines-Skagway	12	0

Source (3)

Figure 5: Map of Alaska

4.6 Types of Information

Participants of the survey were asked what kinds of information they enter into the system. The participants were allowed to check more than one option. As shown in Figure 6, the most common types of information entered were road work (74 percent); followed by driving conditions and closures (70 percent each); delays (48 percent), accidents (43 percent), alerts (35 percent); and other information (13 percent) including wildfires, smoke, and special activities like parades and races. None of the respondents enter ferry information.

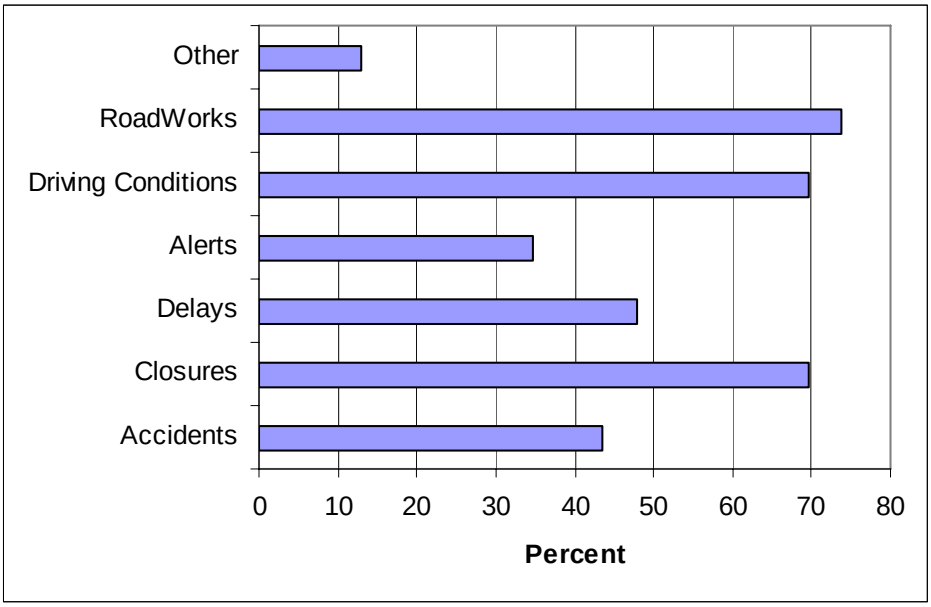

Figure 6: Types of Information Reported

4.7 Ranking of Reported Conditions

Survey participants were then asked to rank the frequency at which they provide types of information into the system; with 1 being the most frequent and 7 the least frequently reported information. As shown in Table 3, although more respondents enter road closures and roadworks, driving conditions were the most frequently reported data. Driving conditions being the most frequently reported conditions correlates with the fact that the National 511 Market Research Study found that "40 percent surveyed said weather-related and road surface condition information was the most critical element for 511 systems to provide" (1). It also correlates with the fact that the Alaska 511 phone system is used most frequently in the wintertime with the peak day between April 2003 and May 2005 being December 24, 2004 (2).

Table 3: Ranking of Reported Conditions

Reported Information	Number of Responses	Rank of Frequency
Driving Conditions	15	1
Roadwork	16	2
Closures	15	3
Accidents	10	4
Delays	11	5
Alerts	8	6
Other	2	7
Ferry Information	0	8

4.8 Sources of Information

Respondents were asked what sources they use to gather the information they enter into the database/form. For this question, respondents were allowed to give more than one answer. As shown in Figure 7, DOT&PF personnel was the most common source of information (82 percent) followed observations of existing conditions (55 percent); other agency personnel (45 percent); maintenance vehicles (32 percent); internet sources (23 percent); other (14 percent) and radio (5 percent each). None of the respondents identified television or police scanners as a source of information. It can also be observed that the respondents used human resources more than electronic resources to get the information they needed. Internet sources used include Anchorage scan web, weather sites such as weatherunderground.com and NOAA's web site, and RWIS cameras. Other agencies included:

- Local law enforcement;
- Department of Natural Resources Bureau of Land Management;
- Anchorage Water and Wastewater Utility Engineering Division;
- Bed and Breakfasts;
- Anchorage police department police officers;
- Right of Way permits and traffic control plans;
- Emergency workers;
- National Weather Service; and
- Alaska State Troopers.

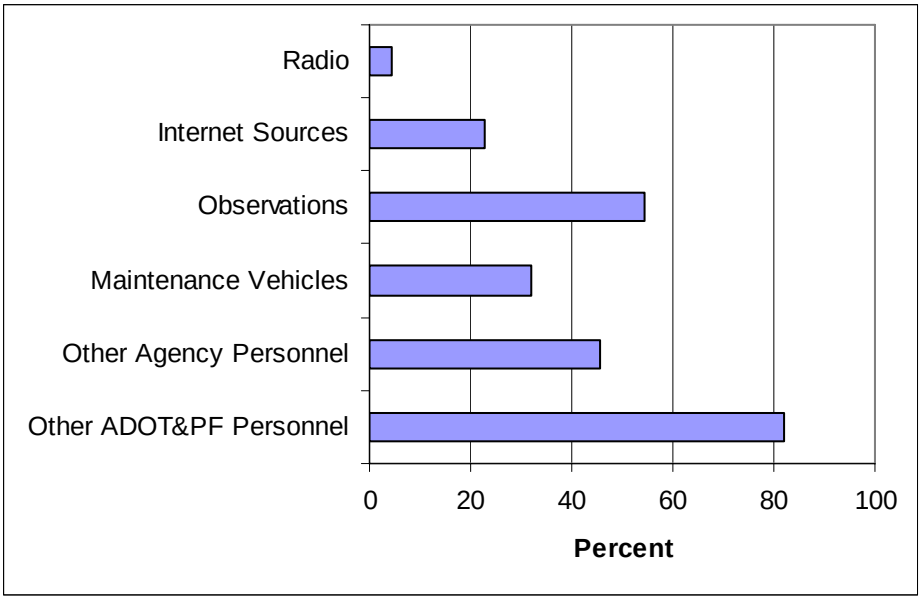

Figure 7: Sources of Information

4.9 Usage of Data Entry Methods

Survey respondents were asked which information input method they used most frequently: the CARS database or the Quick Entry Form. As shown in Figure 8, respondents did not prefer one form over the other. Only 4 percent said they use both features equally.

