American Customer Satisfaction Index

Natural Resources Conservation Service Snow Survey and Water Supply Forecasting Customer Satisfaction Study

> Final Report August 2005









	Table of Contents	
		Page
I	Introduction & Methodology	3
	a. Introduction	3
	b. Overview of ACSI Methodology	4
	c. Customer Segment Choice	4
	d. Customer Sample	4
	e. Questionnaire & Interviewing	5
	f. Customer Responses	5
II	Results	6
	a. Model Indices	6
	b. Satisfaction (ACSI)	8
	c. Drivers of Satisfaction	8
	d. Outcomes of Satisfaction	10
	e. Using the Model	11
	f. Summary	12
	Appendices	
A	Survey Questionnaire	13
В	Frequencies and Means of Survey Questions	25

Chapter I

Introduction & Methodology

a. Introduction

This is the first year the Natural Resources Conservation Service (NRCS) has measured customer satisfaction with its Snow Survey and Water Supply forecasting customers using the American Customer Satisfaction Index (ACSI). Since 1999, additional federal agencies have joined with the 30 that began that year to make comparable measurements of customer satisfaction using the ACSI. Some agencies are now assessing multiple customer segments. The comparable measurements use ACSI methodology that combines survey input with cause and effect modeling to produce indices of satisfaction, and indices of the drivers and outcomes of satisfaction.

This year, NRCS selected a single customer segment to measure: Users of the Snow Survey data and/or Water Supply forecasts from the Natural Resources Conservation Service within the past two years. Additionally, some comments on the satisfaction of two distinct groups – unaffiliated individuals and those within organizations – will be provided.

Since 1994, the American Customer Satisfaction Index has been a national indicator of customer evaluations of the quality of goods and services available to U.S. residents. It is the only uniform, cross-industry/government measure of customer satisfaction. It produces indices of satisfaction, its causes and effects, for seven economic sectors, more than 40 industries, more than 200 private sector companies, two types of local government services, and the U.S. Postal Service. ACSI allows benchmarking between the public and private sectors, and for each customer segment, between one year's results and the next. While using a common methodology, ACSI produces information unique to each agency on how its activities that interface with the public affect the satisfaction of customers. The effects of satisfaction are estimated, in turn, on specific objectives (such as loyalty or trust in the agency).

This study is produced by the National Quality Research Center at the University of Michigan Business School, CFI Group, and the Federal Consulting Group.

Typically, ACSI researchers will warn that a lag time exists between a company or agency inaugurating an improvement in a program and users becoming both aware of the improvement and evaluating it favorably. Certainly, favorable publicity about a change can impact customer perceptions, but government agencies rarely have public

relations and advertising budgets to communicate changes they make. Moreover, negative events or publicity can cause customer satisfaction to drop, and typically have more downward effect than positive events have upward effect.

The best use agencies can make of this study is for learning how customers evaluate the activities they do, then identifying which of these activities has the most impact on the perception of the quality they deliver. This research is a tool with which to prioritize future efforts to improve quality and, through quality, customer satisfaction and the desired outcome – in this case, Trust.

b. Overview of ACSI Methodology

ACSI uses a tested, multi-equation, econometric model, shown in Figure 1. Inputs to the cause and effect model come from surveys of customers of each measured agency. For private sector industries, company scores for Customer Satisfaction (ACSI) and other model components are weighted by company revenues to produce industry indices. Industry indices are weighted by revenues to produce economic sector indices. The sector indices, in turn, are weighted by the sector's contribution to the Gross Domestic Product (GDP) to produce the national ACSI. For the federal government agencies, each is weighted by the budget expended on activities for the chosen customer segment to produce a federal government ACSI.

The ACSI is updated on a rolling basis with data from 2 sectors collected each quarter and used to replace data collected the prior year. Similarly, each participating government agency is measured annually, and the government-wide score is updated annually in mid-December.

c. Customer Segment Choice

NRCS chose users of the Snow Survey data and/or Water Supply forecasts within the past two years as the customer segment for measurement.

d. Customer Sample

NRCS provided personnel at the University of Michigan with a list of individuals who had received its Snow Survey and Water Supply forecasts through its website. Selecting randomly from this list, 1000 interviews were completed by qualifying individuals.

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¹ Some exceptions would be the U.S. Army for recruiting, the U.S. Postal Service, and the recent Census Bureau campaign for the 2000 census.

e. Questionnaire and Interviewing

The questionnaire used is shown in Appendix A. It was designed to be agency-specific in terms of activities and outcomes, and introductions to the questionnaire and to specific question areas. However, it follows a format common to all federal agency questionnaires, one that allows cause and effect modeling using the ACSI methodology.

Customer interviews were conducted online by the professional research firm of Market Strategies, Inc. An invitation to participate in the study was sent to a random sample of individuals whose email addresses were provided by NRCS ("reminder" invitations were also sent to reduce the probability of selection bias). These individuals then completed the survey online.

f. Customer Responses

Customer responses to all questions are shown as frequency tables in Appendix B. Appendix B also shows the means of all scaled questions, including the demographic questions.

