County of Guilford
Transportation & Mobility Services
Agency Survey Report

Conducted Spring 2008

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Purpose and Scope:

Survey research represents one method of collecting important opinion information from your citizens. Properly conducted survey research helps convert citizen opinion information into clear "messages" to you about what your citizens expect from you and believe about you as a supplier of services.

The purpose of this survey is to obtain citizen opinion information regarding services provided by the County of Guilford, and to help identify important "messages" from your citizens that can assist you in decision making. Specifically, the principle goals of this survey might be summarized as follows:

♦ Identify what Transportation & Mobility Services does well. These have a positive influence on customer satisfaction and are the things you want to retain.

♦ Identify areas for improvement that can negatively impact customer satisfaction.

♦ Identify the priorities of your customers.

♦ Establish a baseline of customer opinions that can be trended over time to determine if satisfaction and priorities are changing.

The ability of survey results to assist you in decision making can often be enhanced by looking at the survey data from different perspectives or 'views'. Each view contributes to a more complete understanding of the true opinions underlying people's responses to the survey questions. Looking at multiple views is part of the process of transforming relatively meaningless 'data' into useful 'information' and hopefully even into 'insight'. *For this project, because of the small sample size, we did not ask respondents any background questions.*

In this report, we will refer to respondents, citizens and customers interchangeably.

Survey Description:

The survey is divided into two principle parts:

> 1. *Customer Opinion Statements (Rated on a 7-point scale)*
> 2. *Open Ended Questions (Comments)*

1. Several categories of statements were included in the survey to provide a wide array of respondents' opinions. These categories include:

   - ➢ General statements reflecting broad gauge satisfaction ratings
   - ➢ The Reservation Operators
   - ➢ The Dispatch Operators
   - ➢ The Drivers
   - ➢ Other General Items

2. Comments were also captured. Comments provide an opportunity for respondents to reveal information of importance that was not specifically asked for in the survey. They also lend value to the interpretation of ratings by providing a better sense of context or supportive evidence that enriches the interpretation.

Survey Construction:

Care has been taken in the construction of this survey to help ensure citizen opinion information is gathered in an appropriate manner. In particular, the following characteristics of surveys, which are known to influence the accuracy of the information received, were considered during construction. These include:

1. Wording of Statements	♦ Statements are kept brief to reduce the amount of reading required. ♦ Statements are reviewed for ambiguity to ensure they convey only one meaning where possible. ♦ Statements are designed to be neutral or slightly positive. ♦ Each statement ideally covers only one idea to be rated.
2. Statement Order	♦ When possible, statements are put in order from the most general to the most specific. This is done to avoid raising specific issues early that may positively or negatively influence responses on more general statements that follow. ♦ Statements are grouped with other statements into similar categories. ♦ More emotionally charged statements to be rated are generally placed toward the end of a category, or the end of the survey since they can influence ratings on other less emotionally charged issues.
3. Instructions	♦ Instructions provided at the beginning of the survey clearly indicate the purpose for the survey. The instructions also assure respondents that confidentiality will be preserved, and described when and how to return the survey.
4. Rating Scale	♦ A 7-point scale is used for rating purposes. This type of scale supports a multitude of parametric statistical tests that are most useful in evaluating and prioritizing the strengths and areas for improvement.

♦ *A copy of the survey used is presented later in this report.*

Survey Distribution:

Approximately **52** surveys were delivered to customers via first class US Mail. The surveys were mailed by Insight Research, Inc. Any undeliverable envelopes should have been returned to the County by the USPS.

A cover letter was included with the survey. The letter included:

- ♦ The reason for the survey
- ♦ How and when to complete the survey
- ♦ Guarantee of anonymity by using an independent research firm

Recipients were given a postage-paid pre-stamped envelope for return of their survey to Insight Research.

A reminder postcard was mailed to survey recipients about one week after the surveys were distributed. The card thanked respondents and asked others if they might return their survey within the next few days.

RESULTS

Response Profile:

Of the approximately **52** surveys distributed, **21** surveys were returned, for a total response rate of **40%.** This is a very good response rate, given that many surveys conducted in this manner yield response rates of between 15 and 30 percent.
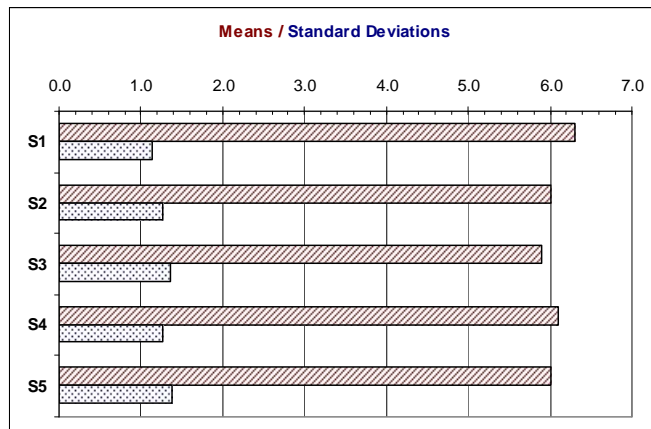

Opinion Findings:

Both a table and graph of the results are provided for each grouping of rated statements.

Table Description: The following information is included in the Tables:

Valid N	♦ Refers to the 'Number' of people responding to the statement.
Mean	♦ Refers to the 'Average' rating received from all respondents who rated the statement.
Median	♦ Refers to the 'Middlemost' score in a list of rank ordered scores, above and below which 50% of the scores lie.
Standard Deviation	♦ Refers to a measure of the amount of variability there is in the responses above and below the average. For example, a smaller standard deviation indicates less variability, and thus more agreement among respondents than a larger standard deviation indicates. (*See Appendix B for more detailed description of the Standard Deviation*).

Graph Description: A graph of the *average ratings* for each statement is presented in the form of horizontal bars to assist in identifying patterns of importance. The longer lines represent the *means* while the shorter lines represent the *standard deviations* for their respective statements.

Two questions often asked in survey research are; "What is a good score, and how do I know where my real areas for improvement are?". Although every organization is different, a general theme in the opinion research literature indicates that "good" is not always "good enough". That is to say, although an average rating of a '4' on a 7-point scale may be perceived to be a "neutral" or even a "good" rating, it actually takes a much higher average rating to increase the likelihood that people are satisfied. Consequently, it is good practice to aim for the highest average possible.

At Insight Research, Inc., we have found it useful to suggest a target average of 5.5 or better for satisfaction statements for most industries. Scores lower below the target do not necessarily indicate a problem, but should be considered as areas for potential improvement that are worthy of attention. For local governments, however, achieving a rating of 5.5 is often difficult; most average closer to 5.2. One reason for this difficulty might be that unlike most organizations in the private sector, a government usually keeps (rather than loses) most of their "unhappy customers".

In addition, as mentioned earlier, low standard deviations reflect more agreement among respondents. As a result, it is most desirable to have a high "average" rating and a low "standard deviation". This would indicate that most people agree that the rating should be high. A good rule of thumb suggests that standard deviations of 1.2 or less are desirable. The following diagram illustrates the relationship between the "average" and "standard deviation" with blocks 1 to 4 reflecting "Least Desirable" to "Most Desirable" in that order.

