

Who supports tax increases? An example from San Juan County, New Mexico

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ABSTRACT

Taxation is a government's most important source of revenue. Former studies have discussed support for tax increases, but no study has focused on individuals supporting tax increases and their perceived satisfaction with government performance. The research purposes of the study are: 1) to identify the variables and model of supporting tax increases, and 2) to develop a profile for those who support tax increases based on their perceptions of government performances. The study adopted data from The National Citizen Survey, which evaluates citizens' satisfaction of their county government, in San Juan County, New Mexico. A total of 647 surveys were completed (339 in 2009 and 308 in 2012). A factor analysis explored five satisfaction factors: convenience, transportation, housing, appearance, and the natural environment. A multiple regression analysis tested the drivers and mediators of loyalty between satisfaction factors and supporting tax increases. The findings indicate that newcomers and citizens with high convenience satisfaction and high loyalty are more likely to support tax increases. Loyalties are primarily based on long residency and high satisfaction with human activities. The study solved the theoretical gap and contributed to the local government in priorities of strategic planning and budget building.

Keywords: Loyalty, Satisfaction, Supporting Tax Increases, Government Performance

INTRODUCTION

Taxation is a government's most important source of revenue. According to the Congressional Budget Office's 2015 federal budget report (www.cbo.gov/publication/51110), individual income taxes covered 47% of total revenues (\$1.5 trillion of \$3.2 trillion). Therefore, a government requires individuals' support of taxes so it can provide more, or better, services and welfare to the public.

According to the January 2015 survey report (N = 547) from Fairleigh Dickinson University's PublicMind poll (<http://publicmind.fdu.edu/2015/gastax/>), only 28% of respondents supported increasing the gas tax to improve the state's infrastructure, while 68% did not. Another survey report (N = 559) in November 2015 (<http://view2.fdu.edu/publicmind/2015/151119/>) revealed that only 36% of respondents supported this, while 62% did not. Seemingly, some would prefer to support tax increases in specific kinds of situations.

Former studies discovered drivers of public support for tax increases. Hogan, Maroney, and Rupert (2013) explored the influences of perceived fairness and desired outcome on tax support. Kallbekken, Garcia, and Korneliusen (2013) argued that tax increase support is determined by the public's expectations of outcomes, benefits, and personal finances. Former research also found communication methods' influence on the support for tax increases. For example, Yusuf and O'Connell (2015) found that discussion and information distribution positively influence the people's support for tax increases. Regarding the profile of communities supporting tax increases, Roscoe (2014) reviewed increases in property taxes in communities (1990 – 2007), and found that race, higher education, low affluence, and broader tax purposes increased tax cap overrides' success.

These former studies regarding supporting tax increases provided the drivers on an individual level, and the profile on a community level. However, no study focuses on individuals' perceived satisfactions of county governments' performances. Customer value can be applied from a marketing perspective to the public's support of tax increases based on cost (tax) and benefits (government performances). Therefore, the study's research purposes are: 1) to identify the variables and model for supporting tax increases, and 2) develop a profile of those who support tax increases based on their perceptions of government performances.

The study adopted data from the National Citizen Survey (NCS), which evaluates citizens' satisfaction of their county government. San Juan County (SJC), New Mexico entrusted the NCS to conduct surveys in 2009 and 2012, for a total of 647 completed surveys (339 in 2009 and 308 in 2012) to study citizens' satisfaction of the local governments' performances and services. The research analyzed secondary data to discover which aspects are more important to earn people's trust and to increase support for tax increases.

This empirical study fills a gap of literature supporting tax increases based on individuals' perceived satisfactions of county governments' performances. The variables and model also contribute to the knowledge of tax increase support. The study's results can be used by community leaders to identify priorities for strategic planning and budget-building at a county government level. The county government can thus increase citizens' satisfaction and earn their loyalty, and citizens would be more likely to support tax increases. With more sources of support, the local government can provide more or better services and welfare to the public.

LITERATURE REVIEW

Based on the conceptual model (Figure 1), the relationships between three variables were discussed.