Chapter II

ACSI Results

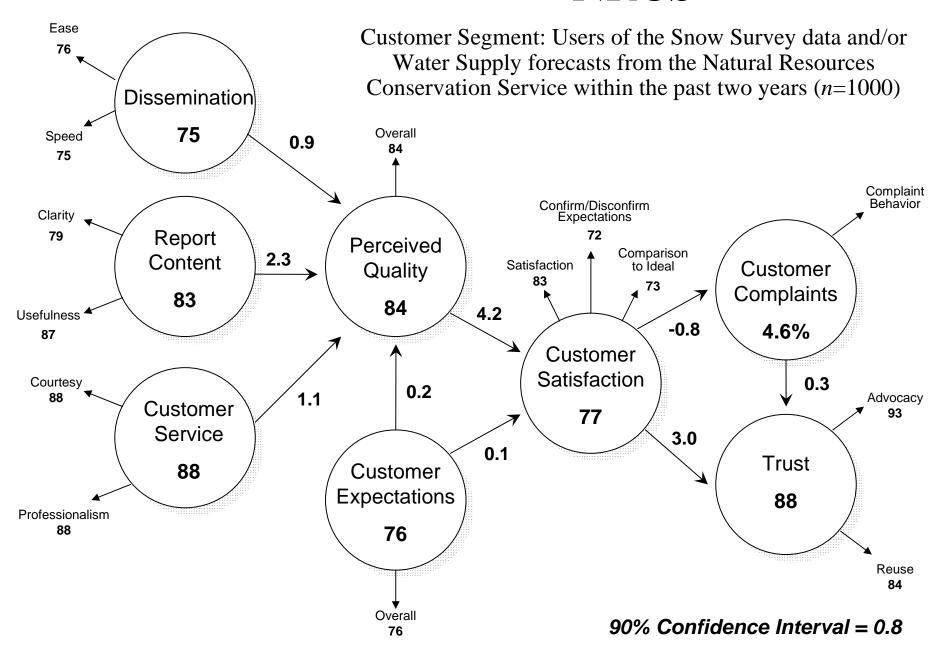
a. Model Indices

The government agency ACSI model is a variation of the model used to measure private sector companies. Both were developed at the National Quality Research Center of the University of Michigan Business School. Whereas the model for private sector, profit-making companies measures Customer Loyalty as the principal outcome of satisfaction (measured by questions on repurchase intention and price tolerance), each government agency defined the outcome most important to it for the customer segment measured. Each agency also identified the principal activities that interface with its customers. The effects of these activities on customer satisfaction/dissatisfaction are estimated by the model.

Thus the model, shown in Figure 1 for NRCS, should be viewed as a cause and effect model that moves from left to right, with satisfaction (ACSI) in the middle. The circles are multi-variable components that are measured by several questions (question topics are shown at the tips of the small lines). The large arrows connecting the components in the circles represent the strength of the effect of the component on the left to the one to which the arrow points on the right. These arrows represent "impacts." The larger the number on the arrow, the more effect the component on the left has on the one on the right.

The meanings of the numbers shown in Figure 1 are the topic of the rest of this chapter.

NRCS



b. Satisfaction: ACSI

The ACSI is a weighted average of three questions, Q11, Q12, and Q13, in the questionnaire in Appendix A. The questions are answered on 1-10 scales, but the weighted average is transposed and reported as an index on a 0-100 scale. The three questions measure: overall satisfaction (Q11); fallen short of or exceeded expectations (Q12); and comparison to an ideal (Q13). The model does the weighting to maximize the effect of satisfaction on the agency outcome (Trust) at the bottom right of the model in Figure 1.

The customer satisfaction index (ACSI) for this group of NRCS customers is 77 on a 0-100 scale. The ACSI score for these NRCS customers is higher than the national ACSI of 73.0 for the private sector (as of the first quarter of 2005). This score is also well above the latest aggregate Federal government ACSI score of 72.1 (from December, 2004).

It is also useful to compare this result for the NRCS Snow Survey/Water Supply forecast program with prior NRCS measurements. As the Table 1 below shows, this study indicates results consistent with earlier NRCS measurements.

Table 1: Comparing NRCS Results					
	_				
NRCS-Snow (2005)	77				
NRCS-WHIP (2004)	77				
NRCS-EQIP (2004)	75				

c. Drivers of Satisfaction

NRCS personnel identified three activities that interface with its Snow Survey/Water Supply customers. These are Dissemination, Report Content, and Customer Service, identified by these names in Figure 1 above. Each activity is measured by multiple questions. For Dissemination, the questions are about the ease and convenience of receiving the reports (Q2), and the speed with which the customer could access the reports (Q3). For Report Content, the questions are about the clarity of the reports (Q4), and the usefulness of the reports (Q5). Finally, for Customer Service, the questions are about the courteousness of NRCS customer service personnel (Q7), and the professionalism of NRCS customer service personnel (Q8). The three component scores are weighted averages of these questions.

Two other components are major drivers of satisfaction. The first is the customer's expectations of the quality he/she would receive from NRCS before he/she

² The confidence interval for this agency's customer segment is plus or minus 2.4 points on a 0 to 100 scale at the 95% confidence level. A difference of about 3 points is statistically significant, larger than could be caused by sampling error.

had any experience with it (Q1). The second is his/her overall perception of the quality delivered after experience with NRCS (Q10).

The scores for the drivers of satisfaction are listed below in Table 2.

Table 2: Drivers of Satisfaction			
Activities That Drive Satisfaction:			
	2005		
DISSEMINATION	75		
REPORT CONTENT	83		
CUSTOMER SERVICE	88		
Major Drivers of Satisfaction			
CUSTOMER EXPECTATIONS (Anticipated Quality)	76		
PERCEIVED QUALITY (Experienced Quality)	84		

For this study, one measured component stands-out above the rest – Customer Service, with a score of 88. This component scores statistically higher than either Report Content or Dissemination. Within Customer Service, both the courtesy and professionalism variables score very well, both at 88.

Dissemination represents the lowest scoring of the three identified drivers of satisfaction within the NRCS model at 75. Within this component, customers rate the ease and speed of receiving the report about the same, at 76 and 75, respectively. To improve this driver, improving either/both the ease or the speed of dissemination would be necessary.

Scoring between these two components, the Report Content component scores an 83. Within this component, customers evaluate the usefulness of the report (87) much higher than the clarity and understandability of the report (79).

Finally, the Perceived Quality and Customer Expectations drivers register scores consistent with most government models. Perceived Quality, the primary driver of satisfaction in the ACSI model, scores well at 84. This component measures customers' perceptions of the overall quality of their experiences with the NRCS Snow Survey/Water Supply forecasts process. Customer Expectations, a measure of customer's perceptions of NRCS prior to contact with the agency, scores significantly lower at 76. In other words, while NRCS customers come to their interactions with the agency concerning the Snow Survey/Water Supply forecasts with fairly low expectations, they are pleasantly surprised with the product and service they actually experience.

The results discussed above focus on the entire NRCS sample. It is also useful to examine various customer groups, to determine whether some particular customers are more or less pleased with their experiences with NRCS. Table 3 below examines two sub-groups of NRCS Snow Survey/Water Supply report users: unaffiliated individuals accessing the report for their own purposes, and individuals accessing the reports because of their affiliation (i.e. employment) with some organization.

