#### THE WHY'S AND HOW'S OF CITIZEN SATISFACTION SURVEYS:

# An Examination of the Relationships between Data Use and Achieving Desired Outcomes Among National Citizen Survey Participants

Ву

#### **Bo Gattis**

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## **Executive Summary**

Jurisdictions choose to conduct citizen satisfaction surveys for a variety of reasons and use the results of these surveys in a variety of ways. This study examines whether, for National Citizen Survey (NCS) participants, there are relationships between how NCS data was used and success in meeting the goals of their survey. The results of this study are intended to help local government professionals make better decisions about the use of citizen satisfaction survey data.

#### Introduction

According to a 2003 study, 43.1% of cities and counties measure citizen satisfaction through the use of surveys<sup>i</sup>. Citizen satisfaction surveys collect data on a variety of topics ranging from perceptions of jurisdictional services and elected officials, to desires for new capital projects.

Why do jurisdictions conduct citizen satisfaction surveys? Miller and Miller describe six "good reasons" communities conduct citizen satisfaction surveys: to assess community needs (resource allocation), to guide long-range planning, to guide short-term planning, to assess communication with citizens, to evaluate community services, and to determine policy support<sup>ii</sup>. If a community chooses to conduct a citizen satisfaction survey for one or more of these six good reasons, or for other reasons outside of Miller and Miller's recommendations, and the community is able to take action based on the citizen satisfaction survey data, then that community has achieved a desired outcome from the survey. But, how do communities use the citizen satisfaction survey data in order to achieve their desired outcome(s)? Miller and Miller also provide guidance on what to do with citizen satisfaction survey data once it is collected. They suggest using data in one or more of the following ways: analyzing disaggregated data, reporting survey findings to the public, reporting survey findings to staff, incorporating survey findings into the performance measurement system, and benchmarking data against past data and other communities<sup>ii</sup>.

The purpose of this study is to answer this question: for those jurisdictions that chose to conduct a citizen satisfaction survey, did how they use the data affect whether or not the jurisdiction achieved a desired outcome of the survey? When choosing to conduct a citizen satisfaction survey, jurisdictions are also choosing to allocate staff and financial resources to this effort. For this to be a reasonable allocation of resources, jurisdictions need to achieve the desired outcomes of the citizen satisfaction survey. This research will see which, if any, of the data uses are most associated with achieving desired outcomes and maximizing the use of citizen surveys.

#### Methodology

To answer the research question, a survey was fielded to the local government jurisdictions that had participated in the National Citizen Survey at least once within the past five years (See Appendix A for complete survey). The National Citizen Survey is "a uniform survey tool used by widely diverse local jurisdictions across the U.S. to assess resident satisfaction with community amenities and government service provision." There is no central repository for jurisdictions choosing to complete a citizen survey. For this reason, participants of the National Citizen Survey, an example of one type of citizen satisfaction survey, were chosen as the sample group. This sample group was chosen as a convenience sample, for expediency of distribution; the findings of this survey may not be applicable to all users of citizen satisfaction surveys.

The 30-question, electronic survey was distributed to National Citizen Survey points of contact in 121 local government jurisdictions across the United States. In the event the survey was not distributed to the correct contact, recipients were encouraged to forward by e-mail the electronic survey to the appropriate contact. A total of 38 jurisdictions responded for a response rate of 31.41%. Table 1 summarizes the population and geographical statistics for the sample group and the respondent group (See Appendix B for a list of those surveyed and respondents). The group of respondents was a good reflection of those invited to participate: population and geographic region data show the similarities.

Table 1: Sample and Respondent Group Comparison							
	Sample (n=121)   Respondent (n=38)						
Population	Mean	87,828	88,815				
	Median	39,442	2 42,287				
Geographical Region	Central	7 (6%)	3 (8%)				
	Midwest	24 (20%)	8 (21%)				
	Northeast	10 (8%)	5 (13%)				
	Southeast	39 (32%)	10 (26%)				
	Southwest	18 (15%)	5 (13%)				
	West	23 (19%)	7 (18%)				

Respondents were asked why they chose to conduct a citizen satisfaction survey; each of Miller and Miller's six reasons, as well as "I don't know" or "other" were the choices. If a respondent selected a Miller and Miller reason for conducting the survey, they were then asked if they achieved a desired outcome related to that reason. Those that indicated they did achieve a desired outcome were asked to provide a specific example of the outcome. The ability to cite a specific example, regardless of the example itself, was the measure of a jurisdiction's achievement of their desired outcome. In the event a specific example was not provided, those responses were recoded from "achieved a desired outcome" to "did not achieve a desired outcome."