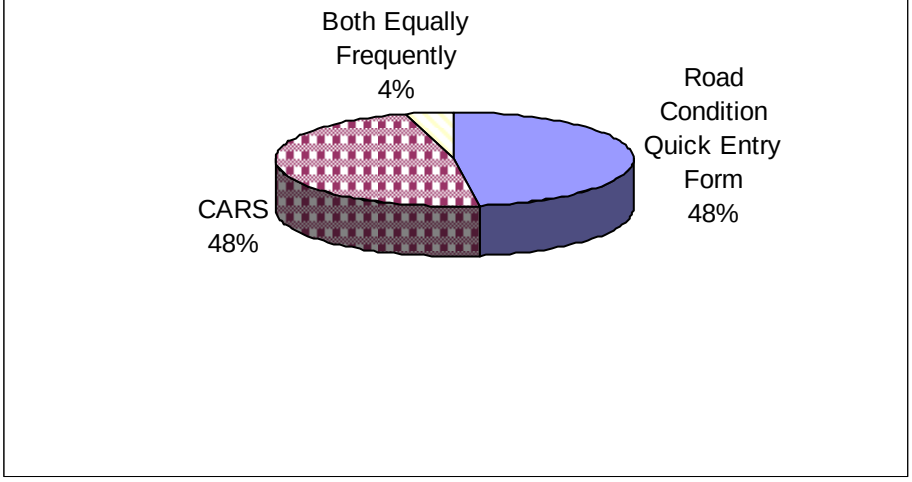

Figure 8: Most Frequently Used Input Feature

5 CONDITION ACQUISITION AND REPORTING SYSTEM (CARS)

Survey respondents were asked if they have ever entered data into Alaska's Condition Acquisition and Reporting System (CARS) database. All but two of the respondents said they had entered data into the database. Those who had used the CARS database were asked several follow-up questions.

5.1 Time Spent Entering Data

Those participants who said they had previous experience entering data into the database were asked to estimate the amount of time they spend each day entering data. As shown in Figure 9, 43 percent said they spend less than 5 minutes while 35 percent said they spend 5 to 10 minutes and finally 22 percent said they spend more than 10 minutes every day updating the database.

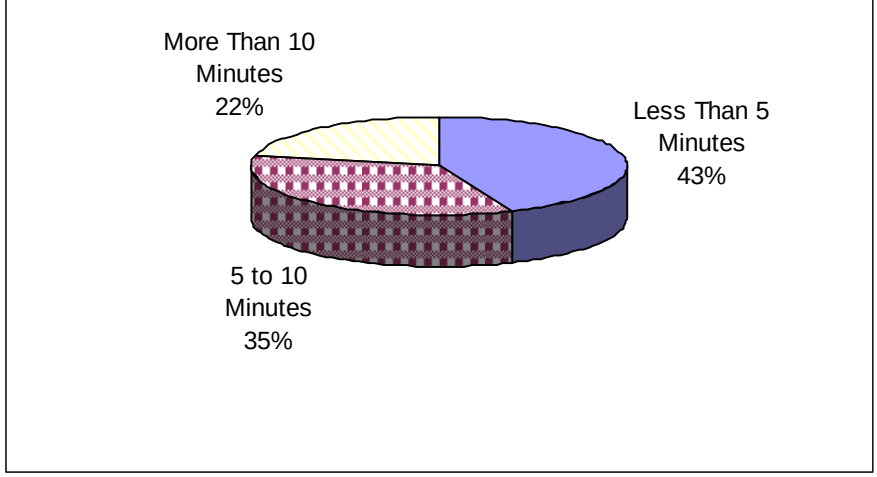

Figure 9: Time Spent Entering Information into the Database

5.2 Challenges of the CARS Database

Respondents were asked what challenges they face when entering data into the CARS database. Respondents were allowed to check all answers that applied. As shown in Figure 10, the challenges that were mentioned the most had to do with inefficient use of time including: time consuming to create a CARS situation/event (48 percent), time consuming to find correct description phrase (43 percent), and time consuming to find a situation/event (39 percent). Also, respondents felt that there was a lack of location features to choose from (39 percent). Other challenges that were identified included that description phrases cannot be customized to what is needed and therefore something generic must be chosen instead; there are challenges getting the

program to launch each time, and two people identified that lack of archiving and emailing capabilities are a challenge.

The general comments about the CARS database agreed with these findings that the system is time consuming. Some examples include:

- CARS entry is time consuming. Most of the time, issuing a Travel Advisory is quicker, more accurate and gets out to the radio stations who relay information to the traveling public sooner; maybe because it seems to stress the importance of the situation better than if it goes on CARS;

- The CARS system of reporting is not set up to be very user friendly, in my opinion. It can take a long time to figure out how to log conditions. For example "travel difficult due to spring thaw/break-up conditions such as soft boils, or flooding, or wash out, or mud slide, etc." It would seem easier to allow us to manually type in the condition; and

- The CARS database is to time consuming. When there is an emergency, a half hour is not available to look for the right phrases.

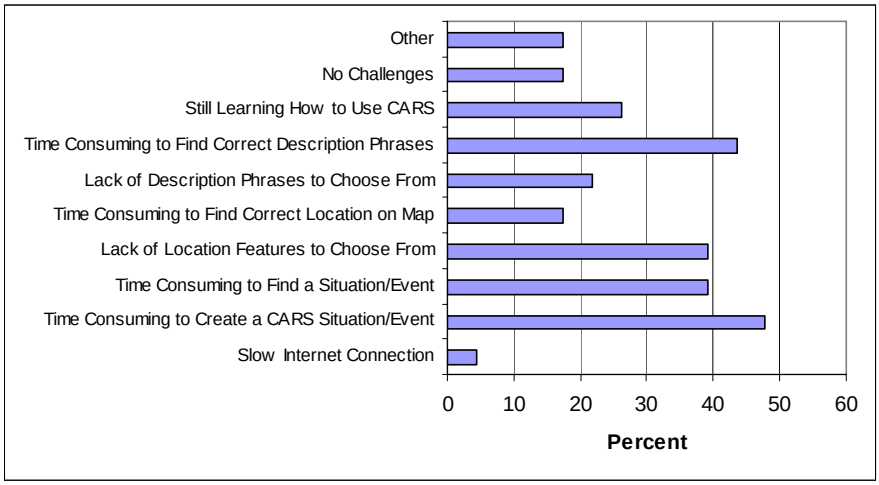

Figure 10: Challenges Using CARS Database

5.3 Rating of the CARS Database

Respondents were asked to rate the overall capabilities of the CARS database. As seen in Figure 11, most of the respondents gave the CARS database a favorable rating (88 percent). Also, no respondents rated the system as poor; however, only four percent rated it as excellent. One respondent in particular said that "overall, CARS is wonderful to have and it has enabled the public to know what is going on."

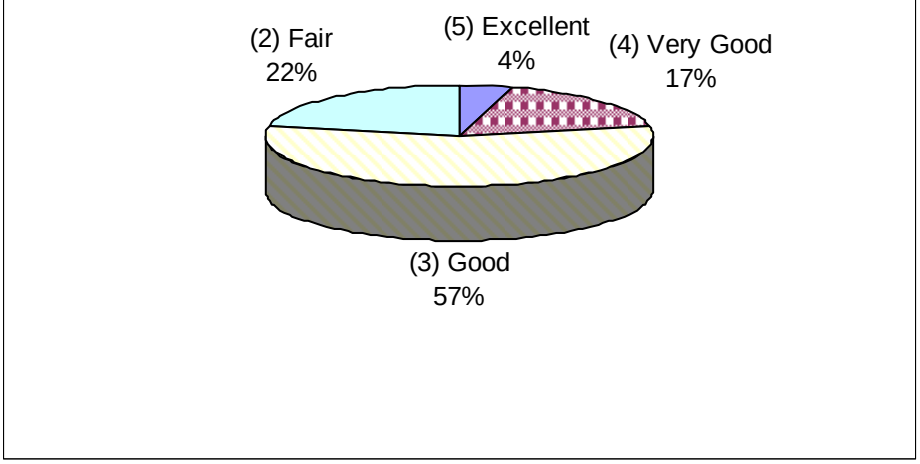

Figure 11: Rating of the CARS Database

5.4 Time Saving

This question asked respondents if, compared with the older travel information systems, they thought that the CARS database saved time for their agency. As shown in Figure 12, when compared with the old system, 57 percent of respondents felt that the database saved their agency time.