	1	2	3	4
Average Rating ➡	Low	Low	High	High
Std. Deviation ➡	Low	High	High	Low
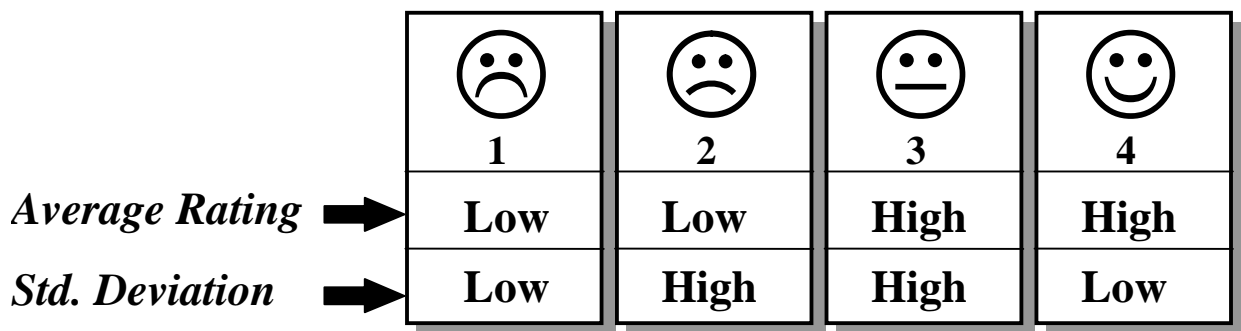
Section One: (General, Reservation & Dispatch)

The following table and graph reflect the ratings of the first 7 statements on the survey.

Statement 1 is particularly important, since it serves as a general "overall" impression of satisfaction with the Department, *to which* many other statements contribute. This statement had a mean or **average** rating of 4.19. This rating is slightly above the midpoint and well below our suggested target rating of 5.5., thus offering meaningful room for improvement. The **median** of 4.0 tells us that at least 50% of respondents rated the statement a '4' or higher, while at least 50% of respondents also rated the statement a '4' or lower. (In fact, 57% or respondents rated Statement a '4' or lower.*) The **standard deviation** of 1.57 indicates a typical amount of variability for an item which has a satisfaction rating between 4.0 and 5.0.

Most of the other items in this section also had ratings fairly near the midpoint of 4.0, except for **Statement 5**, which received a rating of 4.95.

*See the Distributions of Ratings, later in this report.

	Statements S Means "Statement"; 1 = Strongly Disagree; 7 = Strongly Agree	**Valid N** (Number Responding)	**Mean** (Average Rating)	**Median** (Middlemost Score)	**Std. Dev.** (Amount of Variability)
S1	Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.	21	4.19	4.0	1.57
S2	In general, Transportation & Mobility Services is good to do work with.	20	4.45	5.0	1.70
S3	The amount of time passengers actually spend on the vehicles is reasonable.	20	3.50	3.5	1.64
S4	The reservation operators answer the phone in a timely manner.	20	4.35	4.5	1.76
S5	The reservation operators are good at their work	20	4.95	5.0	1.32
S6	The dispatch operators answer the phone in a timely manner.	19	3.32	4.0	1.67
S7	The dispatch operators are good at their work.	19	4.17	4.0	1.34

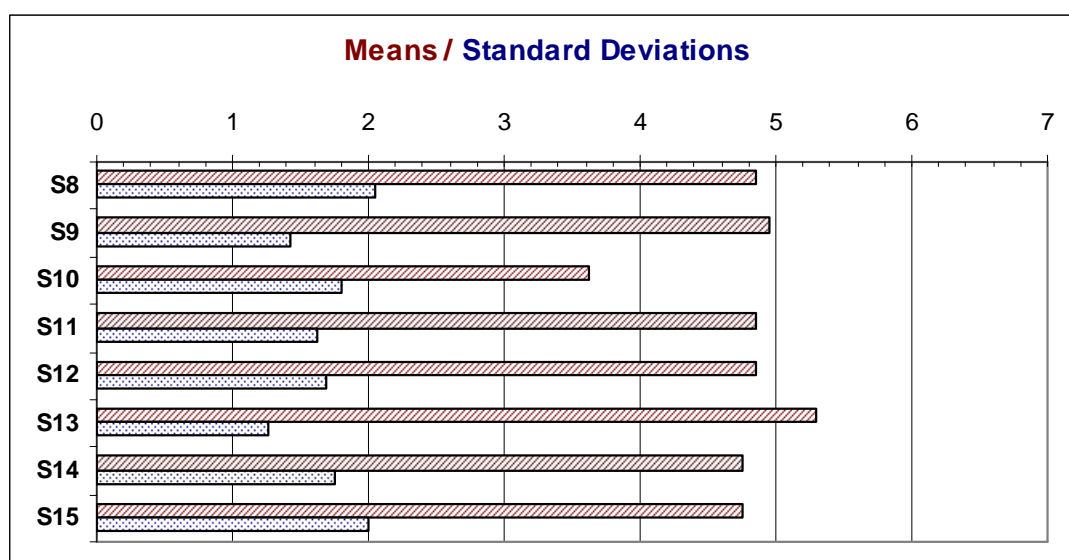**1 = Strongly Disagree and 7 = Strongly Agree**
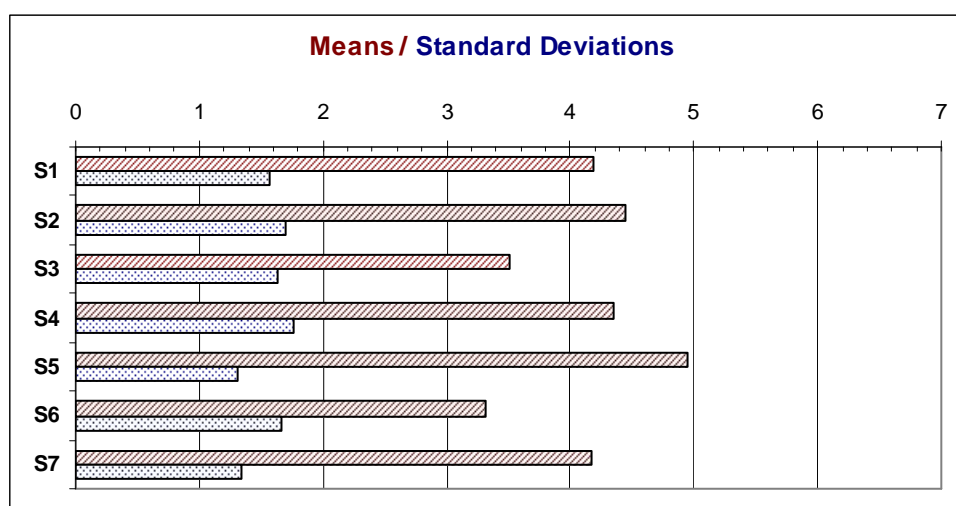
The ratings on this page were typically a good bit better than on the previous page. The Drivers received several good ratings (e.g., courtesy, appearance, safety). However, they received a rating below the midpoint of 4.0 for arriving on time.