Satisfaction → Supporting Tax Increases

Customer satisfaction is the pleasurable or displeased feelings resulting from the difference between customers' expectations, and perceived performance, of a product or service (Kotler & Keller, 2012, p.128). When customers are satisfied with a product or service, they are more likely to pay for it. According to the concept of customer value, customers feel that benefits are more significant than costs for the product/service, and they will therefore have positive attitudes towards it. Customer satisfaction's positive impact on behavior intention (Ajzen, 1991), more likely involved in purchases, has been discovered in former studies (e.g., Cronin Jr., Brady, & Hult, 2000; Gounaris, Dimitriadis, & Stathakopoulos, 2010; Pappas et al., 2014; Rajic & Dado, 2013). Larivière's (2008) empirical study found that satisfaction positively influences customer profitability. This result implies that satisfied customers are more likely to hold positive attitudes towards a product or service and pay for it.

Further, apply the relationship between customer satisfaction and attitudes to supporting tax increases. Local government officials are dedicated to serving the citizens within their districts, and genuinely desire to provide high-quality, efficient services. However, if a local government focuses on the incorrect priorities, citizens' satisfaction will not increase. The NCS used 27 items to measure citizens' perceived satisfaction regarding the various environments in SJC. The 27 items covered shopping, education, transportation, housing, appearance, and the natural environment, among others. Therefore, the proposition is that the more citizens are satisfied, the more they will support tax increases.

Loyalty → Supporting Tax Increases

As customer loyalty is a deep commitment to rebuy or support a product or service (Kotler & Keller, 2012, p.127), loyal customers are less affected by other products' marketing activities and less likely to defect. Loyal customers would rebuy or support the product or service, and are less sensitive to price cuts or promotions. Loyalty, in other words, enhances customers' behavioral intention toward the product or service. Customer loyalty's positive influence on behavioral intention has been examined by prior research (e.g., Gounaris, Tzempelikos, & Chatzipanagiotou, 2007; Topcu & Duygun, 2015).

Loyalty positively influences support for tax increases (behavioral intention). Citizens' attitude toward local government officials impacts whether they support a local government's policies. The NCS used two items to measure citizens' loyalty toward SJC, which focus on both staying in the county and recommending the county to others. Therefore, the proposition is that the more loyalty to the local government, the more support for tax increases.

Satisfaction → Loyalty → Supporting tax increases

When customers are satisfied with a product or service, they are likely to be loyal to it. Prior studies have tested the positive relationship between customer satisfaction and loyalty (e.g.,

Larivière & Bart, 2008; Morgeson III, Sharma, & Hult, 2015; Vázquez-Casielles, Suárez-Álvarez, & Del Río-Lanza, 2009). Larivière et al. (2016) also noted that satisfaction is a backwards-looking metric that influences a customer's current and future engagement (or loyalty and behavioral intention). On individual level, prior research has not clearly discussed customer loyalty's mediating role between satisfaction and behavioral intention. However, on a firm level, customer loyalty's mediating role between customer satisfaction and firm outcomes has been examined (Anderson & Mittal, 2000; Larivière, 2008). These studies focus on firms' performances as a result of customers' behavioral intention. Therefore, this study proposes that loyalty mediates the relationship between satisfaction and the supporting of tax increases.

METHODOLOGY

Measurements

San Juan County (SJC) assigned the task of creating and conducting a citizen survey in 2009 and 2012 to The National Citizen Survey (NCS). The survey was customized specifically for SJC, with input from county staff, elected officials, and commissioners to focus on local services and community concerns.

This study used the NCS surveys from 2009 and 2012. The support for tax increases is measured by 3 items addressing the support for county tax and personal tax, with 4-point scale (1 = Strongly Oppose to 4 = Strongly Support) with a "do not know" option. Loyalty was measured by 3 items with 2 options ("recommend living in San Juan County to someone who asks" and "remain in San Juan County for the next 5 years"), using a 4-point scale (1 = Very Unlikely to 4 = Very Likely), with a "do not know" option. Satisfaction was measured by 27 items that cover appearance, housing and shopping, activities available, traffic, the cost of living, and quality of natural resources in SJC. A 4-point scale was applied in the satisfaction measurement (1 = Poor, 2 = Fair, 3 = Good, and 4 = Excellent) with a "do not know" option. Control variables were measured: years of residence (1 = Less than 2 years, 2 = 2 to 5 years, 3 = 6 to 10 years, 4 = 11 to 20 years, and 5 = More than 20 years); age (1 = 18 to 21, 2 = 25 to 34, 3 = 35 to 44, 4 = 45 to 54, 5 = 55 to 64, 6 = 65 to 74, and 7 = 75 or older); gender (1 = Female and 2 = Male); and dummy variables (2009 and 2012).