Table 3: Individuals and Organizations* Activities That Drive Satisfaction:							
DISSEMINATION	74	76					
REPORT CONTENT	83	84					
CUSTOMER SERVICE	89	85					
Major Drivers of Satisfaction							
CUSTOMER EXPECTATIONS (Anticipated Quality)	78	74					
PERCEIVED QUALITY (Experienced Quality)	84	85					
TRUST	88	88					
CUSTOMER SATISFACTION (ACSI)	76	78					

^{*}n=441 for Organizations; n=534 for Individuals

As the table above shows, there are some meaningful differences between these two groups that might aid NRCS in better satisfying its customers. While both groups judge the Report Content about the same, individuals indicate that they are more critical of the level of Customer Service they receive, but are slightly happier with the Dissemination process. While both groups judge Perceived Quality about the same, individuals come to the process decidedly more skeptical of the level of quality they will receive (which is probably a function of their more limited experience with the program). Finally, while the two groups score Trust identically, unaffiliated individuals are, on the whole, more satisfied with their experiences.

d. Outcomes of Customer Satisfaction

Customer Complaints

Only 4.6% of NRCS customers have complained to NRCS in the past two years concerning the Snow Supply/Water Supply forecasts. This is a very low complaint percentage. With so few complainants, it is not possible to meaningfully analyze the ease of registering complaints or how well complaints were handled by NRCS personnel.

Trust

NRCS personnel identified Trust as the desired outcome to be measured. Trust for this modeling was measured by two questions: willingness to say positive things about the NRCS Snow Survey/Water Supply forecasts program (Q15); and, based on their experience, how likely they are to reuse this service in the future (Q16).

The index of Trust is 88 on a 0-100 scale. Trust scores well above Customer Satisfaction (ACSI) on this model. This is a positive outcome, indicating that while customers are not as satisfied as they could be, they still trust the program and are likely to rely on it in the future.

Within the Trust component, NRCS customers are more likely to say positive things (93) than they are to use the program again in the future (84).

e. Using the Model

Now, it is time to look again at the NRCS Snow Survey/Water Supply forecasts program model in Figure 1 to examine the multivariate components in context and to look at the effects, or "impacts", of each component on subsequent components.

Of the three measured activities, Report Content scores above Dissemination but below Customer Service. However, this component has by far the largest impact of the three components on Perceived Quality, and by extension on Customer Satisfaction (ACSI). In other words, an increase or decline in the Report Content component score will have a larger effect on Perceived Quality – and ultimately Customer Satisfaction (ACSI) and Trust – than will an increase or decline in either of the other two components.

Impact scores should be read as the effect on the subsequent component if the component at the tail of the arrow were to be improved by 5 points. Therefore, if Report Content was improved by 5 points (from 83 to 88) Perceived Quality would go up from 84 to 86.3. Customer Satisfaction (ACSI) would, in turn, increase by 1.9 to 78.9.³

Of the two variables which combine to create the Report Content component, the clarity and understandability of these reports scores well below the perceived usefulness of these reports. In other words, to improve Report Content, ACSI and Trust, NRCS should focus on making the report clearer and more understandable to the customer.

Finally, one area NRCS should work to maintain, but not aggressively work to improve, is Customer Service. The Customer Service component scores well and it has a middling impact on Perceived Quality. In other words, working to make improvements here is unlikely to result in a noticeable increase in Perceived Quality or Customer

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³ The computation is: Impact of Perceived Quality on ACSI (Impact of Report Content on Perceived Quality/5), or 4.2 (2.3/5)=1.9

Satisfaction (ACSI). However, allowing Customer Service to drop may result in a negative effect on ACSI.

Summary

The ACSI results for the NRCS Snow Survey/Water Supply forecasts program gives NRCS much to be happy about, and some direction in working to improve Customer Satisfaction. As discussed above, the Report Content activity provides perhaps the best area to focus in working to improve Customer Satisfaction. However, NRCS should be careful to not allow high-scoring areas (such as Customer Service) to slip.

APPENDIX A SURVEY QUESTIONNAIRE

Welcome to the American Customer Satisfaction Index Natural Resources Conservation Service (NRCS) Snow Survey and Water Supply Forecasting Research Project

Sponsored by: The University of Michigan Business School

Introduction:

There are two sections to this survey. In the first section you will be asked a series of questions about your experience with the Natural Resources Conservation Service (NRCS). In the last section, you will be asked to answer a short set of demographic questions.

Note: Your name will be confidential, and you will only be asked about products and services you have recently received. Your participation is voluntary and you may stop at any time or skip any question you do not wish to answer. Your opinions are important in order to help this government agency improve its products and services to you and to people like you who receive them.

This interview is authorized by Office of Management and Budget Control No. 1505-0191.

Should you have questions regarding your rights as a participant in research, please contact:

Institutional Review Board Kate Keever 1040 Fleming Building 503 Thompson Street Ann Arbor, MI 48109 734-936-0933

email: irbhsbs@umich.edu

Click on the NEXT SCREEN button to begin.

- QA. Are you the person, or one of the persons, within your organization/household who deals most closely with the Natural Resources Conservation Service?
 - 1 Yes
 - 2 No

{IF QA=1, ASK QB; OTHERWISE GO TO TERMINATE SCREEN}

- QB. Have you received the Snow Survey data and/or Water Supply forecasts from the Natural Resources Conservation Service within the past two years?
 - 1 Yes
 - 2 No

DK

REF

{IF QB=1, ASK Q1; OTHERWISE GO TO TERMINATE SCREEN}

Now, I am going to ask you some questions about the NRCS Snow Survey and Water Supply Forecasting program. The purpose of the program is to provide western states and Alaska with data and information on future water supplies.

Q1. Before you first received Snow Survey data and/or Water Supply forecasts from the NRCS, you probably knew something about the Snow Survey and Water Supply program. Now think back and remember your expectations of the overall quality of NRCS data and/or forecasts. How **high** did you expect the **overall quality** of NRCS Snow Survey data and/or Water Supply forecasts to be?