Survey responses were coded and data was cross tabulated with uses of the citizen survey as the independent variables and an achievement of an outcome related to a "good reason" as the dependent variables. For the purposes of this study, statistical significance was set to  $p \le .1$  (a 90% confidence interval). Cross tabulations with a p-value of .1 or less were further examined for relationships between independent and dependent variables. Five cross tabulations had no variance, that is, no cross-tabulation was possible, as all responses fell into the category of using a data technique. In these cases, the frequency of outcome achievement was analyzed.

## **Findings**

The research findings suggest there is some relationship between how citizen satisfaction survey data was used and whether a locality's desired outcome was achieved. Specifically, there are relationships between how data was used and whether any desired outcome was achieved, and there are relationships between how the data was used that the achievement of specific categories of desired outcomes.

Table 2: Number of statistically significant relationships to achieved outcomes						
Data use techniques	Number of statistically significant relationships (total of 5)					
Analyze disaggregated data	1 (16.67%)					
Report survey findings to the public	3 (50.00%)					
Report survey findings to staff	0 (0.00%)					
Incorporate into Performance	1 (16.67%)					
Management System						
Benchmark against past data	0 (0.00%)					

Table 2 summarizes the number of statistically significant relationships between the six categories in which a locality could achieve a desired outcome and the five data use techniques. Three of the five data use techniques had at least one statistically significant relationship with the achievement of a desired outcome; the techniques of reporting survey findings to jurisdictional staff and benchmarking against

past data had no statistically significant relationships with the dependent variables. Tables 3 and 4 examine two of the statistically significant relationships in depth.

Table 3: Statistically significant cross-tabulation for reporting survey findings to the public and achievement of an outcome associated with assessing citizen communication							
	Achieved outcome associated with assessing citizen communication  Did not achieve outcome associated with assessing citizen communication						
Reported Survey Findings to the Public	20 (90.91%)	2 (9.09%)					
Did not report survey findings to the public	0 (0.00%)	1 (100.00%)					

Fifty percent of the relationships between outcome achievement and reporting survey findings to the public were significant. As illustrated in Table 3, for the relationship between assessing citizen communication and reporting survey findings to the public, 90.91% of the 22 respondents that reported survey findings to the public and desired an outcome in assessing citizen communication, also reported achieving a specific outcome. In contrast, the one respondent that desired an outcome in assessing citizen communication but did not report survey findings to the public did not achieve a desired outcome (100%). The data use technique of reporting survey findings to the public had similar relationships with the desired outcomes of evaluating community services and determining support for public policies. It should be noted that there was no variance in the groupings for the other three desired outcome areas, as all respondents that desired an outcome is those three areas also reported survey findings to the public.

Table 4: Statistically significant cross-tabulation for analyzing disaggregated data and achievement of a desire outcome in resource allocation						
	Achieved outcome associated with resource allocation	Did not achieve outcome associated with resource allocation				
Analyzed disaggregated survey data	10 (100.00%)	0 (0.00%)				
Did not analyze disaggregated survey data	10 (58.82%)	7 (41.18%)				

As seen in Table 4, for the statistically significant relationship of achieving a desired outcome in resource allocation and using the technique of analyzing disaggregated data, of the 10 respondents that desired an outcome in resource allocation and analyzed disaggregated data, all 10 (100%) achieved an outcome. In contrast, of the 17 that desired an outcome in resource allocation, but did not analyze disaggregated data, 10 (58.82%) achieved an outcome, while 7 (41.18%) did not. This more even distribution is also found in the statistically significant relationships between achievement of an outcome in resource allocation and using the technique of incorporating survey data into one's performance measurement system.

Cross tabulations between combinations of techniques in data use and outcome achievement were also analyzed, but no additional statistically significant relationships were discovered where an original relationship between one or more of the techniques and an outcome achievement was not present.