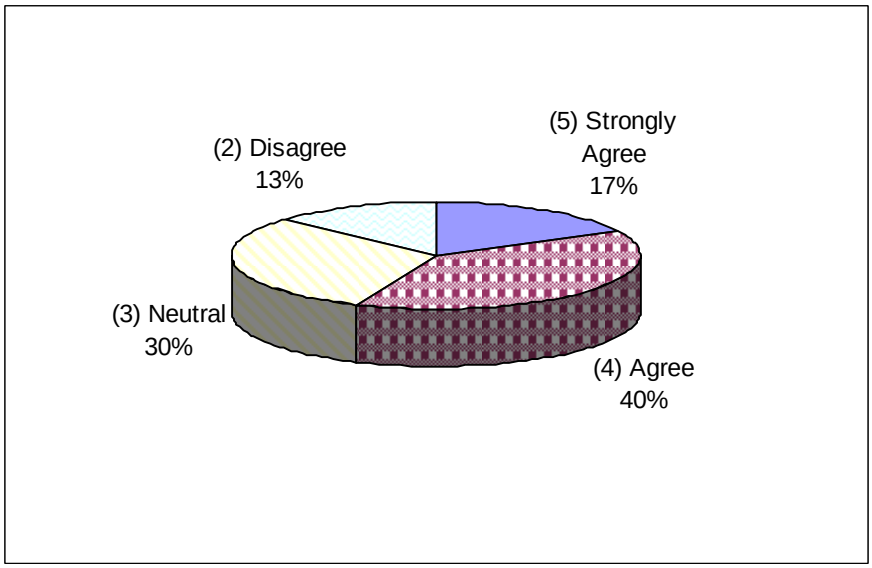

Figure 12: Time Savings of CARS Database

6 ROAD CONDITION QUICK ENTRY FORM

Survey participants were asked if they had done any data entry into Alaska's Road Condition Quick Entry Form. More than half (64 percent) of the respondents said they had entered data into the Quick Entry Form. Those who had used the Quick Entry Form were asked several follow-up questions.

6.1 Time Spent Entering Data

Those participants who said they had previously entered data into the Quick Entry Form were asked to estimate the amount of time they spend each day entering data. As shown in Figure 13, 69 percent said they spend less than 5 minutes while 31 percent said they spend more than 5 minutes every day updating the database. For the CARS database only 43 percent said that their time spent entering data was less than 5 minutes, therefore the Quick Entry Form is quicker to use which was expected as the Quick Entry Form was designed to be quicker than using the CARS database.

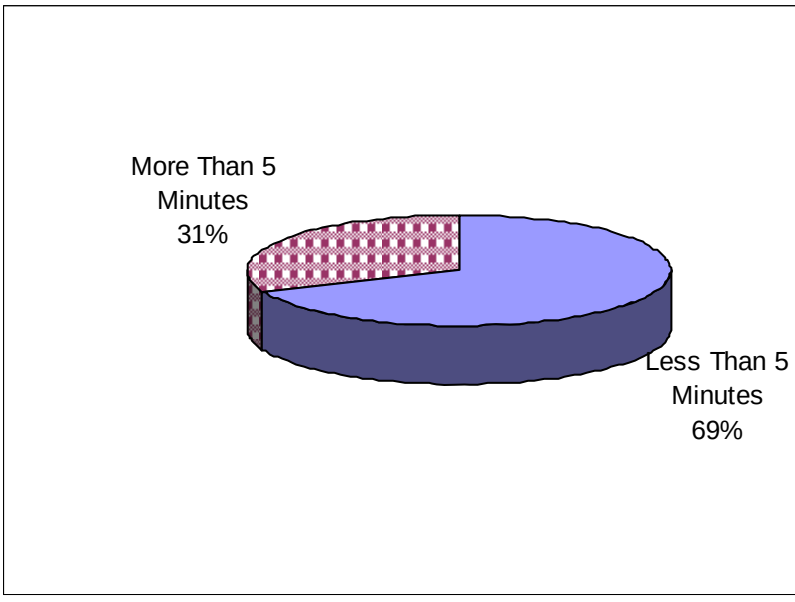

Figure 13: Time Spent Entering Data into Quick Entry Form

6.2 Challenges of the Quick Entry Form

Respondents were asked to indicate what challenges they experienced when entering data into the Quick Entry Form. The respondents were allowed to pick more than one option. 69 percent of respondents said there are no challenges while 6 percent said it does not have the correct locations and 25 percent indicated other challenges including:

- Inadequate archiving and no efficient emailing capability to customers, therefore employees are still continuing to use the old form in addition to the quick entry form to allow for these capabilities;

- Not all driving surfaces are described so there is confusion as to how to indicate snow levels;

- There is a lack of familiar station names as in previous seasons the station names were listed and now only mileposts are. It was noted that having both would be helpful;

- The date input was available in previous seasons and is no longer available. One respondent felt that the date is important in order to know if you have current day information or not as some people do not get their information entered as early as others do; and

- Lastly, quick entry form users would like the ability to enter snow amounts even if the weather is currently clear or cloudy as the snow accumulations from overnight need to be reported.

None of the respondents indicated that a slow internet connection was a challenge.

6.3 Rating of the Quick Entry Form

Respondents were asked to provide a general rating of the Quick Entry Form's capabilities. As seen in Figure 14, most of the respondents; 94 percent of respondents gave the form a favorable rating while 6 percent said the system was poor. The Quick Entry Form received a higher rating (94 percent) than the CARS database (88 percent). This was expected as the Quick Entry Form was created to be quicker and easier to use than the CARS database.