[RECORD NUMBER 1-10]

1 =Not very high quality

10 =Very high quality

Please think now about the **process of receiving** the Snow Survey/Water Supply forecasts from NRCS through their website...

Q2. How **easy and convenient** was it to navigate the NRCS website and find the Snow Survey/Water Supply forecasts offered by NRCS?

[RECORD NUMBER 1-10]

1 = Not very easy and convenient 10 = Very easy and convenient

DK

Q3. How **quickly** were you able to find and access the Snow Survey/Water Supply forecasts offered by NRCS through their website?

[RECORD NUMBER 1-10]

1 = Not very quickly

10 = Very quickly

DK

Now, please think about the **content** of the Snow Survey/Water Supply forecasts you received from NRCS...

Q4. How **clear and understandable** was the information provided in the Snow Survey/Water Supply forecasts you received?

[RECORD NUMBER 1-10]

1 = Not at all clear and understandable

10 = Very clear and understandable

Q5. How **useful** were the Snow Survey/Water Supply forecasts you received from NRCS in terms of being applicable to your needs?

[RECORD NUMBER 1-10]

1 = Not at all useful 10 = Very useful DK

Q6. Considering that data from Snow Survey and Snow Telemetry System (SNOTEL) is a part of the services provided by the Snow Survey and Water Supply Forecasting Program, how **useful** were the Snow Survey Data you received from the NRCS in terms of satisfying your requirements?

[RECORD NUMBER 1-10]

1 = Not at all useful 10 = Very useful DK

SCREEN DESIGN: GRID

And thinking about any **customer service interactions** you might have had with NRCS personnel...

[RECORD NUMBER 1-10]

1 = Not at all 10 = Very DK

- Q7. How **courteous** were the NRCS personnel?
- Q8. How **professional** were the NRCS personnel in terms of being knowledgeable?

Please think now about how useful the Snow Survey/Water Supply forecasts you received from NRCS were in **accurately predicting future water supplies**...

Q9. How **useful** were the Snow Survey/Water Supply forecasts you received from NRCS in terms of **accurately forecasting future water supplies**?

[RECORD NUMBER 1-10]

1 = Not at all useful 10 = Very useful

DK

Q10. Considering **all** your experiences in the past two years with NRCS, how would you rate the **overall quality** of the Snow Survey and Water Supply Forecasting products you received from NRCS?

[RECORD NUMBER 1-10]

1 = Not very high

10 = Very high

DK

Satisfaction includes many things. Let's move on and talk about your overall satisfaction with NRCS.

Q11. Considering **all** your experiences to date with the NRCS Snow Survey and Water Supply Forecasting Program, how **satisfied** are you with the NRCS Snow Survey and Water Supply Forecasting Program?

[RECORD NUMBER 1-10]

1 = Not very satisfied

10 = Very satisfied

Q12. Considering **all** of your expectations, to what extent has the NRCS Snow Survey and Water Supply Forecasting Program **fallen short of or exceeded your expectations**?

[RECORD NUMBER 1-10]

- 1 = Fallen short of expectations
- 10 =Exceeded expectations

DK

Q13. Forget NRCS Snow Surveys and Water Supply Forecasting for a moment. Imagine an **ideal** service that provides forecasting information on water supplies. How **well** do you think the Snow Survey and Water Supply Forecasting Program compares with that **ideal service**?

[RECORD NUMBER 1-10]

- 1 =Not very close to the ideal
- 10 =Very close to the ideal

DK

Next, I want you to think about any communication you may have had with the NRCS Snow Surveys and Water Supply Forecasting Program regarding complaints about your experience.

- Q14. Have you complained about NRCS within the past two years?
 - 1 Yes
 - 2 No

{IF Q14 = 1, ASK Q14A-Q14B; OTHERWISE GO TO Q15} SCREEN DESIGN: GRID [RECORD NUMBER 1-10] 1 = Not very10 = VeryDK Q14A. How well was your most recent complaint handled? Q14B. How easy was it to make your most recent complaint about the NRCS Snow Survey and Water Supply Forecasting Program? Q15. If asked, how willing would you be to say positive things about the NRCS Snow Survey and Water Supply Forecasting Program? [RECORD NUMBER 1-10] 1 = Not at all willing 10 = Very willingDK Q16. How likely is it that you will request information from the NRCS Snow Survey and Water Supply Forecasting Program in the future? [RECORD NUMBER 1-10] 1 = Not very likely10 = Very likely

Q17. In order to meet changing user needs, the Snow Survey and Water Supply Forecasting Program strives to make useful modifications to our products and services. How **useful** have you found recent modifications to our products and services?