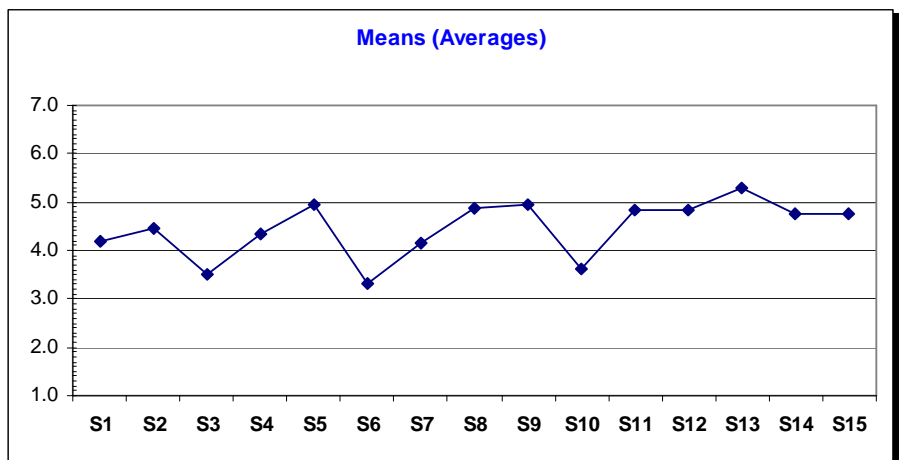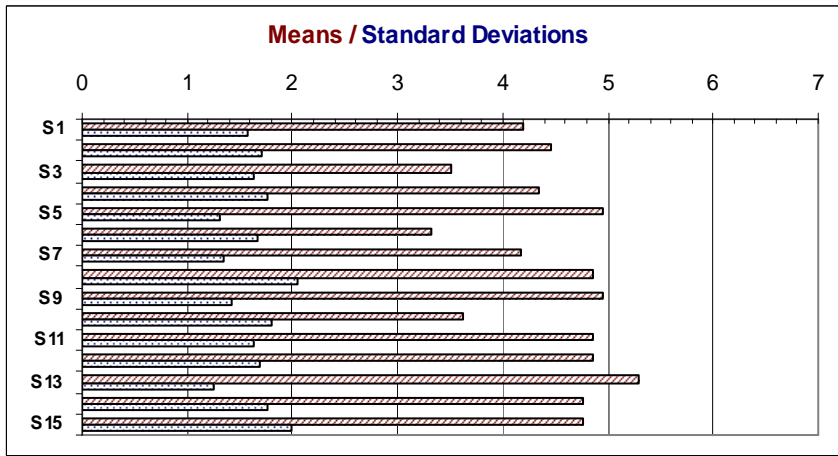*See the Distributions of Ratings, later in this report.*

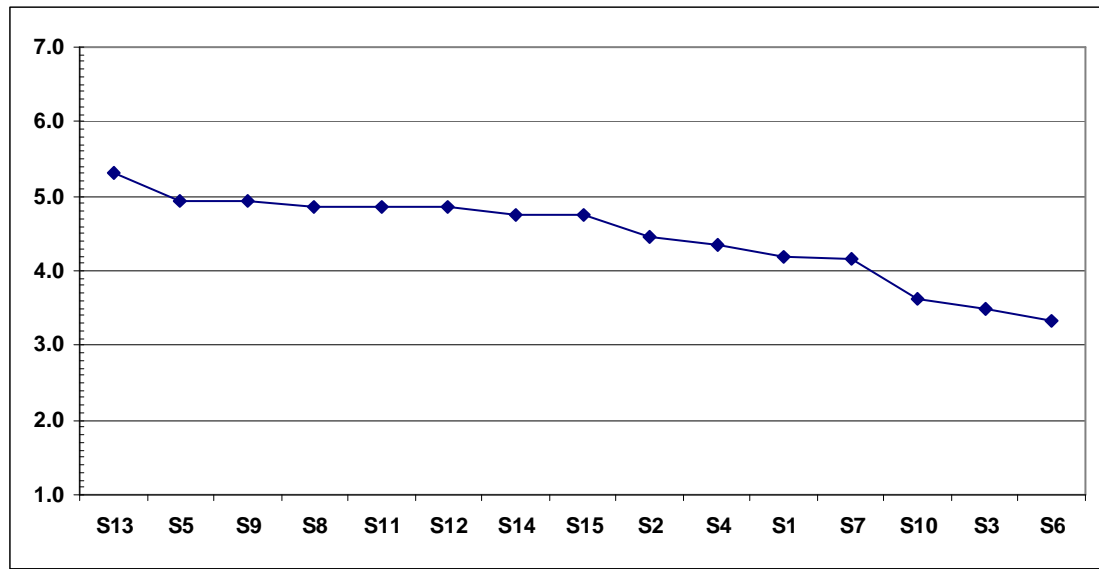|	Statements 1 = Strongly Disagree; 7 = Strongly Agree	Valid N (Number Responding)	Mean (Average Rating)	Median (Middlemost Score)	Std. Dev. (Amount of Variability)
S8	The drivers are courteous.	21	4.86	5.0	2.06
S9	The drivers are professional in their appearance.	21	4.95	5.0	1.43
S10	The drivers arrive at my location when expected.	21	3.62	3.0	1.80
S11	The drivers are helpful at getting passengers in and out of the vehicle.	20	4.85	4.5	1.63
S12	The drivers are helpful at getting passengers to and from the door.	20	4.85	5.0	1.69
S13	The drivers appear to drive safely.	20	5.30	5.0	1.26
S14	Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.	21	4.76	5.0	1.76
S15	I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.	21	4.76	5.0	2.00

1 = Strongly Disagree and 7 = Strongly Agree

Means / Standard Deviations

All Statements in One Table (All Respondents)

	Statements S Means "Statement"; 1 = Strongly Disagree; 7 = Strongly Agree	Valid N (Number Responding)	Mean (Average Rating)	Median (Middlemost Score)	Std. Dev. (Amount of Variability)
S1	Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.	21	4.19	4.0	1.57
S2	In general, Transportation & Mobility Services is good to do work with.	20	4.45	5.0	1.70
S3	The amount of time passengers actually spend on the vehicles is reasonable.	20	3.50	3.5	1.64
S4	The reservation operators answer the phone in a timely manner.	20	4.35	4.5	1.76
S5	The reservation operators are good at their work	20	4.95	5.0	1.32
S6	The dispatch operators answer the phone in a timely manner.	19	3.32	4.0	1.67
S7	The dispatch operators are good at their work.	19	4.17	4.0	1.34
S8	The drivers are courteous.	21	4.86	5.0	2.06
S9	The drivers are professional in their appearance.	21	4.95	5.0	1.43
S10	The drivers arrive at my location when expected.	21	3.62	3.0	1.80
S11	The drivers are helpful at getting passengers in and out of the vehicle.	20	4.85	4.5	1.63
S12	The drivers are helpful at getting passengers to and from the door.	20	4.85	5.0	1.69
S13	The drivers appear to drive safely.	20	5.30	5.0	1.26
S14	Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.	21	4.76	5.0	1.76
S15	I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.	21	4.76	5.0	2.00