Sampling

The NCS states that the survey, which was created specifically for the SJC government to identify and measure service strengths and weaknesses, is comprised of two major parts to justify its sampling.

- One thousand and two hundred surveys were mailed through the United States Postal Service, including 1) a pre-survey letter on county letterhead, asking for their civic help with a survey to be sent within a specific timeframe; and 2) a self-addressed, postage-paid envelope for returning the survey. Each sample was contacted three times to encourage and remind the potential respondents to gather as much diverse information as possible.
- Samples of households were chosen randomly from the county's varied geographic areas. The "birthday method" was used for each household to allow for unbiased samples. Oversampling in multi-family housing units with lower incomes or younger apartment dwellers was used to improve the response rate in this hard-to-reach group.

The survey sample was comprised of 1,200 random households with multiple contact mailings for 339 and 308 completed surveys in 2009 and 2012, respectively. The random selection of households and multiple mailings allowed for a variety of participants. The average response rate for SJC was 28%. The 2009 survey included 185 females and 143 males, 199 people's residency over 20 years (58.7%), and 83 people between 55 to 64 years old (24.5%). The 2012 survey included 178 females and 119 males, 193 people's residency over 20 years (62.7%), and 85 people between 55 to 64 years old (27.6%).

Analysis Methods

The survey data was analyzed using factor and multiple regression analyses. The factor analysis was applied to the 32 items measuring loyalty, satisfaction, and support for tax increases. The primary reason for the factor analysis is that satisfaction includes 27 items, such as shopping, education, transportation, housing, appearance, and the natural environment, among others. Therefore, it is more efficient to analyze citizens' perceived satisfaction with important factors: convenience, transportation, housing, appearance, and the natural environment. Loyalty was measured with two items, and support for tax increases was measured with three items.

A multiple regression analysis was applied to analyze 1) the mediator of loyalty between five satisfaction factors and the support for tax increases, and 2) predictors of loyalty. Three multiple regression models were tested regarding the mediator of loyalty.

Model 1 tested the influences of the five satisfaction factors on support for tax increases.

$$\text{Supporting tax increases} = \beta_{1.0} + \beta_{1.1} \times \text{Convenience} + \beta_{1.2} \times \text{Transportation} + \beta_{1.3} \times \text{Housing} + \beta_{1.4} \times \text{Appearance} + \beta_{1.5} \times \text{Natural Environment} + \beta_{1.6} \times \text{Residence} + \beta_{1.7} \times \text{Year} + \beta_{1.8} \times \text{Age} + \beta_{1.9} \times \text{Sex} + \text{Error}$$

Model 2 tested the influences of loyalty on support for tax increases.

$$\text{Supporting tax increases} = \beta_{2.0} + \beta_{2.1} \times \text{Loyalty} + \beta_{2.2} \times \text{Residence} + \beta_{2.3} \times \text{Year} + \beta_{2.4} \times \text{Age} + \beta_{2.5} \times \text{Sex} + \text{Error}$$

Model 3 tested the influences of loyalty and five satisfaction factors on support for tax increases.

$$\text{Supporting tax increases} = \beta_{3.0} + \beta_{3.1} \times \text{Convenience} + \beta_{3.2} \times \text{Transportation} + \beta_{3.3} \times \text{Housing} + \beta_{3.4} \times \text{Appearance} + \beta_{3.5} \times \text{Natural Environment} + \beta_{3.6} \times \text{Loyalty} + \beta_{3.7} \times \text{Residence} + \beta_{3.8} \times \text{Year} + \beta_{3.9} \times \text{Age} + \beta_{3.10} \times \text{Sex} + \text{Error}$$

Compare the coefficients of the five satisfaction factors in Model 1 with those in Model 3. If the coefficients are weakened or nonsignificant, then the mediator of loyalty exists.