Table 5: Relatio	Table 5: Relationships - Outcome achievements and Data techniques						
		<b>Immediate Decision</b>	ıs	Pla	nning Decisio	ns	
	Resource Allocation	Assess Citizen Communication	Evaluate community services	Long-range planning	Short-term planning	Determine Support for policies	
Analyze disaggregated data	.018*	.825	.618	.915	.152	.973	
Report survey findings to the public	#	.008*	.002*	#	#	.093*	
Report survey findings to staff	#	.692	.632	#	.137	.536	
Incorporate into Performance Management System	.055*	.704	.678	.42	.484	.78	
Benchmark against past data	.547	.104	.229	.444	.484	.444	

\* $p \le .1$ . #=Grouping with no variance

Table 5 summarizes the presence of statistically significant relationships between outcome achievement and data techniques as well as the relationships that had no variance.

Miller and Miller's six "good reasons" for conducting citizen satisfaction surveys can be broken into two categories: reasons associated with immediate decisions, and reasons associated with planning decisions. Immediate decisions include resource allocation, assess citizen communication, and evaluate community services. Planning decisions include long-range planning, short-term planning, and determine support for policies. It appears that how a locality uses data is more important for immediate decisions than for planning decisions. There are four statistically significant relationships between reasons within the immediate decision group and data use techniques, while there is only one statistically significant relationship between reasons within the planning decision group and data use techniques. This finding may also suggest that there is some difference between these two groups that goes beyond data use techniques. See Appendix C for detailed data analysis.

#### **Application of Findings**

The difference in the number of statistically significant relationships between the immediate decision and planning decision groups suggests that depending on which outcomes are desired, certain data use techniques may be more appropriate than others. As previously mentioned, there was a statistically significant difference between those that used data techniques and reported outcome achievement and those that used fewer data techniques within the immediate decision group. The immediate decision sub-group reported relationships in 4 (26.67%) of the 15 possibilities. In contrast, there was a relationship in 1 (6.67%) of the 15 possibilities within the planning decision sub-group. These findings suggest that using the data techniques as a means of achieving an outcome in resource allocation, assessing citizen communication, or evaluating community services, may be more effective than using the data techniques as a means of achieving an outcome in long-range or short-term planning, or determining support for policies.

The data use technique of reporting survey findings to the public had statistically significant relationships in three of the six "good reasons" to conduct a citizen satisfaction survey, and groupings

with no variance for the other three "good reasons". This finding points to a difference in outcome achievement rates in the respondent group between those that do and do not use this technique.

The data use techniques of analyzing disaggregated data and incorporating findings into a performance measurement system had statistically significant relationships with achieving an outcome related to resource allocation. This finding suggests it is appropriate to use these data techniques when desiring an outcome in this area.

#### Limitations

The results of the study may not be generalizable considering the self-selecting nature of the sample group as users of the National Citizen Survey, which is only one type of citizen satisfaction survey. The results of this survey may only be relevant to NCS users. Also, this study made no effort to determine causality between data use techniques and outcome achievement. A variety of factors beyond the relationship between the presence of techniques and outcomes may lead to the achievement of an outcome. In other words, the use of a data use technique may not lead, on its own, to an outcome achievement.

#### Conclusion

This study examines the relationships between the uses of particular data techniques for citizen satisfaction survey data and the reasons to conduct citizen satisfaction surveys found in citizen survey literature. The study suggests a difference between outcomes related to immediate decisions and planning decisions. For those outcomes related to immediate decisions, relationships with data techniques are more common. For those outcomes related to planning decisions, relationships with data techniques are less common. This finding may point to a difference between the two outcome groups that limit the usability of the data techniques in the achievement of planning decision outcomes. The results of these findings, however, are limited to relationships, and do not point to causality between the use of data techniques and the achievement of outcomes.