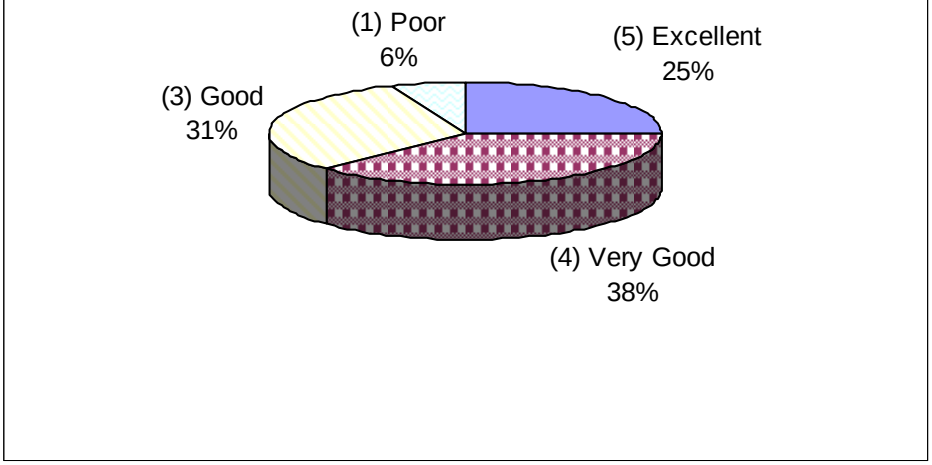

Figure 14: Rating of Quick Entry Form

6.4 Time Savings

This question asked the respondents if they thought the Quick Entry Form saved time for the agency as opposed to older travel information systems. As shown in Figure 15, fifty six percent of respondents felt that the Quick Entry Form saved the agency time as opposed to the older systems.

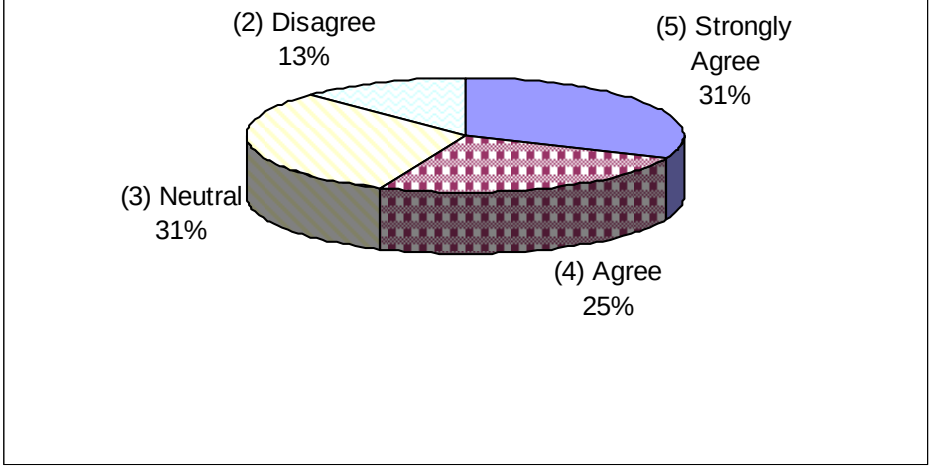

Figure 15: Time Saving Capability

7 ENHANCEMENTS

Respondents were asked what enhancements they felt should be made to the CARS database and Quick Entry Form, the 511 phone system, and the 511 Web Site. Their answers follow.

7.1 Enhancements to CARS Database/Road Condition Quick Entry Form

Enhancements that respondents would like to see made to the CARS database and/or Road Condition Quick Entry Form fell into several categories including phrases, locations, roadways, situations, and general. Theses enhancements are below.

Phrase enhancements included:

- Allow precipitation amounts to be entered and show up on 511 even if the sky condition is clear due to travelers needing to know if a major event occurred the night before they begin traveling;
- Make descriptive phrases customizable as needed and perhaps have the ability for canned messages to be editable rather than having to go to multiple screens. An alternative would be to have customizable lists so that the most used items are near the top of the various drop downs;
- Provide additional phrases to describe wildfires and smoky conditions. For example "do not stop" and "flames next to road;"
- Improve time constraint option to make it more user friendly. Respondents have had difficulty finding the most appropriate description and entering a time frame which will be interpreted correctly when submitted; and
- Provide better descriptions.

Location enhancements included:

- Provide station names and mileposts rather than just one or the other;
- Provide more centerlines and features to handle situation location referencing. For example intersections, rivers, bridges, and mile points;
- Provide the capability to sort features by the location or alphabetically;
- Implement the road segments as this will be a big improvement; and
- Provide more mileposts and more accurate mileposts.

Roadway enhancements included:

- Provide more roadways for Anchorage and statewide;

- Provide more roadways for Anchorage as there are many closures and projects cannot be input because the roads do not exist on the CARS map; and

- Ensure that all roadways can be used as starting points, traveling to points, and traveling from points. Currently some roadways can only be used as a "to" or "from" destinations;

Situation enhancements included:

- Make the system less confusing for choosing situations; and

- Simplify the situation/event listings as it could potentially take a long time to describe some events and some may not be able to be translated into a situation. For example when a construction crew is working, information needing to be provided may include the fact that they are working on a bridge with only one lane open and a Tractor Trailer is coming through with a wide load.

General enhancements included:

- Provide the date input as was available in the past so people know if the information is for the current day;

- Provide a printable format for archiving;

- Provide a pop up alert to indicate possible entry duplications;

- Provide refresher training;

- Include data from RWIS sites; and

- Simplify the access into CARS. When customers call in for road updates, they do not want to wait for 10-15 minutes for a person to access CARS and find out what the conditions are on the whole length of the highway. A generic way of indicating that half the highway is under construction or the other half may have a forest fire blocking it would be beneficial.

7.2 Enhancements to 511 Phone System

While some of the respondents felt that the 511 phone system is a " valuable tool for getting road conditions, construction, etc to the motoring public. The enhancements planned in the near future will continue to streamline the system, making it easier to provide accurate information. We just need to continue to get the word out to the public that it is available" and is a "pretty good system" and that they do not hear "many, if any" complaints about it; there were also several drawbacks of the system listed. Drawbacks included complaints that the system frequently does not recognize voice commands, that the pronunciation of some Alaska cities is not correct (e.g. Valdez), that the extended menus are too long and therefore perhaps too much is being provided.

Potential enhancements that were mentioned included:

- Abandoning the use of mile points and instead use mileposts;
- Add a time and date stamp so the public is aware of how current the information is;
- Provide better advertisements to make the public aware of 511 availability;
- Improve the voice recognition as this has been the biggest complaint;
- Use mile markers instead of street names;
- Add a disclaimer to suggest to drive responsibly for ever changing driving conditions as conditions can change periodically and then the information on the system can be misleading; and
- Keep all accident information up to date.

7.3 Enhancements to 511.Alaska.gov Web Site

Enhancements that were suggested for 511.Alaska.gov included general enhancements to the web page, enhancements for roadway descriptions, and enhancements that effect internal users only. These are listed below.

General enhancements included:

- Adding a date and time stamp on the information posted to 511;
- Having a daily driving hint such as “watch for Moose crossing road August through October;" "when there are three vehicles behind you, yield right of way when safe to do so and let them pass;" and "studded tires allowed from date to date;"
- Improving the translations of the Road Weather Information System (RWIS) weather observations as these translations to plain language equivalents can be misleading, particularly since these are spot reports;
- Use mile markers instead of street names;
- Add a disclaimer to suggest to drive responsibly for ever changing driving conditions as conditions can change periodically and then the information on the system can be misleading; and
- Provide more public awareness of the 511.Alaska.gov Web Site.