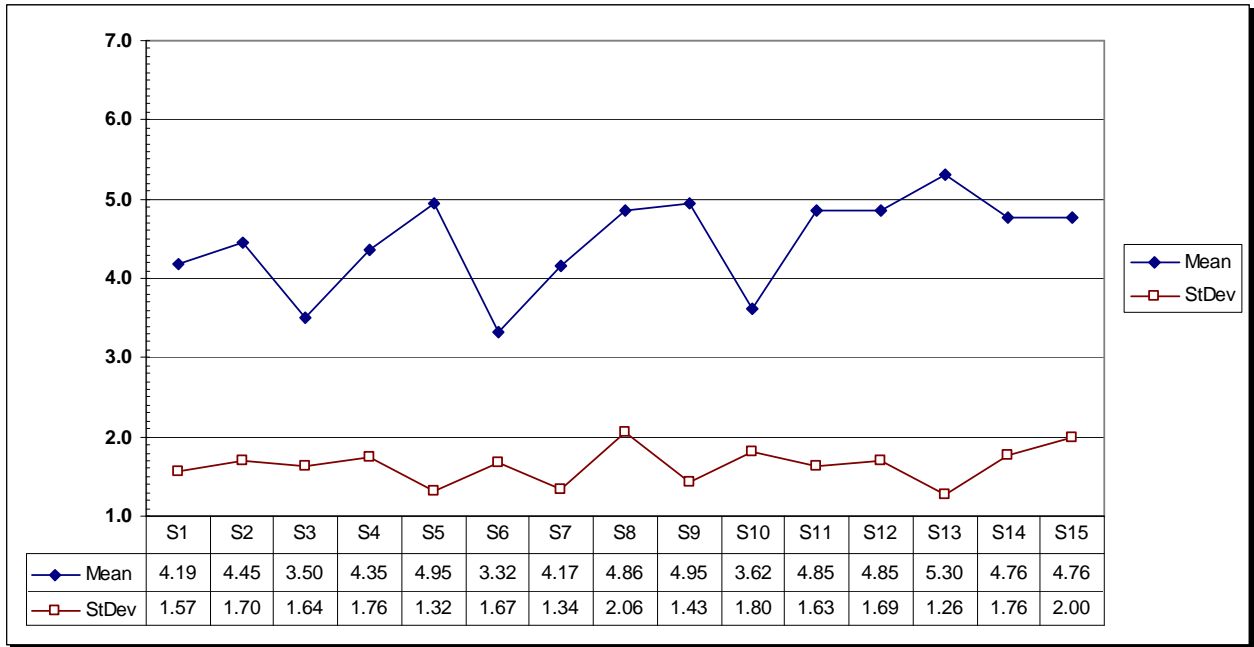Means / Standard Deviations

Means (Averages)

All Statements in One Table (Ranked Highest to Lowest)

	Statements S Means "Statement"; 1 = Strongly Disagree; 7 = Strongly Agree	Valid N (Number Responding)	Mean (Average Rating)	Median (Middlemost Score)	Std. Dev. (Amount of Variability)
S13	The drivers appear to drive safely.	20	5.30	5.0	1.26
S5	The reservation operators are good at their work	20	4.95	5.0	1.32
S9	The drivers are professional in their appearance.	21	4.95	5.0	1.43
S8	The drivers are courteous.	21	4.86	5.0	2.06
S11	The drivers are helpful at getting passengers in and out of the vehicle.	20	4.85	4.5	1.63
S12	The drivers are helpful at getting passengers to and from the door.	20	4.85	5.0	1.69
S14	Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.	21	4.76	5.0	1.76
S15	I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.	21	4.76	5.0	2.00
S2	In general, Transportation & Mobility Services is good to do work with.	20	4.45	5.0	1.70
S4	The reservation operators answer the phone in a timely manner.	20	4.35	4.5	1.76
S1	Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.	21	4.19	4.0	1.57
S7	The dispatch operators are good at their work.	19	4.17	4.0	1.34
S10	The drivers arrive at my location when expected.	21	3.62	3.0	1.80
S3	The amount of time passengers actually spend on the vehicles is reasonable.	20	3.50	3.5	1.64
S6	The dispatch operators answer the phone in a timely manner.	19	3.32	4.0	1.67

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
Mean	4.19	4.45	3.50	4.35	4.95	3.32	4.17	4.86	4.95	3.62	4.85	4.85	5.30	4.76	4.76
StDev	1.57	1.70	1.64	1.76	1.32	1.67	1.34	2.06	1.43	1.80	1.63	1.69	1.26	1.76	2.00

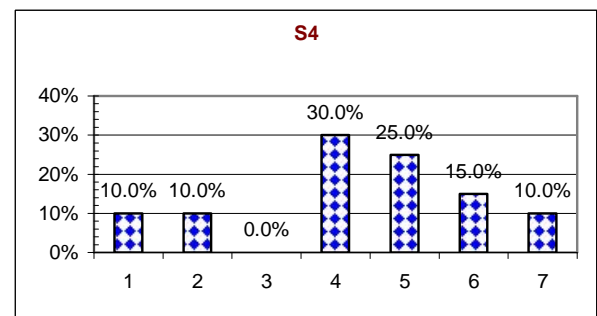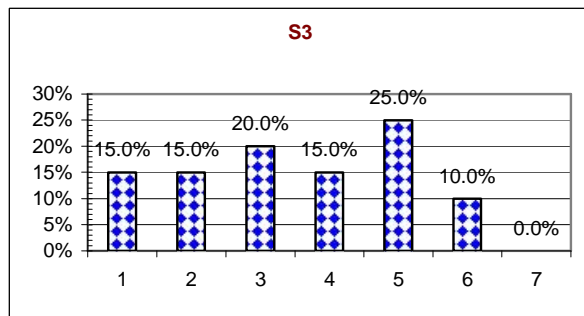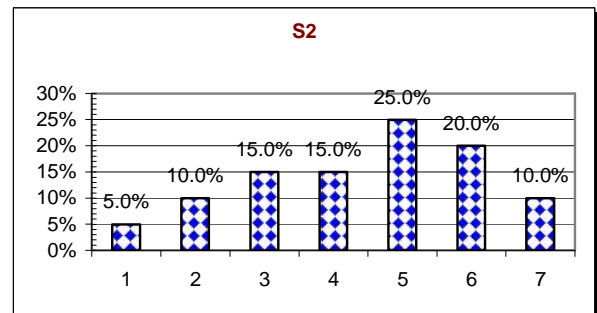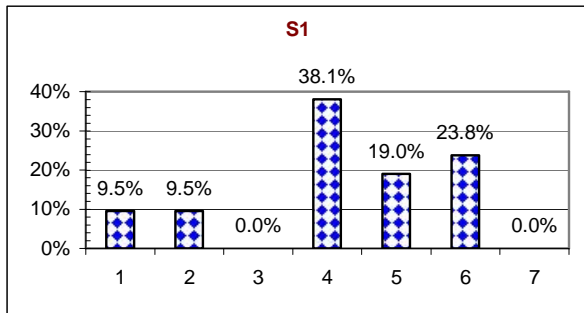|	**Statements**
	S Means "Statement"; 1 = Strongly Disagree; 7 = Strongly Agree
S1	Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.
S2	In general, Transportation & Mobility Services is good to do work with.
S3	The amount of time passengers actually spend on the vehicles is reasonable.
S4	The reservation operators answer the phone in a timely manner.
S5	The reservation operators are good at their work
S6	The dispatch operators answer the phone in a timely manner.
S7	The dispatch operators are good at their work.
S8	The drivers are courteous.
S9	The drivers are professional in their appearance.
S10	The drivers arrive at my location when expected.
S11	The drivers are helpful at getting passengers in and out of the vehicle.
S12	The drivers are helpful at getting passengers to and from the door.
S13	The drivers appear to drive safely.
S14	Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.
S15	I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.