[RECORD NUMBER 1-10]

```
1 = Not at all useful
10 = Very useful
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DK

Now a few demographic questions for classification purposes only...

- QD1. Which of the following best describes the organization you work with and for which you have received NRCS Snow Survey/Water Supply forecasts?
 - 1 No organization/Individual recipient
 - 2 Local government
 - 3 State agency
 - 4 Federal agency
 - 5 Private Corporation/Organization

DK

REF

{IF QD1 = 1, ASK QD6; OTHERWISE CONTINUE}

- QD2. Approximately how many people does your organization employ?
 - 1 1-49
 - 2 50-149
 - 3 150-499
 - 4 500-999
 - 5 1,000 or more

DK

REF

QD3.	What best describes your current role in your organization?					
	1 Research/Analysis 2 Customer/Client Services 3 Management 4 Other DK REF					
QD4.	Approximately how many years of experience do you have working with NRCS Snow Survey/Water Supply forecasts? (Please provide your answer in years. Enter only the number.)					
	[RECORD NUMBER 1-150] 0 Less than one year DK REF					
QD5.	Approximately how many hours do you spend analyzing/using NRCS Snow Survey/Water Supply forecasts each year ? (<i>Please provide your answer in hours. Enter only the number.</i>)					
	[RECORD NUMBER 1-150] 0 Less than one hour 151 151 hours or more DK/REF					
QD6.	What state (If QD1=1, RESTORE "are you", OTHERWISE RESTORE "is your organization") in?					
PROG	. NOTE: Display as drop down					
	1 ALABAMA 2 ALASKA 4 ARIZONA 5 ARKANSAS 6 CALIFORNIA 8 COLORADO 9 CONNECTICUT 10 DELAWARE 11 DISTRICT OF COLUMBIA 12 FLORIDA					

GEORGIA

- 14 HAWAII
- 16 IDAHO
- 17 ILLINOIS
- 18 INDIANA
- 19 IOWA
- 20 KANSAS
- 21 KENTUCKY
- 22 LOUISIANA
- 23 MAINE
- 24 MARYLAND
- 25 MASSACHUSETTS
- 26 MICHIGAN
- 27 MINNESOTA
- 28 MISSISSIPPI
- 29 MISSOURI
- 30 MONTANA
- 31 NEBRASKA
- 32 NEVADA
- 33 NEW HAMPSHIRE
- 34 NEW JERSEY
- 35 NEW MEXICO
- 36 NEW YORK
- 37 NORTH CAROLINA
- 38 NORTH DAKOTA
- 39 OHIO
- 40 OKLAHOMA
- 41 OREGON
- 42 PENNSYLVANIA
- 44 RHODE ISLAND
- 45 SOUTH CAROLINA
- 46 SOUTH DAKOTA
- 47 TENNESSEE
- 48 TEXAS
- 49 UTAH
- 50 VERMONT
- 51 VIRGINIA
- 53 WASHINGTON
- 54 WEST VIRGINIA
- 55 WISCONSIN
- 56 WYOMING
- 57 Prefer not to say

QD7. What is the 5-digit ZIP Code of the city or town (IF QD1=1 RESTORE "you live", OTHERWISE RESTORE "your organization is") in?

[RECORD ZIP CODE] REF

Thank You

You have completed the survey. We would like to thank you for taking the time today to participate in this study!

PROG. NOTE: TERMINATE SCREEN

Thank you for your time and your consideration today. At this time, we are only interviewing individuals who regularly interact with the Natural Resources Conservation Service (NRCS).

APPENDIX B FREQUENCIES AND MEANS OF SURVEY QUESTIONS

Q1. Before you first received Snow Survey data and/or Water Supply forecasts from the NRCS, you probably knew something about the Snow Survey and Water Supply program. Now think back and remember your expectations of the overall quality of NRCS data and/or forecasts. Please give me a rating on a 10 point scale on which "1" means your expectations were "not very high" and "10" means your expectations were "very high."

How would you rate your expectations of the overall quality of NRCS Snow Survey data and/or Water Supply forecasts?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	. 2	. 2	. 2
	2	7	.7	.8	1.0
	3	11	1.1	1.2	2.2
	4	25	2.5	2.7	4.9
	5	61	6.1	6.6	11.5
	6	89	8.9	9.7	21.2
	7	131	13.1	14.3	35.5
	8	251	25.1	27.3	62.8
	9	158	15.8	17.2	80.0
	10	184	18.4	20.0	100.0
Don't know	98	81	8.1	Missing	
	Total	1000	100.0	100.0	

Mean 7.807

Valid cases 919 Missing cases 81

Q2. How easy and convenient was it to navigate the NRCS website and find the Snow Survey/Water Supply forecasts offered by NRCS? Using a 10 point scale on which "1" means "not at all easy and convenient" and "10" means "very easy and convenient," how easy and convenient was it to navigate the NRCS website and find the Snow Survey/Water Supply forecasts offered by NRCS?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	. 4	. 4	. 4
	2	11	1.1	1.1	1.5
	3	23	2.3	2.3	3.8
	4	35	3.5	3.5	7.3
	5	53	5.3	5.3	12.7
	6	89	8.9	8.9	21.6
	7	143	14.3	14.4	35.9
	8	235	23.5	23.6	59.5
	9	169	16.9	17.0	76.5
	10	234	23.4	23.5	100.0
Don't know	98	4	. 4	Missing	
	Total	1000	100.0	100.0	

Mean 7.807

Valid cases 996 Missing cases 4

Q3. How quickly were you able to find and access the Snow Survey/Water Supply forecasts offered by NRCS through their website? Using a 10 point scale on which "1" means "not at all quickly" and "10" means "very quickly," how quickly were you able to find and access the Snow Survey/Water Supply forecasts offered by NRCS through their website?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	5	.5	.5	.5
	2	12	1.2	1.2	1.7
	3	23	2.3	2.3	4.0
	4	36	3.6	3.6	7.6
	5	57	5.7	5.7	13.4
	6	88	8.8	8.9	22.2
	7	139	13.9	14.0	36.2
	8	262	26.2	26.4	62.6
	9	180	18.0	18.1	80.7