Improvements to roadway descriptions:

- Have a list of conditions in order of highways instead of in order of good, fair and difficult; and

- Describing the conditions by stating the roadway, the milepost, and then the conditions. For example "Taylor Highway is paved from Milepost 0 to Milepost 62 and gravel on the remainder;" "Alaska Highway Milepost X to Milepost X is narrow;" and "X Highway from Milepost X to Milepost X has narrow shoulders or brush close to road and watch for moose."

Enhancements for internal use included:

- Internally providing a required contact person and phone number for the person responsible for a situation;

- Providing hard copy archiving for web information; and

- Decreasing the entry time for more efficient distribution of the report to the radio stations. Currently, a written report is also being faxed.

8 CONCLUSIONS

This survey found that although the Road Condition Quick Entry Form was preferred over the CARS database, respondents felt favorably about both the CARS database (88 percent) and the Quick Entry Form (94 percent). As one respondents said, “overall, CARS is wonderful to have and it has enabled the public to know what is going on.” Respondents felt that both the Quick Entry and CARS database saved them time compared to the older manual system.

Although respondents did not use the system as frequently as was expected, 56 percent used it at least weekly; the system was used most frequently on weekday mornings which corresponds to the peak usage for the Alaska 511 phone system. Also, although more respondents enter information about road work (74 percent) then driving conditions and closures (70 percent each), driving conditions were the most frequently reported which corresponds to the fact that the 511 phone system is used most frequently in the wintertime when driving conditions are needed.

The respondents had typically heard about the CARS database and/or the Quick Entry Form from their immediate supervisor (56 percent). At least one of the respondents had entered data for all of the regions except Valdez and Cordova and Haines-Skagway. The sources they used for gathering the information that was input into the CARS database and/or Quick Entry Form tended to be human resources rather than technology resources with the most used sources being other ADOT & PF employees (82 percent), observations of existing conditions (55 percent), and other agencies (45 percent).

Lastly, respondents suggested numerous enhancements for the CARS database and Quick Entry Form, the 511 phone system, and the 511 Web Site.

9 REFERENCES

1. ITS America "511 Market Research Here's What Consumers Want." 2002.

2. C. Strong and Eidswick, J. "Alaska 511 Statistics Analysis for April 25, 2003 to May 1, 2005" Western Transportation Institute, March 2006.

3. Travel Alaska http://www.travelalaska.com/Transportation/roadmap.aspx (28 February 2006).

APPENDIX A: SURVEY INSTRUMENT

Alaska Travel Information Internal User Survey

Please take time to fill out this survey on behalf of the Alaska Department of Transportation & Public Facilities. The purpose of this survey is to get your opinion on the usefulness of the Condition Acquisition & Reporting System (CARS) database and the Road Condition Quick Entry Form used to enter travel information for the 511 "Travel in the Know" phone and web system. The results of this survey will be used to make changes to CARS and the Road Condition Quick Entry Form to better serve you and the public.

This anonymous survey is being administered by the Western Transportation Institute at Montana State University.

1. Have you input information into Alaska's Condition Acquisition & Reporting System (CARS) database?
   ☐ Yes ☐ No

If you HAVE NOT used the Condition Acquisition & Reporting System (CARS), please skip to Question 6.

2. How much time per day do you spend entering information into Alaska's CARS database? (Please check only one box)
   ☐ Less than 5 Minutes ☐ 5-10 minutes ☐ More than 10 Minutes

3. What challenges have you had with Alaska's CARS database? (Please check ALL that apply)
   ☐ Slow Internet connection
   ☐ Time consuming to create a CARS situation/event
   ☐ Time consuming to find a situation/event
   ☐ Lack of location features (e.g. mileposts, significant landmarks, intersections) to choose from
   ☐ Time consuming to find correct location on map
   ☐ Lack of description phrases (e.g. "Caribou on roadway") to choose from
   ☐ Time consuming to find correct description phrase
   ☐ Still learning how to use CARS
   ☐ No challenges
   ☐ Other (Please Specify) _____

4. How would you rate the current capabilities of Alaska's CARS database? (Please check only one box)

Excellent	Very Good	Good	Fair	Poor
☐	☐	☐	☐	☐

5. Do you believe that Alaska's CARS database saves time for your agency as opposed to the older travel information system? (Please check only one box)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

6. Have you input information using Alaska's Road Condition Quick Entry Form?
   ☐ Yes ☐ No

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If you HAVE NOT used the Road Condition Quick Entry Form, please skip to Question 11.

7. How much time do you spend per day entering information into the Road Condition Quick Entry form?
   - ☐ Less than 5 minutes
   - ☐ More than 5 minutes

8. What challenges have you had with the Road Condition Quick Entry Form? (Please check ALL that apply)
   - ☐ Slow Internet connection
   - ☐ Does not have correct locations
   - ☐ No challenges
   - ☐ Other (Please Specify below)

9. How would you rate the current capabilities of the Road Condition Quick Entry Form?
   (Please check only one box)

Excellent	Very Good	Good	Fair	Poor
☐	☐	☐	☐	☐

10. Do you believe that the Road Condition Quick Entry Form saves time for your agency as opposed to the older travel information system?
    (Please check only one box)

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
☐	☐	☐	☐	☐

If you have used either the Condition Acquisition & Reporting System (CARS) or the Road Condition Quick Entry Form, please answer the following questions.

11. When did you start using Alaska's CARS database or the Road Condition Quick Entry Form?
    (Please enter a month and year, or a season and year.)

12. How did you first hear about Alaska's CARS database or the Road Condition Quick Entry Form?
    (Please check only one box)
    - ☐ Immediate supervisor
    - ☐ Co-worker
    - ☐ Other agency
    - ☐ Other (please specify)

13. How often do you enter data into Alaska's CARS database or Road Condition Quick Entry Form?
    (Please check only one box)
    - ☐ Multiple times per day
    - ☐ Daily
    - ☐ 1-3 times per week
    - ☐ Sometimes but not every week
    - ☐ Never

14. When do you enter data into Alaska's CARS database or Road Condition Quick Entry Form?
    (Please check ALL that apply)
    - ☐ Weekdays: 6 AM -Noon
    - ☐ Weekdays: Noon - 5 PM
    - ☐ Weekdays: After 5 PM
    - ☐ Weekends: Saturday and/or Sunday
    - ☐ Holidays

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15. What portions of Alaska do you input data for?
(Please check ALL that apply.)

- ☐ Anchorage
- ☐ Fairbanks
- ☐ South Central Alaska
- ☐ Southeast Alaska
- ☐ Statewide
- ☐ Kenai Peninsula
- ☐ Northern Alaska
- ☐ East Central Alaska
- ☐ Seward Peninsula
- ☐ Mat-Su Area
- ☐ North Central Alaska
- ☐ Valdez and Cordova
- ☐ Haines-Skagway

16. What type(s) of information have you reported to CARS or the Road Condition Quick Entry Form?
(Please check ALL that apply).