Distributions of Ratings (A Different View of the Data):

The following graphs are presented to show the percentage of respondents who rated each statement a 1, 2, 3, 4, 5, 6, or 7. By showing the distributions of responses in this manner, you can gain a better appreciation for the 'standard deviation' associated with each statement. Thus, for example, the distribution of ratings for a statement with a smaller standard deviation will show a lot of respondents rating that statement similarly (within a point or two). The distribution will be more spread out across the 1 to 7 scale when a statement has a *large* standard deviation.
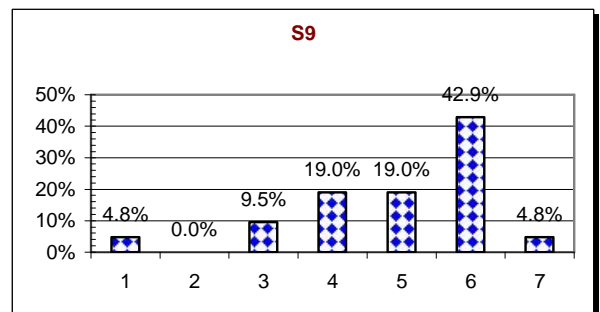
Statements 1-4:

		Statements	Ave.
S1		Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.	4.19
S2		In general, Transportation & Mobility Services is good to do work with.	4.45
S3		The amount of time passengers actually spend on the vehicles is reasonable.	3.50
S4		The reservation operators answer the phone in a timely manner.	4.35

S1 — 1: 9.5%, 2: 9.5%, 3: 0.0%, 4: 38.1%, 5: 19.0%, 6: 23.8%, 7: 0.0%

S2 — 1: 5.0%, 2: 10.0%, 3: 15.0%, 4: 15.0%, 5: 25.0%, 6: 20.0%, 7: 10.0%

S3 — 1: 15.0%, 2: 15.0%, 3: 20.0%, 4: 15.0%, 5: 25.0%, 6: 10.0%, 7: 0.0%

S4 — 1: 10.0%, 2: 10.0%, 3: 0.0%, 4: 30.0%, 5: 25.0%, 6: 15.0%, 7: 10.0%

Statements 5-9:

	Statements	Ave.
S5	The reservation operators are good at their work	4.95
S6	The dispatch operators answer the phone in a timely manner.	3.32
S7	The dispatch operators are good at their work.	4.17
S8	The drivers are courteous.	4.86
S9	The drivers are professional in their appearance.	4.95

S5

Rating	1	2	3	4	5	6	7
%	0.0%	0.0%	15.0%	25.0%	25.0%	20.0%	15.0%

S6

Rating	1	2	3	4	5	6	7
%	15.8%	21.1%	10.5%	36.8%	5.3%	5.3%	5.3%

S7

Rating	1	2	3	4	5	6	7
%	0.0%	11.1%	16.7%	38.9%	16.7%	11.1%	5.6%

S8

Rating	1	2	3	4	5	6	7
%	14.3%	4.8%	0.0%	14.3%	19.0%	23.8%	23.8%

S9

Rating	1	2	3	4	5	6	7
%	4.8%	0.0%	9.5%	19.0%	19.0%	42.9%	4.8%
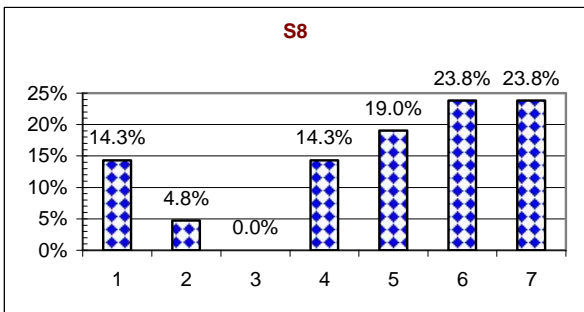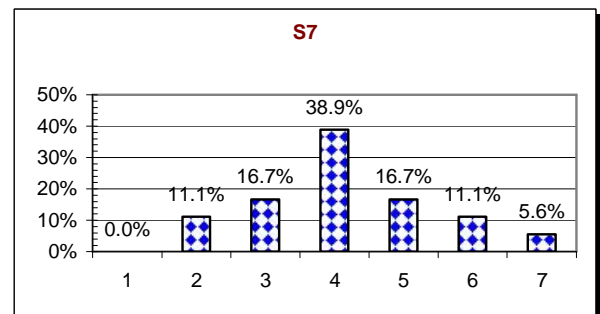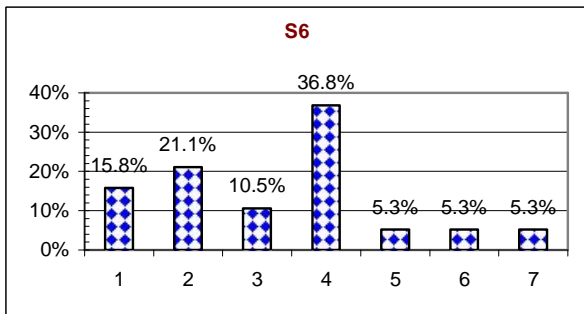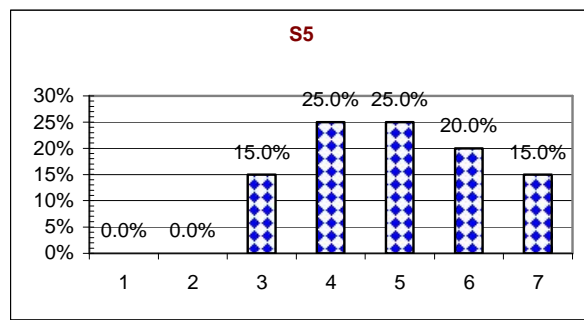
Statements 10-15:

		Statements	Ave.
S10		The drivers arrive at my location when expected.	3.62
S11		The drivers are helpful at getting passengers in and out of the vehicle.	4.85
S12		The drivers are helpful at getting passengers to and from the door.	4.85
S13		The drivers appear to drive safely.	5.30
S14		Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.	4.76
S15		I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.	4.76

S10

1	2	3	4	5	6	7
14.3%	14.3%	23.8%	14.3%	14.3%	14.3%	4.8%

S11

1	2	3	4	5	6	7
0.0%	10.0%	5.0%	35.0%	15.0%	10.0%	25.0%

S12

1	2	3	4	5	6	7
0.0%	15.0%	0.0%	30.0%	20.0%	10.0%	25.0%

S13

1	2	3	4	5	6	7
0.0%	0.0%	5.0%	25.0%	30.0%	15.0%	25.0%

S14

1	2	3	4	5	6	7
9.5%	4.8%	4.8%	14.3%	23.8%	33.3%	9.5%

S15

1	2	3	4	5	6	7
14.3%	0.0%	9.5%	14.3%	14.3%	28.6%	19.0%
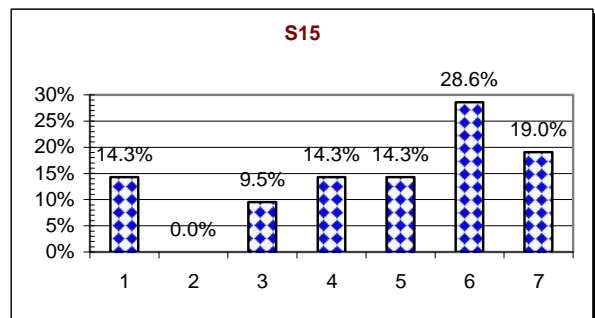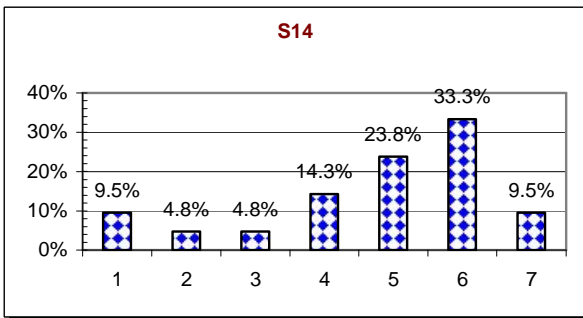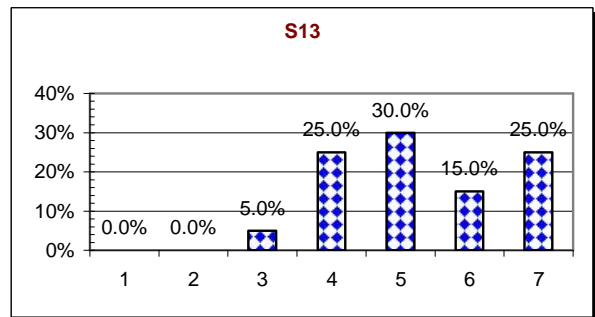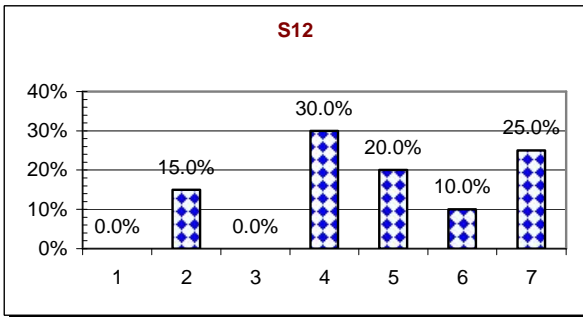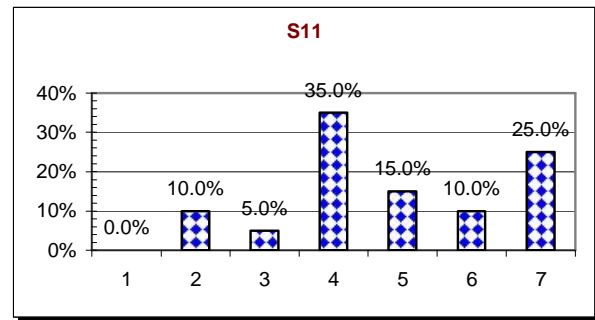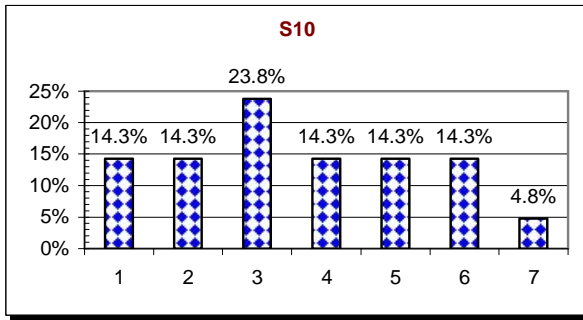
One measure of how closely related two or more items are is called Correlation. A "positive" correlation indicates that the answers to two or more items tend to move in the same direction (e.g., *overall satisfaction* and *driver promptness* are seen to be positively correlated.).

On the other hand, a "negative" correlation exists when two or more items are related in *opposite* directions. (As one increases, the other tends to decrease.)

Correlation measures can be extremely useful in survey analysis. Specifically, correlation analyses help identify those items that are related to one another. Thus, knowing how a person responds to one item can give insight about how they will respond to another correlated item. Although these relationships do not necessarily represent "cause and effect" relationships, they may give good insight about what is important to these respondents.

The charts below indicated how each survey statement is correlated to the following general statements.

S1	**Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.**
S2	**In general, Transportation & Mobility Services is good to do work with.**
S15	**I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.**

Example of interpretation:

From this data, we see that Statements 2, 5, 10 & 15 were more closely related to **Statement 1** than were the other statements, and thus are better predictors of overall satisfaction.

Correlations

	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	S13	S14	S15
S1	NA	0.81	0.75	0.79	0.83	0.54	0.60	0.78	0.69	0.80	0.61	0.69	0.52	0.79	0.85
S2	0.81	NA	0.74	0.76	0.66	0.62	0.50	0.69		0.67		0.48		0.81	0.83
S15	0.85	0.83	0.63	0.88	0.76	0.54	0.53	0.92	0.57	0.68	0.53	0.63		0.90	NA

	Statements
S1	**Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.**
S2	**In general, Transportation & Mobility Services is good to do work with.**
S3	The amount of time passengers actually spend on the vehicles is reasonable.
S4	The reservation operators answer the phone in a timely manner.
S5	The reservation operators are good at their work
S6	The dispatch operators answer the phone in a timely manner.
S7	The dispatch operators are good at their work.
S8	The drivers are courteous.
S9	The drivers are professional in their appearance.
S10	The drivers arrive at my location when expected.
S11	The drivers are helpful at getting passengers in and out of the vehicle.
S12	The drivers are helpful at getting passengers to and from the door.
S13	The drivers appear to drive safely.
S14	Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.
S15	**I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.**

Written Comments

Symbols

♦ NR - This stands for Name Reference, which means that a person's name was mentioned. Each
Name Reference includes the survey's case and/or ID number.