	10	192	19.2	19.3	100.0
Don't know	98	6	.6	Missing	
	Total	1000	100.0	100.0	

Mean 7.710

Valid cases 994 Missing cases 6

Q4. How clear and understandable was the information provided in the Snow Survey/Water Supply forecasts you received? Using a 10 point scale on which "1" means "not at all clear and understandable" and "10" means "very clear and understandable," how clear and understandable was the information provided in the Snow Survey/Water Supply forecasts you received?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	.2	. 2	. 2
	2	4	. 4	. 4	.6
	3	14	1.4	1.4	2.0
	4	23	2.3	2.3	4.3
	5	35	3.5	3.5	7.8
	6	59	5.9	5.9	13.8
	7	131	13.1	13.2	26.9
	8	272	27.2	27.3	54.2
	9	217	21.7	21.8	76.0
	10	239	23.9	24.0	100.0
Don't know	98	4	. 4	Missing	
	Total	1000	100.0	100.0	

Valid cases 996 Missing cases 4

Q5. How useful were the Snow Survey/Water Supply forecasts you received from NRCS in terms of being applicable to your needs? Using a 10 point scale on which "1" means "not at all useful" and "10" means "very useful," how useful were the Snow Survey forecasts you received from NRCS in terms of being applicable to your needs?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	.2	.2	. 2
	2	2	. 2	.2	. 4
	3	3	.3	.3	.7
	4	8	.8	.8	1.5
	5	13	1.3	1.3	2.8
	6	34	3.4	3.4	6.2
	7	88	8.8	8.8	15.1
	8	203	20.3	20.4	35.5
	9	223	22.3	22.4	57.9
	10	419	41.9	42.1	100.0
Don't know	98	5	.5	Missing	
	Total	1000	100.0	100.0	

Mean 8.797

Valid cases 995 Missing cases 5

Q6. Considering that data from Snow Survey and Snow Telemetry System (SNOTEL) is a part of the services provided by the Snow Survey and Water Supply Forecasting Program, how useful was the Snow Survey Data you received from the NRCS in terms of satisfying your requirements? Using a 10 point scale on which "1" means "not at all useful" and "10" means "very useful," how useful were the Snow Survey Data you received from NRCS in terms of satisfying your requirements?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	. 2	. 2	. 2
	2	2	. 2	. 2	. 4
	3	5	.5	.5	.9
	4	8	.8	.8	1.7
	5	10	1.0	1.0	2.7
	6	22	2.2	2.2	4.9
	7	75	7.5	7.5	12.5
	8	202	20.2	20.3	32.8
	9	231	23.1	23.2	56.0
	10	437	43.7	44.0	100.0
Don't know	98	6	.6	Missing	
	Total	1000	100.0	100.0	

Valid cases 994 Missing cases 6

Q7. How courteous were the NRCS personnel? Using a 10 point scale on which "1" means "not at all courteous" and "10" means "very courteous," how courteous were the NRCS personnel?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	5	.5	1.3	1.3
	2	1	.1	.3	1.6
	3	3	.3	.8	2.3
	5	9	.9	2.3	4.7
	6	10	1.0	2.6	7.3
	7	16	1.6	4.1	11.4
	8	65	6.5	16.8	28.2
	9	78	7.8	20.2	48.4
	10	199	19.9	51.6	100.0
Don't know	98	614	61.4	Missing	
	Total	1000	100.0	100.0	

Mean 8.925

Valid cases 386 Missing cases 614

Q8. How professional were the NRCS personnel in terms of being knowledgeable? Using a 10 point scale on which "1" means "not at all professional" and "10" means "very professional," how professional were the NRCS personnel?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	. 4	1.0	1.0
	2	1	.1	.3	1.3
	3	3	.3	.8	2.1
	4	2	. 2	.5	2.6
	5	7	.7	1.8	4.4
	6	10	1.0	2.6	7.0
	7	17	1.7	4.4	11.4
	8	64	6.4	16.5	27.9
	9	87	8.7	22.5	50.4
	10	192	19.2	49.6	100.0
Don't know	98	613	61.3	Missing	
	Total	1000	100.0	100.0	

Valid cases 387 Missing cases 613

Q9. How useful were the Water Supply forecasts you received from NRCS in terms of accurately forecasting future water supplies? Using a 10 point scale on which "1" means "not at all useful" and "10" means "very useful," how useful were the Water Supply forecasts you received from NRCS in terms of accurately forecasting future water supplies?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	8	.8	1.2	1.2
	2	1	.1	.2	1.4
	3	6	.6	.9	2.3
	4	7	.7	1.1	3.3
	5	28	2.8	4.2	7.5
	6	59	5.9	8.9	16.4
	7	105	10.5	15.8	32.2
	8	173	17.3	26.0	58.2
	9	142	14.2	21.4	79.5
	10	136	13.6	20.5	100.0
Don't know	98	335	33.5	Missing	
	Total	1000	100.0	100.0	

Mean 7.980

Valid cases 665 Missing cases 335

Q10. Please consider all your experiences in the past two years with NRCS. Using a 10 point scale, on which "1" means "not very high" and "10" means "very high," how would you rate the **overall quality** of the Snow Survey and Water Supply Forecasting products you received from NRCS?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	2	.2	.2	. 2
	3	3	.3	.3	.5
	4	4	. 4	. 4	.9
	5	20	2.0	2.0	2.9
	6	26	2.6	2.6	5.6
	7	109	10.9	11.0	16.6
	8	251	25.1	25.4	42.0
	9	297	29.7	30.1	72.1
	10	276	27.6	27.9	100.0
Don't know	98	12	1.2	Missing	
	m-+-1	1000	100.0	100.0	
	Total	1000	100.0	100.0	

Valid cases 988 Missing cases 12

Q11. First, please consider all your experiences to date with the NRCS Snow Survey and Water Supply Forecasting Program. Using a 10 point scale on which "1" means "very dissatisfied" and 10 means "very satisfied," how **satisfied** are you with the NRCS Snow Survey and Water Supply Forecasting Program?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	3	.3	.3	.3