- ☐ Accidents
- ☐ Alerts
- ☐ Roadwork (maintenance, construction, etc)
- ☐ Other (Please Specify)
- ☐ Closures
- ☐ Driving conditions (weather related road conditions)
- ☐ Delays
- ☐ Ferry information

17. Please rank these in order of which you use most frequently (1 = most frequent and 7 = least frequent).
If you do not report on one of these options, please do not rank that option.

- ☐ Accidents
- ☐ Closures
- ☐ Delays
- ☐ Alerts
- ☐ Driving conditions (weather related road conditions)
- ☐ Roadwork (maintenance, construction, etc)
- ☐ Ferry information
- ☐ Other (Please Specify)

18. What sources do you use to gather the information you input into Alaska's CARS database or the Road Condition Quick Entry Form? (Please check ALL that apply).

- ☐ Other ADOT&PF Personnel
- ☐ Other Agency Personnel (Please Specify Agency)
- ☐ Maintenance vehicles
- ☐ Observations of existing conditions
- ☐ Television
- ☐ Police scanner
- ☐ Internet source (Please Specify)
- ☐ Radio
- ☐ Other (Please Specify)

19. Which database input feature do you use most frequently?
(Please check only one)

- ☐ Road Condition Quick Entry Form
- ☐ CARS
- ☐ Both equally frequently

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20. What enhancements/ improvements should be made to Alaska's CARS database or the Road Condition Quick Entry Form?

21. What type of enhancements to the 511 phone system would be useful to your agency?

22. What type of enhancements to the 511.Alaska.gov web site would be useful to your agency?

The following information is needed to ensure that responses are properly represented in the survey. It will be used for the purposes of this survey ONLY.
(Check only one response per question)

23. What agency in Alaska do you work for?

24. What is your age?
- ☐ 18-24 years
- ☐ 25-44
- ☐ 45-64
- ☐ 65 or older

25. What is the highest level of education you have completed?
- ☐ Did not finish high school
- ☐ High school graduate or equivalent
- ☐ 2 year college (community/technical)
- ☐ 4 year college/university
- ☐ Post-graduate college/university

26. General comments/suggestions:

27. (Optional Question) If you would like to be contacted by the ADOT&PF CARS/511 manager to discuss this in more detail, please leave your name and phone number. Your comments will be kept confidential. If you do not put your name here, your answers will still be included in this study.

Name Phone

Thankyou for your response,
please submit the completed survey by clicking this button

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APPENDIX B: DATA ANALYSIS

Question 1: Have you input information into Alaska's Condition Acquisition & Reporting System (CARS) database?

	Count	Percent
Yes	23	95.83
No	1	4.17
N	24	
*****	1	

Question 2: How much time per day do you spend entering information into Alaska's CARS database?

	Count	Percent
Less Than 5 Minutes	10	43.48
5 to 10 Minutes	8	34.78
More Than 10 Minutes	5	21.74
N	23	
*****	2	

Question 3: What challenges have you had with Alaska's CARS database? (Please check ALL that apply)

	Count	Percent
Slow Internet Connection	1	4.35
Time Consuming to Create a CARS Situation/Event	11	47.83
Time Consuming to Find a Situation/Event	9	39.13
Lack of Location Features to Choose From	9	39.13
Time Consuming to Find Correct Location on Map	4	17.39
Lack of Description Phrases to Choose From	5	21.74
Time Consuming to Find Correct Description Phrases	10	43.48
Still Learning How to Use CARS	6	26.09
No Challenges	4	17.39
Other	4	17.39
N	23	
*****	2	

Question 4: How would you rate the current capabilities of Alaska's CARS database?

	Count	Percent
(5) Excellent	1	4.35
(4) Very Good	4	17.39
(3) Good	13	56.52
(2) Fair	5	21.74
(1) Poor	0	0
N	23	
*****	2	
Mean	3.04	
StDev.	0.75	

Question 5: Do you believe that Alaska's CARS database saves time for your agency as opposed to the older travel information system?

	Count	Percent
(5) Strongly Agree	4	17.39
(4) Agree	9	39.13
(3) Neutral	7	30.43
(2) Disagree	3	13.04
(1) Strongly Disagree	0	0.00
N	23	
*****	2	
Mean	3.61	
StDev.	0.94	

Question 6: Have you input information using Alaska's Road Condition Quick Entry Form?

	Count	Percent
Yes	16	64.00
No	9	36.00
N	25	
*****	0	

Question 7: How much time do you spend per day entering information into the Road Condition Quick Entry form?

	Count	Percent
Less Than 5 Minutes	11	68.75
More Than 5 Minutes	5	31.25
N	16	
*****	9	

Question 8: What challenges have you had with the Road Condition Quick Entry Form? (Please check ALL that apply)

	Count	Percent
Slow Internet Connection	0	0.00
Does Not Have Correct Locations	1	6.25
No Challenges	11	68.75
Other	4	25.00
N	16	
*****	9	

Question 9: How would you rate the current capabilities of the Road Condition Entry Form?

	Count	Percent
(5) Excellent	4	25.00
(4) Very Good	6	37.50
(3) Good	5	31.25
(2) Fair	0	0.00
(1) Poor	1	6.25
N	16	
*****	9	
Mean	3.75	
StDev.	1.04	

Question 10: Do you believe that the Road Condition Quick Entry Form saves time for your agency as opposed to the older travel information system?

	Count	Percent
(5) Strongly Agree	5	31.25
(4) Agree	4	25.00
(3) Neutral	5	31.25
(2) Disagree	2	12.50
(1) Strongly Disagree	0	0.00
N	16	
*****	9	
Mean	3.75	
StDev.	1.13	

Question 11: When did you start using Alaska's CARS database or the Road Condition Quick Entry Form?

Times of the Year	2002	2003	2004	2005	2006
Spring		2	1	1	
Summer		2	1		
Fall	1	2	1		
Winter		1	5	3	
Did Not Specify Season		2			1
TOTAL	1	9	8	4	1
*****		1		1	

Question 12: How did you first hear about Alaska's CARS database or the Road Condition Quick Entry Form?

	Count	Percent
Immediate Supervisor	14	56.00
Co-Worker	5	20.00
Other Agencies	2	8.00
Others	4	16.00
N	25	
*****	0	

Question 13: How often do you enter data into Alaska's CARS database or Road Condition Quick Entry Form?