♦ (?) - This denotes an illegible word.

Written Comments

➢ An individual respondent's complete answer to an open-ended question appears in one cell. One or more ideas may be expressed within that cell. In the report we arrange the comments by the case number of the respondent.

What do you like best about this department?	What do you think needs improvement?
The service and convenience of transporting.	Can't think of anything.
The drivers are very nice and respectful.	The amount of time it takes to pick passengers up is too long. The amount of time passengers spend on vehicles is also too long. The dispatcher will sometimes not answer the phone and when they do they put you on hold for a very long time.
	Scheduling, organization, timeliness, time for patient on bus, time patient has to wait on ride, resolving issues timely.
Most of the employees are professional.	Sometimes scheduling gets mixed up. Occasionally you run into a rude and unkind driver. Most are very pleasant but there have been exceptions.
Helpful attitude with riders.	It may be helpful for new drivers - stay with trainer a week longer. When ride is late, give more information when ride will arrive or give reason for lateness.
The department appears to be going in the right direction. Mark is very approachable and willing to work to solve challenges.	Dispatch - sometimes the phone is never answered.
That a service is provided for the senior and mental and physically impaired.	Participants attending the same center should ride in 1 or 2 vans/cars. We have 8 participants and they ride in 5 or 6 vans. The drivers state that this is my last pickup (2:20 pm). What of BAS & transportation and an added burden to our already critical environment?

What do you like best about this department?	What do you think needs improvement?
Nice people and they are concerned.	Better pick up time - keeping the schedule consistent. They are often late or early.
	MV Transport needs to be replaced by a company that can provide efficient and truly service to the dialysis community.
They provide services to the Medicaid and Title III people in the community for medical appointments.	The phone system. The lines are busy most of the time.
	More professional appearance and behavior.
Drivers for MV are wonderful. Transportation office staff are great.	Scheduling needs much improvement, however it is better than previous year.
While response to concerns is slow the staff is willing to address concerns and attempt to fix.	I would recommend because there are limited options or alternatives scheduling needs to be improved as does timeliness.
Mark Kirstner and staff are responsive to concerns when they arise.	
Dispatch is friendly and try to find answers but the answer is not always correct.	People should be picked up as scheduled. Being on a van 2 hours is too long.
	Pick-up times need to be more accurate and consistent.
24/7 services	Structure of the program. Organization of the program. Commitment on providing good and quality services. I am tired of the line, "Driver will be there in 10 minutes." This has never happened and usually means driver will arrive in 30 minutes to an hour.
Drivers are very caring. They have become part of the program.	Dispatch is very difficult to work with when there is a problem. They will tell you what they think you want to hear and not really what is going to happen (when driver is late).
When there is a problem the staff listens to the problem and fixes it immediately.	The drivers need to understand the exact location that they need to drop off. They need to know how to get to their destination in a timely manner and fashion. Also, better understanding of limitations of our participants.
1. Talking with reservation operators…very personable, helpful and professional. 2. The fact that it provides a service to individuals who may be isolated otherwise.	Drivers who assume they may use our facilities and telephones without asking permission. Loud-talking drivers.

SUMMING UP – AN EXECUTIVE SUMMARY

Although this list is not exhaustive, here are some of the items from your recent survey that we thought were interesting and/or important. Please review the entire report, and read from your many written comments to gain additional insight.

Items of Note:

➢ There was a good response to the survey, with 21 surveys returned of approximately 52 delivered. This is a 40% response rate.

➢ The highest rated satisfaction statements (*P. 11*) were:

S13	The drivers appear to drive safely.
S5	The reservation operators are good at their work
S9	The drivers are professional in their appearance.
S8	The drivers are courteous.
S11	The drivers are helpful at getting passengers in and out of the vehicle.
S12	The drivers are helpful at getting passengers to and from the door.

➢ The lowest rated satisfaction statements (*P. 11*) were:

S1	Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.
S7	The dispatch operators are good at their work.
S10	The drivers arrive at my location when expected.
S3	The amount of time passengers actually spend on the vehicles is reasonable.
S6	The dispatch operators answer the phone in a timely manner.

➢ From reading the comments and looking at the ratings, it appears that some opportunities for improvement lie with the Dispatch operations and the issue of the Drivers arriving when needed or expected.

➢ Using correlation analysis, we found a number of significant predictors of general satisfaction items. These should provide assistance in setting priorities for the future. (See pages 16)

We hope this information will help you make good decisions. If you have any questions at any time, please let me know. We look forward to working with you in the future.

Tollie Mitchell, Program Director
Insight Research, Inc.

Guilford County Transportation & Mobility Services

Agency Survey

Please help us serve our passengers and agencies like yours better. This anonymous survey is being conducted by an independent research firm, and your name is not needed.

➢ **Please return your completed survey in the postage-paid envelope by June 13th 2008.**

Your participation is greatly appreciated!

Please indicate how strongly you disagree or agree with the following statements.

Leave any statement BLANK that you find unclear or that does not apply.

☹ Strongly Disagree ☺ Strongly Agree

		1	2	3	4	5	6	7
1.	Overall, I am satisfied with Guilford Co. Transportation & Mobility Services.	❍	❍	❍	❍	❍	❍	❍
2.	In general, Transportation & Mobility Services is good to do work with.	❍	❍	❍	❍	❍	❍	❍
3.	The amount of time passengers actually spend on the vehicles is reasonable.	❍	❍	❍	❍	❍	❍	❍
4.	*The reservation operators* … answer the phone in a timely manner.	❍	❍	❍	❍	❍	❍	❍
5.	… are good at their work	❍	❍	❍	❍	❍	❍	❍
6.	*The dispatch operators* … answer the phone in a timely manner.	❍	❍	❍	❍	❍	❍	❍
7.	… are good at their work.	❍	❍	❍	❍	❍	❍	❍
8.	*The drivers* … are courteous.	❍	❍	❍	❍	❍	❍	❍
9.	… are professional in their appearance.	❍	❍	❍	❍	❍	❍	❍
10.	… arrive at my location when expected.	❍	❍	❍	❍	❍	❍	❍
11.	… are helpful at getting passengers *in and out of the vehicle.*	❍	❍	❍	❍	❍	❍	❍
12.	… are helpful at getting passengers *to and from the door.*	❍	❍	❍	❍	❍	❍	❍
13.	… appear to drive safely.	❍	❍	❍	❍	❍	❍	❍
14.	Guilford Co. Transportation & Mobility Services responds well when needs / problems arise.	❍	❍	❍	❍	❍	❍	❍
15.	I would recommend Guilford Co. Transportation & Mobility Services to others who may need their services.	❍	❍	❍	❍	❍	❍	❍

What do you **like best** about this department?

_____

_____

What do you think **needs improvement**?

_____

_____

Thank you once again for your participation!