Model 4 tested the five satisfaction factors' influences on loyalty.

$$\text{Loyalty} = \beta_{4.0} + \beta_{4.1} \times \text{Convenience} + \beta_{4.2} \times \text{Transportation} + \beta_{4.3} \times \text{Housing} + \beta_{4.4} \times \text{Appearance} + \beta_{4.5} \times \text{Natural Environment} + \beta_{4.6} \times \text{Residence} + \beta_{4.7} \times \text{Year} + \beta_{4.8} \times \text{Age} + \beta_{4.9} \times \text{Sex} + \text{Error}$$

Model 5 tested the five satisfaction factors' influences on loyalty in 2009.

$$\text{Loyalty} = \beta_{5.0} + \beta_{5.1} \times \text{Convenience} + \beta_{5.2} \times \text{Transportation} + \beta_{5.3} \times \text{Housing} + \beta_{5.4} \times \text{Appearance} + \beta_{5.5} \times \text{Natural Environment} + \beta_{5.6} \times \text{Residence} + \beta_{5.7} \times \text{Year} + \beta_{5.8} \times \text{Age} + \beta_{5.9} \times \text{Sex} + \text{Error}$$

Model 6 tested the five satisfaction factors' influences on loyalty in 2012.

$$\text{Loyalty} = \beta_{6.0} + \beta_{6.1} \times \text{Convenience} + \beta_{6.2} \times \text{Transportation} + \beta_{6.3} \times \text{Housing} + \beta_{6.4} \times \text{Appearance} + \beta_{6.5} \times \text{Natural Environment} + \beta_{6.6} \times \text{Residence} + \beta_{6.7} \times \text{Year} + \beta_{6.8} \times \text{Age} + \beta_{6.9} \times \text{Sex} + \text{Error}$$

Model 4 displayed the influence of critical factors on loyalty across the two years. A comparison of Models 5 and 6 in 2009 and 2012 reveals that changes in critical factors' influences can be identified, and this trend can be further explored.

ANALYSIS RESULTS

Table 2 illustrates the factor analysis results for the 32 survey items, except the control variables (sex, age, residence, and year). The loadings of the seven factors (supporting tax increases, loyalty, satisfaction with convenience, transportation, housing, appearance, and the natural environment) are between 0.896 and 0.505. The reliabilities (Cronbach's alpha) fall between 0.899 (convenience) and 0.679 (housing). Several items were deleted to increase the consistency and reliability.

Table 3 notes the correlation coefficients between continuous variables. The correlation coefficients between supporting tax increases and the other five variables (except natural environment) are significant, ranging from 0.089 (appearance) to 0.187 (loyalty). The results imply that supporting tax increases relates to loyalty, convenience, transportation, housing, and appearance. The correlation coefficients between loyalty and the other five satisfaction factors are significant, ranging from 0.277 (natural environment) to 0.464 (convenience). The results imply that loyalty relates to convenience, transportation, housing, appearance, and the natural environment.

Table 4 displays the results for the mediator of loyalty between satisfaction and support for tax increases. In Model 1, only convenience has a significant, positive influence on supporting tax increases ($\beta_{1.1} = 0.165$, p-value < 0.01), while the other four satisfaction factors are insignificant. Loyalty in Model 2 has a significant, positive influence on supporting tax increases ($\beta_{2.1} = 0.238$, p-value < 0.01). Convenience ($\beta_{3.1} = 0.115$, p-value < 0.05) and loyalty ($\beta_{3.6} = 0.178$, p-value < 0.01) in Model 3 have significant, positive influences on supporting tax increases. The coefficient of convenience weakened after loyalty was added to the model. Therefore, this supports the mediator of loyalty between the satisfaction of convenience and support for tax increases.

