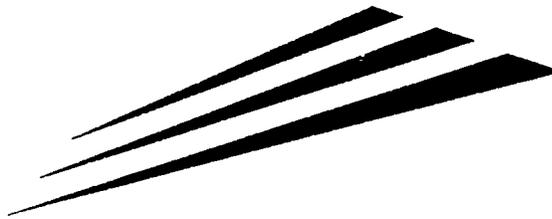




Research Report
KTC-99-3

KENTUCKY TRANSPORTATION CABINET: EMPLOYEE SATISFACTION SURVEY REPORT



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College of Engineering
University of Kentucky

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EXECUTIVE SUMMARY

KYTC employees reported unfavorable attitudes toward a variety of dimensions including the organization's (1) reward system, (2) decision making practices, and (3) level of support for its employees. Only a handful of groups reported attitude levels that were comparable to normative samples. Because the data reflect a one-time snapshot of KYTC's morale, it is unclear whether the results reported here reflect an organization-wide response to specific KYTC initiatives or evidence of a chronic problem. Regardless of the way KYTC decides to address its morale problems, it would be advisable to regularly monitor its employees' attitudes. In either case, KYTC's morale problems are not likely to improve simply by implementing management training and the like.

Assuming that the results are indicative of something chronic, management must regard the process of improving KYTC's morale as a long-range objective. Although organizations are generally unable to make significant changes in morale without resorting to large-scale interventions aimed at altering the organization's culture, public organizations often eschew such strategies. Organizations like KYTC, which have less flexibility and change potential than their private counterparts, usually pursue less aggressive interventions and rely on steady turnover to remake their internal image. What follows are recommendations that are consistent with that strategy (recognizing that any change effort be viewed as a long-term proposition).

RECOMMENDATIONS

A logical first step toward addressing KYTC's morale problems is to provide employees with survey feedback. A brief report should be prepared and circulated throughout the KYTC. Research suggests that the mere act of providing feedback enhances morale because it communicates an interest in employees' well-being. At the same time, however, such feedback is likely to raise employees' expectations that management is ready and willing to address their concerns. Consequently, lack of positive action may increase employees' frustrations.

KYTC should pursue two complementary actions. The first strategy would be a general response that encourages employees to (1) think specifically about what they find dissatisfying, (2) generate suggestions, and (3) submit these concerns and ideas to management anonymously. Next, representatives from management should process these suggestions, analyze their feasibility, and meet with employees in large groups. The purpose of these discussions should be to let employees know management is interested in obtaining feedback and in implementing suggestions that are feasible. When management meets with employees, KYTC representatives should let employees know what can and cannot be done; reasonable explanations can have very positive effects on morale and behavior.

The second component of KYTC's response would involve in-depth analysis of specific trouble spots especially District 2, District 12, and Vehicle Regulation. A series of focus groups should be conducted with employees from each of these areas. The focus groups should consist of approximately 10 to 12 employees, representing a cross-

section of individuals from district/division (three focus groups from each trouble spot should be satisfactory). Since the usefulness of information from focus groups depends on employees' willingness to share their insights in an open and honest manner, it would be advisable to have individuals outside KYTC lead them.

The goal of both strategies should be to identify short-term and long-term plans and to identify general and district/division specific plans. Some of the suggestions arising from these feedback activities will involve things that can be done immediately. Others will require further analysis to assess feasibility. Management should prepare a report that highlights the response to each suggestion: *implemented immediately*, *implemented gradually after further study*, and *not feasible* (accompanied by an explanation as to why). Management should set a timeline for the accomplishment of these activities and communicate these commitments in the report that accompanies the survey feedback.

Once again, the results of this study imply KYTC's morale problems warrant a broader intervention than can be achieved through routine management training programs. At the same time, a full blown organization development program may not be necessary, or even appropriate for KYTC. A reasonable starting point is to begin opening up communication channels using the strategies outlined.

OBJECTIVES

As input for the Kentucky Transportation Cabinet's (KYTC) strategic planning efforts, the School of Management and the Kentucky Transportation Center at the

University of Kentucky conducted a study of KYTC employees' attitudes. This document summarizes the study's results with respect to (1) morale of KYTC employees in general and in comparison to other government institutions, (2) differences in employee morale across KYTC by sex, age, ethnicity, tenure, level of education, supervisory status, and job grade, and (3) differences in employee morale across KYTC's divisions and districts.