	Count	Percent
Multiple Times Per Day	2	8.00
Daily	9	36.00
1-3 Times Per Week	3	12.00
Sometimes But Not Every Week	10	40.00
Never	1	4.00
N	25	
*****	0	

Question 14: When do you enter data into Alaska's CARS database or Road Condition Quick Entry Form? (Please check ALL that apply)

	Count	Percent
Weekdays: 6am-Noon	20	86.96
Weekdays: Noon-5pm	14	60.87
Weekdays: After 5 pm	5	21.74
Weekends	7	30.43
Holidays	6	26.09
N	23	
*****	2	

Question 15: What portions of Alaska do you input data for? (Please check ALL that apply)

	Count	Percent	Rank
Anchorage	6	25.00	1
Kenai Peninsula	5	20.83	2
Mat-Su Area	2	8.33	8
Fairbanks	3	12.50	5
Northern Alaska	3	12.50	5
North Central Alaska	3	12.50	5
South Central Alaska	5	20.83	2
East Central Alaska	4	16.67	4
Valdez and Cordova	0	0.00	12
Southeast Alaska	1	4.17	10
Seward Peninsula	1	4.17	10
Haines-Skagway	0	0.00	12
Statewide	2	8.33	8
N	24		
*****	1		

Question 16: What type(s) of information have you reported to CARS or the Road Condition Quick Entry Form? (Please check ALL that apply)

	Count	Percent
Accidents	10	43.48
Closures	16	69.57
Delays	11	47.83
Alerts	8	34.78
Driving Conditions	16	69.57
RoadWorks	17	73.91
Ferry Information	0	0.00
Other	3	13.04
N	23	
*****	2	

Question 17: Please rank these in order of which you use most frequently (1 = most frequent and 7 = least frequent).

	Count	# Respondents	Average	Rank
Accidents	32	10	3.20	4
Closures	47	15	3.13	3
Delays	36	11	3.27	5
Alerts	31	8	3.88	6
Driving Conditions	19	15	1.27	1
RoadWorks	39	16	2.44	2
Ferry Information	0	0	0.00	8
Other	12	2	6.00	7
N	21			
*****	4			

Question 18: What sources do you use to gather the information you input into Alaska's CARS database or the Road Condition Quick Entry Form? (Please check ALL that apply)

	Count	Percent
Other ADOT&PF Personnel	18	81.82
Other Agency Personnel	10	45.45
Maintenance Vehicles	7	31.82
Observations	12	54.55
Television	0	0.00
Police Scanner	0	0.00
Internet Sources	5	22.73
Radio	1	4.55
Others	3	13.64
N	22	
*****	3	

Question 19: Which database input feature do you use most frequently?

	Count	Percent
Road Condition Quick Entry Form	11	47.83
CARS	11	47.83
Both Equally Frequently	1	4.35
N	23	
*****	2	

Question 23: What agency in Alaska do you work for?

	Count	Percent
DOT	16	72.73
Anchorage Police Department	3	13.64
Anchorage Water & Wastewater Utility	1	4.55
MOA Traffic Dept	1	4.55
Soldotna AST Trooper Dispatch	1	4.55
N	22	
*****	3	

Question 24: What is your age?

	Count	Percent
18-24 years	0	0.00
25-44 years	11	44.00
45-64 years	14	56.00
65 or older	0	0.00
N	25	
*****	0	

Question 25: What is the highest level of education you have completed?

	Count	Percent
Did not finish high school	0	0
High School Graduate	12	48.00
2 Year College	6	24.00
4 Year College	6	24.00
Post Graduate	1	4.00
N	25	
*****	0	

APPENDIX C: RESPONDENTS' COMMENTS

Question 3: What challenges have you had with Alaska's CARS database? (Please check ALL that apply)

Survey #4: Cannot customize description phrases that really say what needs to be conveyed, have to use something similar or generic that really is not complete info.

Survey #10: Challenge to get the program to "launch" each time.

Survey #15: No archiving or emailing capabilities.

Survey #16: No archiving or emailing capabilities.

Question 8: What challenges have you had with the Road Condition Quick Entry Form? (Please check all that apply)

Survey #2: Lack of familiar station names. Last season the station names were listed and now only mileposts are. It would be helpful to have both. Also the date input was available last year and it is not this year. That is important to know if you have current day information or not. Some people do not get their information entered as early as others do. Lastly, we need to be able to enter snow amounts even if the weather is currently clear or cloudy. We have accumulations overnight that need to be reported.

Survey #15: Continuing to do our old form in addition to Quick Entry because of inadequate archiving and no efficient emailing capability to customers.

Survey #17: Put in 1" snow and report as 1"per hour? Not all Driving surfaces are described.

Survey #25: Have not felt the need.

Question 11: When did you start using the Alaska's CARS database or the Road Condition Quick Entry Form? (Please enter a month and year, or a season and year)

Survey #1: November 2003

Survey #2: October 2004

Survey #3: did not answer

Survey #4: Summer 2003

Survey #5: Spring 2004

Survey #6: Spring 2005

Survey #8: Summer 2003

Survey #9: 2003

Survey #10: Summer 2004

Survey #11: Same as the rest of my district

Survey #12: Winter 2004

Survey #13: November 2004 winter

Survey #14: October 2003

Survey #15: From the very beginning

Survey #16: November 2004

Survey #17: Fall 2003 (approximate)

Survey #18: April 2003- September 2004

Survey #19: February 2005

Survey #20: winter of 2004

Survey #21: Fall 2002

Survey #23: Winter 2005

Survey #24: Winter 2004

Survey #25: January 2005

Survey #26: 2006

Question 12: How did you first hear about Alaska's CARS database or the Road Condition Quick Entry Form? (Please check only one box)

Survey #9: DOT & PF ITS Project

Survey #12: Trainer

Survey #24: Jill Sullivan

Question 16: What type(s) of information have you reported to CARS or the Road Condition Quick Entry Form? (Please check all that apply)

Survey #4: Wildfire and smoke

Survey #17: Wildfires

Survey #19: Special activities (parades, races, etc)

Question 17h: Please rank these in order of which you use most frequently (1=most frequent and 7=least frequent). If you do not report on one of these options, please do not rank that option

Survey #4: Wildfire and smoke

Survey #17: Wildfires

Question 18: What sources do you use to gather the information you input into Alaska's CARS database or the Road Condition Quick Entry Form (Please Check ALL that apply)

Other Agencies:

Survey #1: National Weather Service

Survey #3: Police Department

Survey #4: Dept of Natural Resources, Bureau of Land Mgmt.

Survey #5: AST, Local Law Enforcement

Survey #6: Engineering Division, Anchorage Water & Wastewater Utility

Survey #10: Police Officers

Survey #11: B&B

Survey #17: BLM, Forestry, and Alaska State Troopers

Survey #26: pafc.ath.noaa.gov

Internet Sources:

Survey #2: Anchorage scan web

Survey #11: Weatherunderground.com

Other:

Survey #19: ROW permits/traffic control plan

Survey #23: AST/DOT and emergency workers

Survey #24: Our agency's police officers

Question 20: What enhancements/ improvements should be made to Alaska's CARS database or the Road Condition Quick Entry Form?

Survey #1: We need to be able to enter precipitation amounts and have them show on 511 even if the sky condition is clear. Travelers need to know if we have had a major event the night before they travel.

Survey #2: Stated above in question 8.

Survey #4: Make descriptive phrases customizable as needed. Need additional phrases to describe wildfire/smoky conditions - like "do not stop", "flames next to road".

Survey #6: There should be more roads made available for Anchorage. Road which are listed should be able to be used as a start point, a traveling to point and a traveling from point. This is not the case for some roads. It is listed, but can only be used as a "to" or "from" destination.