Table 5 notes critical factors' influence on loyalty. Convenience ($\beta_{4.1} = 0.305$, p-value < 0.01), housing ($\beta_{4.3} = 0.154$, p-value < 0.01), appearance ($\beta_{4.4} = 0.085$, p-value < 0.05), and natural environment ($\beta_{4.5} = 0.121$, p-value < 0.01) in Model 4 have significant, positive influences on loyalty. However, in 2009 (Model 5), only the coefficients of convenience ($\beta_{5.1} = 0.330$, p-value < 0.01) and natural environment ($\beta_{5.5} = 0.208$, p-value < 0.01) are significant and positive. The coefficients of convenience ($\beta_{6.1} = 0.276$, p-value < 0.01), housing ($\beta_{6.3} = 0.206$, p-value < 0.01), and appearance ($\beta_{6.4} = 0.201$, p-value < 0.01) are significant and positive in 2012 (Model 6), while the coefficient of transportation ($\beta_{6.2} = -0.123$, p-value < 0.05) is negative. The changes in critical factors' influences on loyalty identify the trends in citizens' focus.

DISCUSSION

Kogler et al. (2013) argued that trust in (pull) and power of authorities (push) are the two primary drivers of tax compliance. Trust is mainly based on satisfactory experiences and loyalty status. When citizens trust a government, they are more likely to support tax increases for better services and welfare to the public. The correlation coefficient analysis indicates that the local government should increase citizens' loyalty, satisfaction of convenience, transportation, housing, and appearance. Surprisingly, the natural environment is unrelated to support for tax increases. This may be because the quality of the air and natural environment is similar in neighboring counties, and therefore, citizens do not contribute this to the local government's efforts.

The mediator of loyalty between satisfaction (convenience) and support for tax increases was supported. Supporting tax increases is directly and indirectly driven by convenience satisfaction via loyalty, and loyalty is the most important driver of support for tax increases. Convenience was the only satisfaction factor out of the five that significantly influenced support for tax increases in multiple regressions. Thus, if the local government wishes to obtain support for tax increases, it should focus on the most relevant issues of convenience, as the other four satisfaction factors are insignificant. This may be because most people have cars, and the rural geography results in less traffic and more room for walking and bicycling. Intriguingly, the longer the resident resides in the county, they become less supporting of tax increases. Newcomers are willing to pay more in taxes to improve the community. Therefore, attracting more migrants may help support for tax increases.

Among all drivers of support for tax increases, loyalty is the most important. Therefore, a critical issue involves how to increase citizens' loyalty. Satisfactions of convenience, housing, appearance, and natural environment positively influence loyalty, but transportation does not have an impact. This may be due to the widespread countryside and citizens' automobile ownership. However, it is interesting to identify the change of loyalty's drivers between 2009 and 2012, as citizens in 2009 cared more about convenience and the natural environment. However, the four satisfaction factors regarding human activities were more important in 2012 than the natural environment. More people in a county may result in a dissatisfaction with transportation.

In conclusion, newcomers and citizens with high convenience satisfaction and high loyalty are more likely to support tax increases. Loyalty is primarily based on the length of residency and a high satisfaction with human activities.

Limitations and Future Research

There are several limitations to this study. First, this study used secondary data from the NCS. The 4-point unbalanced scale (1 = Poor, 2 = Fair, 3 = Good, and 4 = Excellent) may impact the analysis results. Therefore, primary data with validity items and balance scales may reduce this bias. Second, the five satisfaction factors were generated using a factor analysis, and some items were deleted to make each factor consistent. These arbitrary decisions may result in a bias. Future research may apply more items measuring various dimensions of satisfaction to identify more critical factors in increasing loyalty and support for tax increases.

Third, 58% to 62% of respondents have lived in the county for over 20 years. This may imply stability in the population. However, further information is required to suggest the population structure. Ideally, as the samples should match the actual population structure, further research may focus on age and residence to become representative of the residents. Additionally, comparing the results in SJC with those in other counties can generalize the findings or explore new differences.

Fourth, this study only used a multiple regression to analyze the mediator structure, and drivers of loyalty and support for tax increases. Other methods may be applied to the research, such as structural equation modeling, which can clearly measure the direct and indirect influences between independent and dependent variables. More demographic variables may be included, such as employment or commuting methods, to profile the target citizens' characteristics.