The following section provides a general description of each of the measurements and statistical analyses applied to the responses received to this survey. Much more detailed descriptions of the measures and analyses are available in a variety of statistics books available to the public through local libraries or bookstores.

A verage (Mean):

The average is a single measure used to represent a group of numbers or scores. It can be thought of as a point of balance where the sum of all of the numbers falling above it is the same as the sum of all of the numbers falling below it. Mathematically, the average is expressed as the sum of all of the scores divided by the total number of scores.

It is important to note that the average is sensitive to extreme scores. That is, if most of the scores being averaged fall very close to one another with the exception of one score which is far higher or lower than the rest, that one score can have considerable influence on the average. In some cases the influence of the extreme score is so great that the resulting average could be a misleading representation of the total group of numbers.

M edian:

The median is another single measure that can be used to represent a group of numbers or scores. It can be thought of as the middlemost score in a series of rank ordered scores. That is, the median can be calculated by rank ordering all of the scores of interest from lowest to highest, and finding the score that is exactly half-way down the rank-ordered list (or the 50th percentile). Thus, for example, the median of the series of scores (2, 3, 6, 8, 9) is '6'.

In contrast with the average, the median is NOT sensitive to extreme scores. By simply being the middlemost score in a rank ordered list of scores, the median is not influenced by extremely high or low scores. It can therefore be a useful measure, which may present a more accurate representation of the total group of numbers under certain conditions.

Consider the following example. Suppose you wanted to find a number that would best represent the value of houses in a particular community. Further suppose that there are 5 houses in the community appraised at the following values:

Home 1	$85,000
Home 2	$90,000
Home 3	$110,000
Home 4	$115,000
Home 5	$340,000

As can be seen from the table, 4 out of the 5 houses fall between $85,000 and $115,000. Thus, you might expect that a single number used to represent the 'general' value of homes in that community would fall somewhere in that range. Indeed, the Median score for the values listed is $110,000 as expected. In short, the Median is not impacted by the fact that 1 of the 5 houses has a much higher value than any of the others. By contrast, the AVERAGE value of the homes in this community would be calculated as $148,000 since the one extreme score impacts it.

The differences between the average and the median as seen in this example generally diminishes as the number of scores being evaluated increases.

Standard Deviation:

     The standard deviation reflects the amount of variability that exists in a set of scores around the average.   In short, if most of the scores in a group of scores are close to one another, there is little variability in the scores around the average so the standard deviation is small. By contrast, if the scores vary wildly from one extreme to the other, then the standard deviation is large. By understanding the standard deviation, you can get a sense of how 'tight' or 'spread out' the scores in a group are around the average.

For example, consider these two distributions of numbers:

11			2	
12	**Average = 14**		8	**Average = 14**
14			14	
16	**Stnd. Dev. = 2.3**		20	**Stnd. Dev. = 8.5**
17			26	

Notice that the average in both cases is the same. However, the numbers are clustered much more tightly around the average for the first group of scores (i.e. have a smaller standard deviation) than the scores in the second group which are much more spread out (i.e. have a much larger standard deviation).

T-Tests:

     The T-test is a useful statistical test which compares the responses from two groups (which are treated differently in one way or another) to see if the scores generated by the 2 groups are essentially the same, or whether they are significantly different from one another. If the test shows the responses from the two groups are significantly different, then you can conclude that the different treatments the 2 groups received had an impact on their responses. If however, there is no significant difference found, then you conclude the different treatments had no effect on the groups' scores.

As an example; if a class of students was broken into 2 groups, and one group learned math using Book 'A' while the other group learned math using Book 'B', a T-test could be calculated to determine if Book 'A' or Book 'B' did a better job of helping the students learn math. A significant difference between the two would indicate that the book yielding the highest student scores on a math test served as the better text for students to learn from. A finding of no significant difference would indicate both books are equally effective in teaching math.

ANOVA - (Analysis of Variance):

     Similar to the simpler T-Test, the ANOVA enables you to compare more than 2 groups against each other to see if a treatment had any significant effect on the responses. Extending the example given under T-Tests, the ANOVA could be used to compare the impact of 3 or more different books on students learning math. If no significant difference is found, then you conclude that none of the 3 books is any better or worse at helping teach math to students. If a significant difference is found, then additional analyses (called Post Hoc analyses) need to be conducted to determine the source of the difference. Thus for example if Book 'A', Book 'B' and Book 'C' are being tested, and a significant difference is found, then it is important to determine if scores on a math test for students using Book 'A' are better than, worse than, or the same as Books (B&C). Similarly, we would want to test to see if differences existed between Books 'B' & 'C' as well.

MANOVA - (Multivariate Analysis of Variance):

The Multivariate Analysis of Variance (MANOVA) is a simple extension of the ANOVA with the primary difference being that of having more than one Dependent measure (or measure of performance) to be evaluated. Continuing with the example provided in the ANOVA description, a MANOVA would be computed if the 3 or more different math books were evaluated in terms of their impact on more than one measure of a student's learning such as 1) their scores on an in-class math test, and 2) their scores on the math portion of an achievement test or SAT test. Thus, for example, it is possible that books A, B, and C are found to have a significant impact on in-class math test scores, but have no significant impact on achievement or SAT scores. If a significant difference is found for any of the Dependent Measures taken, then further analysis must be conducted to determine where the significant differences exist. Specifically, in this example, it would be important to determine which book or books are better or worse at helping teach math to students as reflected by in-class math test scores. By contrast, no additional computations are required regarding the books' impact on achievement or SAT scores since no significant effects were found.

Correlation:

The correlation is a measure of how closely related 2 or more items are. A "positive" correlation indicates that 2 or more items are closely related (e.g., height and weight are positively correlated since in general, the taller someone gets, the more they weigh). A "negative" correlation exists when two or more items are related in opposite directions (e.g., number of children in a family, and amount of money available to save each month might be negatively correlated. That is, the more children you have in the family, the more expenses you have to pay each month, which reduces the amount of money left to put in savings.) A finding of no correlation means there is no relationship between the two items. For example, no correlation exists between shoe size and eye color. That is, neither item depends on or is in any way related to the other item.

Correlation measures can be extremely useful in survey analysis. Specifically, correlation analyses help identify those items which are related to one another. Thus, knowing how a person responds to one item can help predict how they will respond to another correlated item.

Multiple Regression Analysis:

Where-as the Correlation is a measure of how closely related 2 or more items are, Multiple Regression Analysis techniques use correlations to analyze the relationships between **many** 'predictor' variables and a Dependent measure. Thus, for example, a car salesman may want to determine which attributes of a car (color, style, name, size, etc.) are most highly related to (or serve as the best predictor of) the price the purchaser is willing to pay for a car. In this case, color, style, name, and size are considered to be potential predictors, while the price paid is the dependent measure of interest. A multiple regression analysis might reveal that style and name are the best predictors of price, while the predictive value of color and size is negligible.

Similarly, multiple regression analysis can be extremely useful in survey analysis where the investigators are most interested in determining which items being rated are the best predictors of an item of interest such as "overall satisfaction", or "willingness to be a repeat customer", etc.