The results of this study also suggest some techniques, particularly those related to reporting survey findings to the public, are often related to the achievement of citizen satisfaction survey outcomes. Relationships between techniques and outcome achievement are sometimes limited to particular techniques and outcomes as well; such as with the data techniques of incorporating citizen satisfaction survey data into the performance measurement system or analyzing disaggregated data and the achievement of an outcome related to resource allocation.

i Dalehite, E. (2008, September). Determinants of Performance Measurement: An Investigation into the Decision to Conduct Citizen Surveys. Public Administration Review, pp. 891,907. Retrieved September 24, 2009, doi:10.1111/j.1540-6210.2008.00930.x

ii Miller, T. I., & Kobayashi, M. Miller. (c2000). Citizen surveys: How to do them, how to use them, what they mean. Washington, D.C.: International City/County Management Association.

iii National Research Center – National Citizen Survey. Retrieved October 22, 2009. http://www.n-r-c.com/services/nationalcitizensurvey.html/

iv Although referred to as uniform, participants have the option to choose from a bank of questions as well as add locality specific questions.

# Appendix A – Electronic Survey Distributed

Thank you for your participation in this survey on your jurisdiction's decision to complete the National Citizen Survey. The questions below focus on why your jurisdiction chose to complete the NCS and what outcomes your community achieved by using the survey findings.

	ase check all reasons that apply to why your jurisdiction chose to conduct the National zen Survey:
	Assess community needs (resource allocation)
	Long-range planning
	Short-term planning
	Assess communication with citizens
	Evaluation of community services
	Determine support to particular policies
	Other, please specify
	each of the reasons you chose to conduct the survey, please indicate whether your sdiction achieved an outcome related to the reason.
	your jurisdiction achieve a desired outcome related to resource allocation? Yes
$\circ$	No
O	Don't know
	your jurisdiction achieve a desired outcome related to long-range planning? Yes
$\circ$	No
O	Don't know
	your jurisdiction achieve a desired outcome related to short-term planning? Yes
$\mathbf{C}$	No
O	Don't know
	your jurisdiction achieve a desired outcome related to assess communication with citizens? Yes
C	No
$\circ$	Don't know

Did your jurisdiction achieve a desired outcome related to evaluation of community services?  Yes
© No
O Don't know
Did your jurisdiction achieve a desired outcome related to determine support to particular policies?
C Yes
C No
O Don't know
Did your jurisdiction achieve a desired outcome related to any other reason for completing the National Citizen Survey?
C Yes
C No
C Don't know
Please provide an example of a <b>resource allocation</b> outcome your jurisdiction achieved as a result of the NCS:
Please provide an example of a <b>long range planning</b> outcome your jurisdiction achieved as a result of the NCS:
Please provide an example of a <b>short-term planning</b> outcome your jurisdiction achieved as a result of the NCS:
<b>→</b>

Please provide an example of an outcome related to assessing communication with citizens your jurisdiction achieved as a result of the NCS:
Please provide an example of an outcome related to <b>evaluating community services</b> your jurisdiction achieved as a result of the NCS:
Please provide an example of a outcome related to <b>determining support to particular policies</b> your jurisdiction achieved as a result of the NCS:
Please provide an example of an outcome related to any <b>other reason</b> your jurisdiction achieved as a result of the NCS:
Please indicate how your jurisdiction used National Citizen Survey data.
Did your jurisdiction, or any department within your jurisdiction, analyze disaggregated data?  Yes  No  Don't know
Did your jurisdiction, or any department within your jurisdiction, report survey findings to the public?  Yes  No  Don't know

	l your jurisdiction report survey findings to staff? Yes
O	No
O	Don't know
	I your jurisdiction incorporate survey findings into the performance measurement system? Yes
$\circ$	No
O	Don't know
	I your jurisdiction benchmark data against past data and other communities? Yes
$\circ$	No
$\circ$	Don't know
men	I your jurisdiction use the National Citizen Survey data in any other way not already ntioned?  Yes  No
$\circ$	Don't know
Ho	w was the NCS data disaggregated?
Ho	w were the NCS survey findings reported?
Ho	w were NCS survey findings reported to staff?

How were the findings incorporated into the jurisdiction's performance measurement
system?
How was the NCS data benchmarked?
In what <b>other</b> ways were National Citizen Survey findings used?
in what other ways were reactional entrem our vey findings used:
Name of Jurisdiction
Name of Jurisdiction
Name of names a completing sympay
Name of person completing survey
Email address for follow-up questions
Telephone number for follow-up questions
Comments
<b>*</b>

Thank you for your participation in this survey. If you have any further questions, feel free to contact Bo Gattis at bgattis@email.unc.edu.