Theoretical and Managerial Implications

In theory, this is the first study that focuses on an individual level to explore the profiles of those who support tax increases. Additionally, the model successfully discovered the relationships among satisfaction (independent), loyalty (mediator), and support for tax increases (dependent). The relationships confirm Kogler et al.'s (2013) argument, and the survey results from Fairleigh Dickinson University's PublicMind poll. Additionally, this study specifies critical factors to increase citizens' loyalty to the local government. Those findings can contribute to the knowledge of interactions between citizens and their government.

This study also provides a logical map for local government officers in practice. Loyalty and satisfaction are the keys for citizens' support of tax increases. Among the five satisfaction factors, convenience (most relative to citizens' daily lives) is a key driver for supporting tax increases. Regarding ways to increase loyalty, citizens' focuses have changed over time. Local governments should increase efforts towards the satisfaction of human activities, namely convenience, transportation, housing, and appearance. They can also prioritize strategic planning and budget building, and can then increase citizens' satisfaction, earn their loyalty, and win support for tax increases.

REFERENCES

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Anderson, E. W., & Mittal, V. (2000). Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3(2), 107–20.
- Cronin Jr., J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, 76(2), 193-216.
- Gounaris, S., Dimitriadis, S., & Stathakopoulos, V. (2004). An examination of the effects of service quality and satisfaction on customers' behavioral intentions in e-shopping. *Journal of Services Marketing*, 24(2), 142-156.
- Gounaris, S. P., Tzempelikos, N. P., & Chatzipanagiotou, K. (2007). The relationships of customer-perceived value, satisfaction, loyalty and behavioral intentions. *Journal of Relationship Marketing*, 6(1), 63-87.
- Hogan, B., Maroney, J. J., & Rupert, T. J. (2013). The relation among voice value, policy outcomes, and intensity of support on fairness assessments of tax legislation. *Journal of the American Taxation Association*, 35(1), 85-109.
- Kallbekken, S., Garcia, J. H., & Korneliussen, K. (2013). Determinants of public support for transport taxes. *Transportation Research Part A: Policy and Practice*, 58(December), 67-78.
- Kogler, C., Batrancea, L., Nichita, A., Pantya, J., Belianin, A., & Kirchler, E. (2013). Trust and power as determinants of tax compliance: Testing the assumptions of the slippery slope framework in Austria, Hungary, Romania and Russia. *Journal of Economic Psychology*, 34(February), 169-180.
- Kotler, P. & Keller, K. L. (2012). *Marketing management* (14th ed.). Upper Saddle River, New Jersey: Prentice Hall.

- Larivière, B. (2008). Linking perceptual and behavioral customer metrics to multiperiod customer profitability: A comprehensive service-profit chain application. *Journal of Service Research*, 11(1), 3–21.
- Larivière, B., Keiningham, T. L., Aksoy, L., Yalçın, A., Morgeson III, F. V., & Mithas, S. (2016). Modeling heterogeneity in the satisfaction, loyalty intention, and shareholder value linkage: A cross-industry analysis at the customer and firm levels. *Journal of Marketing Research*, 53(1), 91-109.
- Marandu, E. E., Mbekomize, C. J., & Ifezue, A. N. (2015). Determinants of tax compliance: A review of factors and conceptualizations. *International Journal of Economics and Finance*, 7(9), 207-218.
- Morgeson III, F. V., Sharma, P. N., and Hult, G. T. M. (2015). Cross-national differences in consumer satisfaction: Mobile services in emerging and developed markets. *Journal of International Marketing*, 23(2), 1-24.
- Pappas, L. O., Pateli, A. G., Giannakos, M. N., & Chrissikopoulos, V. (2014). Moderating effects of online shopping experience on customer satisfaction and repurchase intentions. *International Journal of Retail & Distribution Management*, 42(3), 187-204.
- Roscoe, D. D. (2014). Yes, raise my taxes: Property tax cap override elections. *Social Science Quarterly*, 95(1), 145-164.
- Rajic, T., & Dado, J. (2013). Modelling the relationships among retail atmospherics, service quality, satisfaction and customer behavioural intentions in an emerging economy context. *Total Quality Management & Business Excellence*, 24(9/10), 1096-1110.
- Topcu, B., & Duygun, A. (2015). The impacts of customer loyalty on negative word-of-mouth communication and repurchase intention. *Journal of Marketing & Management*, 6(1), 16-27.
- Vázquez-Casielles, R., Suárez-Álvarez, L., & Del Río-Lanza, A. B. (2009). Customer satisfaction and switching barriers: Effects on repurchase intentions, positive recommendations, and price tolerance. *Journal of Applied Social Psychology*, 39(10), 2275-2302.
- Yusuf, J., & O'Connell, L. (2015). The effects of discussion and information on public support for tax and fee increases for transportation. *Public Works Management and Policy*, 20(2), 146-158.