Survey #8: Include more features (intersection, rivers, bridges, mile points). Make features sort able by the location or alphabet.

Survey #9: More centerlines and transportation features to handle situation location referencing.

Survey #10: Improving time constraint option to make it more user friendly. Sometimes have found it difficult to find the most appropriate description and enter a time frame which doesn't interpret correctly when press 'DONE.'

Survey #12: Having the ability to have canned messages that can be edited rather than going to multiple screens. An alternative would be to have customizable lists so that the most used items are near the top of the various drop downs.

Survey#13: Cover more roads in the state.

Survey#15: A printable format for archiving. Better description and more mile posts.

Survey #16: A printable format for archiving. More accurate mile posts

Survey #17: Alaska Cars Database: Too time consuming, when we are having an emergency we do not have a half hour to look for the right phrases.

Survey #18: Simplify the situation /event listing. It would take such a long time to get the various for construction crew working. Such as: working on the bridge- where one lane is only open – Tractor Trailer is coming through with a wide load – how is that translated to a situation.

Survey #19: The CARS database desperately needs more roads in the Anchorage area. There are many, many closures and projects that I am unable to input because the roads do not exist on the CARS map.

Survey #21: Implementation of the road segments will be a big improvement.

Survey #23: I wish it would pop up an alert that that location or incident has been entered if you miss looking for it before entry, that way there would be no duplicates.

Survey #25: refresher training and include data from RWIS sites

Survey #26: So far it works good for me

Question 21: What type of enhancement to the 511 phone system would be useful to your agency?

Survey #1: I don't use or hear many, if any, complaints about the phone system.

Survey #2: This seems to be a pretty good system.

Survey #4: Do not use the phone, so do not have comment on this.

Survey #6: N/A

Survey #9: Would be good to get a actual user perspective. One of the drawbacks is the extended menus – maybe we are trying to do too much.

Survey #11: Abandon mile points, use mileposts.

Survey #14: We've had complaints that the system frequently does not recognize voice commands.

Survey #15: Better advertisements to make public aware of availability.

Survey#17: The phone does not say what the date and time of the report, so the public does not know how current the information is.

Survey#18: Verbage: it is important to get the correct pronunciation of various cities in Alaska, example Valdez should be pronounced as valdeeez not Valdez.

Survey #21: Improvement of the voice recognition – this has been the biggest complaint.

Survey #23: I don't like when you put in a mile marker and on phone 511 it lists some weird street name that no one knows where it is at. Mile markers help better.

Survey #25: conditions can change periodically and then information on the system can be misleading therefore there should be a disclaimer to suggest to drive responsibly for ever changing driving conditions.

Survey #26: need to keep all accident information up to date

Question 22: What type of enhancement to the 511.Alaska .gov web site would be useful to your agency?

Survey #1: A date and time stamp need to be added to the information posted on 511 for clarity.

Survey #2: It would be helpful to have the list in order of highways instead of good, fair and difficult.

Survey #4: Description of each road ... like "Taylor Highway is paved from Milepost 0 to Milepost 62 and gravel on the remainder"; "Alaska Highway Milepost X to Milepost X is narrow"; "X Highway from Milepost X to Milepost X has narrow shoulders or brush close to road and watch for moose"; etc. ALSO - a daily driving hint to pop up which could say "watch for Moose crossing road August through October"; "When 3 vehicles are behind you, yield ROW when safe to do so and let them pass"; "Studded tires allowed from date to date"; etc.

Survey #6: See question 20

Survey #8: Required contact person and phone number of person responsible for situation (Internal DOT/PF use only).

Survey #9: Improved RWIS weather info – translations of RWIS observations to plain language equivalents can be misleading. Particularly since these are spot reports.

Survey #15: Public awareness of the 511, both telephonic and electronic some type of hard copy archiving.

Survey #16: Hard copy archiving.

Survey #17: A way the cut down time or entry, that radio stations could get this report, now we also fax a written report. With out distances most affected drivers are already on the road, not near a computer or phone.

Survey #18: Simplify the access into cars –customers that call in for road updates do not want to wait for 10-15 minutes for me to access cars and find out what the whole length of the highway is doing. There is not just a generic way of putting in that ½ the highway is under construction and /or the other half may have a forest fire blocking it.

Survey #23: I don’t like when you put in a mile marker and on phone 511 it lists some weird street name that no one knows where it is at. Mile markers help better.

Survey #25: conditions can change periodically and then information on the system can be misleading therefore there should be a disclaimer to suggest to drive responsibly for ever changing driving conditions.

Question 23: What agency in Alaska do you work for?

Survey #1: DOT/PF, M&O

Survey #2: DOT/PF

Survey #3: Anchorage Police Department

Survey #4: Dept of Transportation & PF, M&O, Northern Region

Survey #5: DOT

Survey #6: Anchorage Water & Wastewater Utility

Survey #8: Transportation

Survey #9: DOT

Survey #10: Anchorage Police Department

Survey #11: D.O.T /M & O

Survey #12: AK DOT M&O

Survey #13: DOT

Survey #14: Department of transportation and public facilities

Survey #15: Department of transportation and public facilities

Survey #16: Department of transportation and public facilities

Survey #17: did not answer

Survey #18: Department of Transportation

Survey #19: MOA Traffic Department

Survey #20: DOT/PF

Survey #23: Soldotna AST Trooper Dispatch

Survey #24: Anchorage Police Department

Survey #25: DOT P/F

Survey #26: DOT

Question 26: General comments/suggestions

Survey #4: CARS entry is time consuming. Most of the time, issuing a Travel Advisory is quicker and more accurate info - and it gets out to the radio stations who relay info to the traveling public sooner; maybe because it seems to stress the importance of the situation better than if it goes on CARS.

Survey #6: This is a good start. More roads need to be made available. System should be made a little less confusing to pick out situations, etc.

Survey #9: Not sure my survey helps you much. I have only done situation entry and the quick entry form as part of training. My work involves integrating the CARS/511 program into other ADOT & PF data areas such as traffic, road weather, temperature data probe and accidents. Also heavily involved in the road centerlines and transportation features.

Survey #11: The CARS system of reporting is not set up to be very user friendly, in my opinion. It can take a long time to figure out how to log conditions, i.e travel difficult due to spring thaw/ break-up conditions such as soft boils ,or flooding, or wash out, or mud slide, etc…It would seem easier to allow us to manually type in the condition.

Survey #18: Overall- CARS is wonderful to have though and it has enabled the public to know what is going on- some customers do not have internet service.

Survey #21: 511 is a valuable tool for getting road conditions, construction, etc to the motoring public. The enhancements planned in the near future will continue to streamline the system, making it easier to provide accurate information. We just need to continue to get the word out to the public that it is available.

Survey #23: I like the system. We have been chewed out a few times by a DOT person who was mad we entered it and they also had, making it duplicate.

Survey #25: Conditions can change periodically and then information on the system can be misleading therefore there should be a disclaimer to suggest to drive responsibly for an ever changing driving condition.