# Appendix B – NCS Participants Surveyed and Respondents

# # Denotes respondents

Alamogordo, NM # Albany, GA Ankeny, IA # Ann Arbor, MI

Arapahoe County, CO Asheville, NC Aurora, CO Bedford, MA # Benbrook, TX # Benicia, CA Bettendorf, IA Billings, MT

Billings, MT Bowling Green, KY Bozeman, MT # Brevard County, FL Burlingame, CA Cape Coral, FL # Cartersville, GA #

Chandler, AZ Chanhassen, MN # Charlotte County, FL Cheyenne, WY Chula Vista, CA

Collinsville, IL #
Cooper City, FL #
Craig, CO

Crested Butte, CO Dania Beach, FL Davidson, NC Decatur, GA # Delray Beach, FL

Denver (City and County), CO #

Dewey-Humboldt, AZ #

Dover, DE
Duluth, MN #
Duncanville, TX
East Providence, RI #

Eau Claire, WI El Cerrito, CA Englewood, CO Farmington, UT Fishers, IN #
Gainesville, FL
Gaithersburg, MD

Galt, CA

Gig Harbor, WA #
Grand Prairie, TX #
Gunnison County, CO
Hanover County, VA #

Henderson, NV
Hermiston, OR
Highland Park, IL
Hopewell, VA
Hutchinson, MN
James City County, VA
Johnson City, TN
La Plata, MD #

La Vista, NE Laguna Beach, CA # Lane County, OR # Lexington, VA Lincolnwood, IL

Livermore, CA Lodi, CA

Menlo Park, CA #

Meridian Charter Township, MI

Merrill, WI Munster, IN Needham, MA # North Las Vegas, NV #

Oak Park, IL
Ocean City, MD
O'Fallon, IL
Oldsmar, FL
Oviedo, FL
Palatine, IL #
Palm Bay, FL
Palm Coast, FL #
Palm Springs, CA
Park Ridge, IL #
Pasco, WA
Pasco County, FL

Peoria County, IL # Peters Township, PA Port St. Lucie, FL Prescott Valley, AZ

Prince George's County, MD

Queen Creek, AZ Renton, WA Richmond, CA # Richmond Heights, MO Rio Rancho, NM Rock Hill, SC Salina, KS #

San Juan County, NM # San Luis Obispo County, CA

Sanford, FL #
Sarasota, FL
Savannah, GA
Sedona, AZ #
Shorewood, IL
Sioux Falls, SD #
Smyrna, GA

South Daytona, FL #
South Haven, MI
South Lake Tahoe, CA
State College, PA
Stillwater, OK
Stockton, CA #
Sugar Grove, IL
Suwanee, GA

Sylvania Township, OH

Valdosta, GA Walnut Creek, CA Walton County, FL Washington City, UT # Washoe County, NV White House, TN Williamsburg, VA Winter Garden, FL