APPENDIX

Table 1
Sample Profile

Variable	Category	2009		2012	
		Frequency	Percent	Frequency	Percent
Sex	Female	185	54.6	178	57.8
	Male	143	42.2	119	38.6
	Missing Value	11	3.2	11	3.6
	Total	339	100	308	100.0
Residence	Less than 2 Years	14	4.1	6	1.9
	2-5 Years	28	8.3	14	4.5
	6-10 Years	26	7.7	32	10.4
	11-20 Years	67	19.8	60	19.5
	20+ Years	199	58.7	193	62.7
	Missing Value	5	1.5	3	1.0
	Total	339	100.0	308	100.0
Age	18-24 Years	7	2.1	3	1.0
	25-34 Years	37	10.9	19	6.2
	35-44 Years	43	12.7	39	12.7
	45-54 Years	72	21.2	63	20.5
	55-64 Years	83	24.5	85	27.6
	65-74 Years	53	15.6	57	18.5
	Above 75 Years	38	11.2	37	12.0
	Missing Value	6	1.8	5	1.6
	Total	339	100	308	100.0

Table 2
Factor Loadings

Factor and Items	Loading
Supporting tax increases (3 items, Cronbach's alpha=.779)	
Roads and bridges are aging throughout San Juan County. To what extent would you support or oppose a tax increase to fund improvements in these areas?	.88
To what extent would you support or oppose each of the following types of tax increases to fund improvements to roads and bridges?	.78
GRT (Gross Receipts Tax)	.4
Property tax	.77
	2
Loyalty (2 items, Cronbach's alpha=.735)	
Recommend living in San Juan County to someone who asks	.87
Remain in San Juan County for the next five years	.89
	6
Satisfaction	
Please rate each of the following characteristics as they relate to San Juan County as a whole:	
Convenience (9 items, Cronbach's alpha=.899)	
Overall quality of business and service establishments in San Juan County	.62
Shopping opportunities	.67
Opportunities to attend cultural activities	.71
Recreational opportunities	.54
Educational opportunities	.60
Opportunities to participate in social events and activities	.75
Opportunities to participate in religious or spiritual events and activities	.74
Opportunities to volunteer	.653
Opportunities to participate in community matters	.64
	5
Transportation (5 items, Cronbach's alpha=.780)	
Ease of car travel in San Juan County	.507
Ease of bus travel in San Juan County	.554
Ease of bicycle travel in San Juan County	.505
Availability of paths and walking trails	.630
Traffic flow on county roads	.663
Availability of affordable quality child care	Deleted
Housing (2 items, Cronbach's alpha=.679)	
Variety of housing options	.66
Availability of affordable quality housing	.68
	0

Availability of affordable quality health care	Deleted
Availability of preventive health services	Deleted
Employment opportunities	Deleted
Appearance (2 items, Cronbach’s alpha=.884)	
	.82
Overall appearance of San Juan County	5
	.80
Cleanliness of San Juan County	0
Overall quality of new development in San Juan County	Deleted
Natural environment (2 items, Cronbach’s alpha=.711)	
Openness and acceptance of the community toward people of diverse backgrounds	Deleted
	.73
Air quality	6
	.67
Quality of overall natural environment in San Juan County	8
Overall image or reputation of San Juan County	Deleted

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 Table 3
 Correlation Coefficient Matrix