	2	1	.1	.1	. 4
	3	3	.3	.3	.7
	4	7	.7	.7	1.4
	5	18	1.8	1.8	3.3
	6	28	2.8	2.8	6.1
	7	125	12.5	12.7	18.8
	8	261	26.1	26.5	45.3
	9	270	27.0	27.4	72.8
	10	268	26.8	27.2	100.0
Don't know	98	16	1.6	Missing	
	Total	1000	100.0	100.0	

Mean 8.509

Valid cases 984 Missing cases 16

Q12. Considering all of your expectations, to what extent has the NRCS Snow Survey and Water Supply Forecasting Program fallen short of or exceeded your expectations? Using a 10 point scale on which "1" now means "falls short of your expectations" and "10" means "exceeds your expectations," to what extent has the NRCS Snow Survey and Water Supply Forecasting Program fallen short of or exceeded your expectations?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	6	.6	.6	.6
	2	3	.3	.3	.9
	3	11	1.1	1.1	2.1
	4	31	3.1	3.2	5.3
	5	77	7.7	8.0	13.4
	6	146	14.6	15.3	28.6
	7	172	17.2	18.0	46.6
	8	218	21.8	22.8	69.4
	9	183	18.3	19.1	88.5
	10	110	11.0	11.5	100.0
Don't know	98	43	4.3	Missing	
	Total	1000	100.0	100.0	

Mean 7.445

Valid cases 957 Missing cases 43

Q13. Forget NRCS Snow Surveys and Water Supply Forecasting for a moment. Now, I want you to imagine an ideal service that provides forecasting information on water supplies. (PAUSE) How well do you think the Snow Survey and Water Supply Forecasting Program compares with that ideal service? Please use a 10 point scale on which "1" means "not very close to the ideal," and "10" means "very close to the ideal."

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	3	.3	.3	.3
	2	4	. 4	. 4	.8
	3	13	1.3	1.5	2.2
	4	25	2.5	2.8	5.1
	5	42	4.2	4.7	9.8
	6	101	10.1	11.4	21.1
	7	204	20.4	22.9	44.1
	8	263	26.3	29.6	73.7
	9	137	13.7	15.4	89.1
	10	97	9.7	10.9	100.0
Don't know	98	111	11.1	Missing	
	Total	1000	100.0	100.0	

Mean 7.538

Valid cases 889 Missing cases 111

Q14. Have you complained about NRCS within the past two years?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
No Yes Don't know	0 1 98	907 44 49	90.7 4.4 4.9	95.4 4.6 Missing	95.4 100.0
	Total	1000	100.0	100.0	

Valid cases 951 Missing cases 49

Q14A. How well, or poorly, was your most recent complaint about the NRCS Snow Survey and Water Supply Forecasting Program handled? Using a 10 point scale on which "1" means "handled very poorly" and "10" means "handled very well," how would you rate the handling of your complaint about NRCS?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	. 4	10.0	10.0
	3	2	. 2	5.0	15.0
	4	4	. 4	10.0	25.0
	5	3	.3	7.5	32.5
	6	6	.6	15.0	47.5
	7	4	. 4	10.0	57.5
	8	2	. 2	5.0	62.5
	9	4	. 4	10.0	72.5
	10	11	1.1	27.5	100.0
	•	956	95.6	Missing	
Don't know	98	4	. 4	Missing	
	Total	1000	100.0	100.0	

Mean 6.675

Valid cases 40 Missing cases 960

Q14B. How difficult or easy was it to make your most recent complaint about the NRCS Snow Survey and Water Supply Forecasting Program? Using a 10 point scale on which "1" means "very difficult" and "10" means "very easy," how difficult or easy was it to make your most recent complaint about the NRCS Snow Survey and Water Supply Forecasting Program?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	3	.3	7.0	7.0
	3	1	.1	2.3	9.3
	5	4	. 4	9.3	18.6
	6	3	.3	7.0	25.6
	7	3	.3	7.0	32.6
	8	3	.3	7.0	39.5
	9	8	.8	18.6	58.1
	10	18	1.8	41.9	100.0
		956	95.6	Missing	
Don't know	98	1	.1	Missing	
	Total	1000	100.0	100.0	

Mean 7.930

Valid cases 43 Missing cases 957

Q15. If asked, how willing would you be to say positive things about the NRCS Snow Survey and Water Supply Forecasting Program? Using a 10 point scale on which "1" means "not at all willing" and "10" means "very willing," how willing would you be to say positive things about the NRCS Snow Survey and Water Supply Forecasting Program?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	10	1.0	1.0	1.0
	3	3	. 3	.3	1.3
	4	6	.6	.6	2.0
	5	34	3.4	3.5	5.5
	6	38	3.8	3.9	9.4
	7	99	9.9	10.2	19.6
	8	217	21.7	22.4	42.1
	9	178	17.8	18.4	60.5
	10	382	38.2	39.5	100.0
Don't know	98	33	3.3	Missing	
	Total	1000	100.0	100.0	

Valid cases 967 Missing cases 33

Q16. How likely is it that you will request information from the NRCS Snow Survey and Water Supply Forecasting Program in the future? Using a 10 point scale on which "1" means "very unlikely" and "10" means "very likely," how likely is it that you will request information from the NRCS Snow Survey and Water Supply Forecasting Program in the future?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	6	.6	.6	.6
	2	3	.3	.3	.9
	3	3	.3	.3	1.2
	4	3	.3	.3	1.5
	5	10	1.0	1.0	2.5
	6	23	2.3	2.3	4.8
	7	33	3.3	3.3	8.1
	8	74	7.4	7.4	15.6
	9	80	8.0	8.0	23.6
	10	760	76.0	76.4	100.0
Don't know	98	5	.5	Missing	
	Total	1000	100.0	100.0	

Mean 9.411

Valid cases 995 Missing cases 5