Yuma, AZ

# Appendix C - Results for all cross tabulations

Analyze disaggregated data	p=.018 Yes No	Achieve a desired outcome in Resource Allocation   No   10 (100%)   0 (0%)   10 (58.82%)   7 (41.18%)	Analyze disaggregated data	p=.915 Yes No	Achieve a desired outcome in Long-Range Planning   Yes   No   5 (62.5%) 3 (37.5%)   11 (64.71%) 6 (35.29%)	Analyze disaggregated data	p=.152 Yes No	Achieve a desired outcome in Short-term planning   No   No   7 (87.5%)   1 (12.5%)   10 (58.82%)   7 (41.18%)
Analyze disaggregated data	p=.825 Yes No	Achieve a desired outcome in Assessing citizen communications Yes No 8 (88.88%) 1 (11.11%) 12 (85.71%) 2 (14.29%)	Analyze disaggregated data	p=.618 Yes No	Achieve a desired outcome in Evaluating community services Yes No 12 (85.71%) 2 (14.29%) 15 (79.95%) 4 (21.05%)	Analyze disaggregated data	p=.973 Yes No	Achieve a desired outcome in evaluating support for policies  Yes  No  8 (72.73%) 3 (27.27%)  11 (73.33%) 4 (26.67%)
Report survey findings to the public	p=# Yes No	Achieve a desired outcome in Resource Allocation  Yes No 1 (25.93%) 7 (25.93%)	Report survey findings to the public	p=# Yes No	Achieve a desired outcome in Long-Range Planning Yes No 16 (64%) 9 (36%)	Report survey findings to the public	p=# Yes No	Achieve a desired outcome in Short-term planning Yes No 17 (68%) 8 (32%)
Report survey findings to the public	p=.008 Yes No	Achieve a desired outcome in Assessing citizen communications Yes    No	Report survey findings to the public	p=.002 Yes No	Achieve a desired outcome in Evaluating community services   No	Report survey findings to the public	p=.093 Yes No	Achieve a desired outcome in evaluating support for policies No S of (24%) 0 (0%) 1 (100%)
Report survey findings to staff	p=# Yes No	Achieve a desired outcome in Resource Allocation   No   No   20 (74.07%)   7 (25.93%)	Report survey findings to staff	p=# Yes No	Achieve a desired outcome in Long-Range Planning   Yes   No   16 (64%)   9 (36%)   -	Report survey findings to staff	p=.137 Yes No	Achieve a desired outcome in Short-term planning N N (2011) 17 (70.83%) 7 (29.17%) 0 (0%) 1 (100%)
Report survey findings to staff	p=.692 Yes No	Achieve a desired outcome in Assessing citizen communications   Yes   No   19 (86,36%)   3 (13,64%)   1 (100%)   0 (0%)	Report survey findings to staff	p=.632 Yes No	Achieve a desired outcome in Evaluating community services   No   26 (81.25%)   6 (18.75%)   1 (100%)   0 (0%)	Report survey findings to staff	p=.536 Yes No	Achieve a desired outcome in evaluating support for policies  Yes   No   18 (72%)   7 (28%)   1 (100%)   0 (0%)
Incorporate into Performance Management System	p=.055 Yes No	Achieve a desired outcome in Resource Allocation Yes No 19 (86.36%) 3 (13.64%) 6 (54.55%) 5 (45.45%)	Incorporate into Performance Management System	p=.42 Yes No	Achieve a desired outcome in Long-Range Planning Yes No 8 (57.14%) 6 (42.86%) 8 (72.73%) 3 (27.27%)	Incorporate into Performance Management System	p=.484 Yes No	Achieve a desired outcome in Short-term planning Yes No 11 (73.33%) 4 (26.67%) 6 (60%) 4 (40%)
Incorporate into Performance Management System	p=.704 Yes No	Achieve a desired outcome in Assessing citizen communications Yes No 11 (84.62%) 2 (15.38%) 9 (90%) 1 (10%)	Incorporate into Performance Management System	p=.678 Yes No	Achieve a desired outcome in Evaluating community services Yes No 16 (84.21%) 3 (15.79%) 11 (78.57%) 3 (21.43%)	Incorporate into Performance Management System	p=.78 Yes No	Achieve a desired outcome in evaluating support for policies Yes   No   12 (75%)   4 (25%)   7 (70%)   3 (30%)
Benchmark against past data	p=.547 Yes No	Achieve a desired outcome in Resource Allocation Yes No 19 (73.08%) 7 (26.92%) 1 (100%) 0 (0%)	Benchmark against past data	p=.444 Yes No	Achieve a desired outcome in Long-Range Planning Yes No 15 (62.5%) 9 (37.5%) 1 (100%) 0 (0%)	Benchmark against past data	p=.484 Yes No	Achieve a desired outcome in Short-term planning Yes No 16 (94.12%) 1 (5.88%) 1 (100%) 0 (0%)
Benchmark against past data	p=.104 Yes No	Achieve a desired outcome in Assessing citizen communications Yes No 19 (95%) 1 (50%) 1 (50%)	Benchmark against past data	p=.229 Yes No	Achieve a desired outcome in Evaluating community services Yes No 26 (92.86%) 2 (7.14%) 1 (50%) 1 (50%)	Benchmark against past data	p=.444 Yes No	Achieve a desired outcome in evaluating support for policies Yes No 18 (94.74%) 1 (5.26%) 1 (50%) 1 (50%)