	1	2	3	4	5	6	7
1 Support Tax	.77						
2 Loyalty	.187^a	.73					
3 Convenience	.156^a	.464^a	.89				
4 Transportation	.134^a	.243^a	.538^a	.78			
5 Housing	.107^a	.339^a	.484^a	.506^a	.68		
6 Appearance	.089^b	.297^a	.372^a	.302^a	.323^a	.88	
7 Natural Environment	.072	.277^a	.368^a	.383^a	.324^a	.394^a	.71
Number of Items	3	2	9	5	2	2	2
Sample Size	548	604	503	396	558	628	597
Mean	2.43	3.19	2.65	2.21	2.07	2.12	2.22
Standard Deviation	.88	.77	.60	.70	.85	.78	.76

^a p < 0.01; ^b p < 0.05

Notes: The diagonal illustrates the reliability, or Cronbach’s alpha.

Table 4
 Multiple Regression Results (Model 1, 2, and 3)

Independent Variable	Model 1	Model 2	Model 3
	Support Tax	Support Tax	Support Tax
Convenience	.165^a		.115^b
Transportation	.021		.047
Housing	.040		.007
Appearance	.019		-.007
Natural Environment	-.022		-.040

Loyalty		.238^a	.178^a
Residence	-.129^a	-.148^a	-.163^a
Year	.030	.063	.051
Age	-.029	-.050	-.054
Sex	-.163^a	-.137^a	-.151^a
Sample Size	591	605	586
R-Square	.074	.089	.102
F-value of Model	5.149 ^a	11.796 ^a	6.566 ^a

^a p < 0.01; ^b p < 0.05

Table 5
Multiple Regression Results (Model 4, 5, and 6)

Independent Variable	Model 4	Model 5	Model 6
	Dependent Variable		
	Loyalty	2009 Loyalty	2012 Loyalty
Convenience	.305^a	.330^a	.276^a
Transportation	-.066	.006	-.123^b
Housing	.154^a	.083	.206^a
Appearance	.085^b	-.022	.210^a
Natural Environment	.121^a	.208^a	.028
Loyalty			
Residence	.146^a	.147^a	.174^a
Year	-.111^a		
Age	.091^b	.004	.177^a
Sex	-.106^a	-.083	-.105^b
Sample Size	591	304	287
R-Square	.308	.273	.384
F-value of Model	28.738 ^a	13.876 ^a	21.661 ^a

^a p < 0.01; ^b p < 0.05

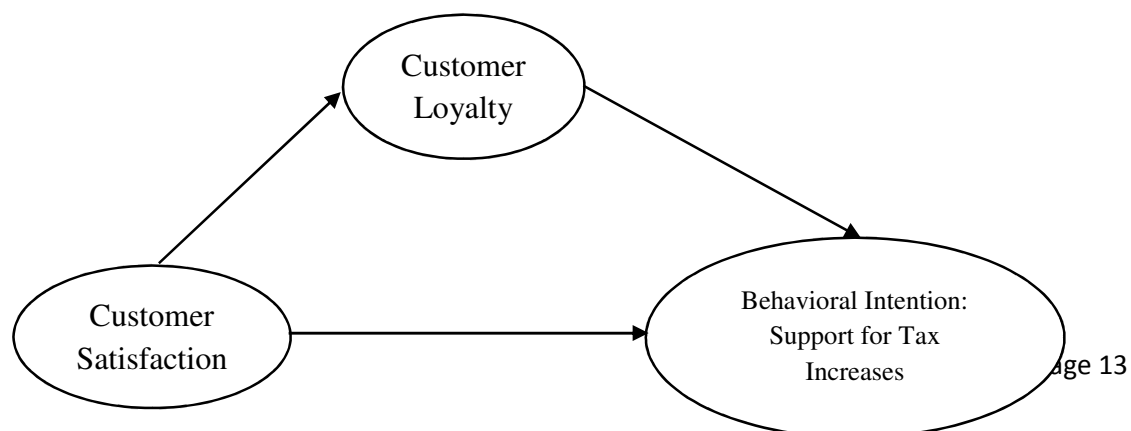


Figure 1. Conceptual Model