Q17. In order to meet changing user needs, the Snow Survey and Water Supply Forecasting Program strives to make useful modifications to our products and services. How useful have you found recent modifications to our products and services? Using a 10 point scale on which "1" means "not at all useful" and "10" means "very useful," how useful have you found recent modifications to our products and services?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	1	4	. 4	.6	.6
	2	1	.1	. 2	.8
	3	5	.5	.8	1.6
	4	5	.5	.8	2.4
	5	28	2.8	4.5	6.8
	6	46	4.6	7.3	14.1
	7	101	10.1	16.1	30.2
	8	180	18.0	28.6	58.8
	9	127	12.7	20.2	79.0
	10	132	13.2	21.0	100.0
Don't know	98	371	37.1	Missing	
	Total	1000	100.0	100.0	

Valid cases 629 Missing cases 371

QD1. Which of the following best describes the organization you work with and for which you have received NRCS Snow Survey/Water Supply forecasts?

						Valid
Cum						
Value Label			Value	Frequency	Percent	Percent
Percent						
No organization	/Indivi	dual recipien	.t 1	541	54.1	54.7
54.7		_				
Local governmen	.t		2	74	7.4	7.5
62.2						
State agency			3	75	7.5	7.6
69.8						
Federal agency			4	105	10.5	10.6
80.4						
Private Corpora	tion/Org	ganization	5	194	19.4	19.6
100.0				_	_	
Don't know			98	6	.6	Missing
Refused			99	5	.5	Missing
			Total	1000	100.0	100.0
Valid cases	989	Missing ca	.ses	11		

QD2. Approximately how many people does your organization employ?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
1 - 49	1	175	17.5	40.9	40.9
50 - 149	2	64	6.4	15.0	55.8
150 - 499	3	63	6.3	14.7	70.6
500 - 999	4	23	2.3	5.4	75.9
1,000 or more	5	103	10.3	24.1	100.0
		541	54.1	Missing	
Don't know	98	21	2.1	Missing	
Refused	99	10	1.0	Missing	
	Total	1000	100.0	100.0	

Valid cases 428 Missing cases 572

QD3. What best describes your current role in your organization?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Research/Analysis	1	170	17.0	38.2	38.2
Customer/Client Services	2	50	5.0	11.2	49.4
Management	3	161	16.1	36.2	85.6
Other	4	64	6.4	14.4	100.0
		541	54.1	Missing	
Don't know	98	3	.3	Missing	
Refused	99	11	1.1	Missing	
	Total	1000	100.0	100.0	

Mean 2.267

Valid cases 445 Missing cases 555

QD4. Approximately how many years of experience do you have working with NRCS Snow Survey/Water Supply forecasts?

				Valid	Cum
Value Label	Value	Frequency	Percent	Percent	Percent
	1	10	1.0	2.5	2.5
	2	42	4.2	10.4	12.8
	3	38	3.8	9.4	22.2
	4	35	3.5	8.6	30.9
	5	49	4.9	12.1	43.0
	6	14	1.4	3.5	46.4
	7	12	1.2	3.0	49.4
	8	19	1.9	4.7	54.1
	9	2	.2	.5	54.6
	10	54	5.4	13.3	67.9
	11	5	.5	1.2	69.1
	12	11	1.1	2.7	71.9
	13	3	.3	. 7	72.6
	14	2	. 2	.5	73.1
	15	29	2.9	7.2	80.2
	16	7	. 7	1.7	82.0
	17	1	.1	. 2	82.2
	18	7	. 7	1.7	84.0
	19	3	.3	. 7	84.7
	20	29	2.9	7.2	91.9
	22	4	. 4	1.0	92.8
	24	1	.1	. 2	93.1
	25	14	1.4	3.5	96.5
	26	3	.3	. 7	97.3
	30	4	. 4	1.0	98.3
	33	1	.1	. 2	98.5
	35	3	.3	. 7	99.3
	36	1	.1	. 2	99.5
	40	1	.1	. 2	99.8
	50	1	.1	. 2	100.0
_		541	54.1	Missing	
Less than one year	97	12	1.2	Missing	
Don't know	98	41	4.1	Missing	
Refused	99	1	.1	Missing	
	Total	1000	100.0	100.0	

Mean 9.817

Valid cases 405 Missing cases 595

QD5. Approximately how many hours do you spend analyzing/using NRCS Snow Survey/Water Supply forecasts each year?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
	2	6	.6	1.7	1.7
	3	14	1.4	4.0	5.7
	4	9	. 9	2.6	8.3
	5	16	1.6	4.6	12.9
	6	5	.5	1.4	14.3
	7	1	.1	.3	14.6
	8	8	. 8	2.3	16.9
	10	59	5.9	16.9	33.7
	12	10	1.0	2.9	36.6
	15	14	1.4	4.0	40.6
	16	3	.3	.9	41.4
	20	49	4.9	14.0	55.4
	24	8	. 8	2.3	57.7
	25	21	2.1	6.0	63.7
	26	2	. 2	.6	64.3
	30	12	1.2	3.4	67.7
	35	6	.6	1.7	69.4
	40	26	2.6	7.4	76.9
	46	1	.1	.3	77.1
	48	1	.1	.3	77.4
	50	31	3.1	8.9	86.3
	60	9	.9	2.6	88.9
	65	1	.1	.3	89.1
	70	1	.1	.3	89.4
	75	2	. 2	.6	90.0
	80	11	1.1	3.1	93.1
	100	20	2.0	5.7	98.9
	120	3	.3	. 9	99.7
	150	1	.1	.3	100.0
		541	54.1	Missing	
Less than one hour	997	51	5.1	Missing	
Don't know	998	28	2.8	Missing	
Refused	999	30	3.0	Missing	
	Total	1000	100.0	100.0	

Mean 29.877

Valid cases 350 Missing cases 650

QD6. What state are you/is your organization in?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
		1 1			
ALASKA	2	8	.8	.8	.8
ARIZONA	4	15	1.5	1.5	2.3
CALIFORNIA	6	29	2.9	2.9	5.2
COLORADO	8	182	18.2	18.3	23.5
CONNECTICUT	9	1	.1	.1	23.6
FLORIDA	12	1	.1	.1	23.7
GEORGIA	13	2	. 2	. 2	23.9
IDAHO	16	134	13.4	13.5	37.4
ILLINOIS	17	2	. 2	. 2	37.6
INDIANA	18	2	. 2	. 2	37.8
IOWA	19	2	. 2	. 2	38.0
KANSAS	20	1	.1	.1	38.1
MARYLAND	24	3	.3	.3	38.4
MASSACHUSETTS	25	1	.1	.1	38.5
MICHIGAN	26	1	.1	.1	38.6
MINNESOTA	27	11	1.1	1.1	39.7
MISSOURI	29	3	.3	.3	40.0
MONTANA	30	122	12.2	12.3	52.3
NEBRASKA	31	1	.1	.1	52.4
NEVADA	32	19	1.9	1.9	54.3
NEW HAMPSHIRE	33	1	.1	.1	54.4
NEW MEXICO	35	64	6.4	6.4	60.9
NEW YORK	36	2	. 2	. 2	61.1
NORTH CAROLINA	37	1	.1	.1	61.2
NORTH DAKOTA	38	1	.1	.1	61.3
OHIO	39	1	.1	.1	61.4
OKLAHOMA	40	2	. 2	. 2	61.6
OREGON	41	54	5.4	5.4	67.0
PENNSYLVANIA	42	1	.1	.1	67.1
SOUTH DAKOTA	46	2	. 2	. 2	67.3
TENNESSEE	47	1	.1	.1	67.4
TEXAS	48	12	1.2	1.2	68.6
UTAH	49	138	13.8	13.9	82.5
VIRGINIA	51	2	. 2	. 2	82.7
WASHINGTON	53	108	10.8	10.9	93.6
WYOMING	56	64	6.4	6.4	100.0
Prefer not to say	57	6	.6	Missing	
	Total	1000	100.0	100.0	

Valid cases 994 Missing cases 6