PROCEDURES

Surveys were administered through interoffice mail to 6486 employees of the KYTC. The General Counsel's office distributed surveys to office managers, division heads, and chief district engineers who, in turn, distributed the surveys to their employees. Employees used business reply envelopes to return their answer sheets to the Technology Transfer Unit of the Kentucky Transportation Center at the University of Kentucky. The Technology Transfer Unit collected the surveys to assure respondent anonymity. The surveys were then scanned and the totals given to Dr. Bennett Tepper, of the School of Management at the University. A total of 3375 useable surveys were returned. Table 1 summarizes the respondents' background characteristics. Dr. Tepper analyzed the data and is responsible for the content of this document.

SURVEY CONTENT

The survey included measures of employees' job satisfaction, organizational commitment, organizational justice, and organizational support.

Job Satisfaction

Job satisfaction refers to employees' feeling of like or dislike for their jobs and is an indicator of emotional well-being or psychological health. Large organizations routinely measure job satisfaction, sometimes for instrumental reasons (because it is related to absenteeism and turnover) and sometimes for humanitarian reasons (reflecting the belief that people deserve to be treated with respect). Differences among organizational units in job satisfaction can be a diagnostic of potential trouble spots. The measure used in this study was the Minnesota Satisfaction Questionnaire, which captures twenty different facets of satisfaction including: activity, independence, variety, social status, supervision-human relations, supervision-technical, moral values, security, social service, authority, ability utilization, company policies and practices, compensation, advancement, responsibility, creativity, working conditions, co-workers, recognition, and achievement. In keeping with standard practice, responses to these items were summed to form a measure of employees' general job satisfaction.

Organizational Commitment

Organizational commitment generally refers to individuals' sense of attachment to their organization. Commitment has two components:

1. Affective (loyalty-based) commitment refers to employees' emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment because they *want* to do so.

2. Normative (obligation-based) commitment refers to a feeling that one is obligated to continue employment. Employees with a high level of normative commitment feel they *ought* to continue employment.

The measure used in this study was a 12-item scale developed by John Meyer and Natalie Allen, both from the University of Western Ontario. The instrument consists of two 6-item subscales, one for each dimension of commitment. A considerable body of empirical work provides support for the measure's test-retest reliability, internal-consistency, factor structure, and validity as a predictor of turnover, attendance, performance, citizenship, and career progress. Evidence that psychological commitment is a problem (low normative and affective commitment) often reflects underlying trouble with the organization's human resource management practices.

Organizational Justice

Organizational justice refers to employees' subjective evaluations of fairness and consists of two components: outcome fairness and procedural fairness. *Outcome fairness* refers to employees' perceptions of the outcomes they receive (i.e., pay, benefits, and attractive work assignments) compared to the outcomes their fellow employees receive. Individuals experience inequality when their outcomes are not as favorable as those of their colleagues. The experience of inequality causes individuals to withdraw psychologically from work. *Procedural justice* refers to employees' perceptions of the procedures used to allocate outcomes. Individuals experience procedural injustice when organizational decision makers use procedures that are biased, inconsistent,

unethical, inaccurate, or violate employees' dignity. Procedural justice is extremely important because employees will tolerate unfavorable outcomes if they feel that the procedures used in deciding those outcomes are nevertheless fair. Consequently, in public institutions where distributions are often fixed, perceptions of procedural justice assume considerable importance.

Justice was measured using Robert Moorman's 10-item scale, which consists of a 5-item outcome fairness subscale and a 5-item procedural fairness subscale. Previous research suggests these subscales are excellent predictors of a variety of outcomes including withdrawal or turnover and absenteeism, psychological health, and willingness to cooperate with change efforts.

Organizational Support

Organizational support refers to employees' perceptions as to how committed the organization is to them personally (i.e., the extent to which the organization provides support for employees' job responsibilities, demonstrates concern for employees' well-being, and values employees' contributions). Recent research suggests organizations can expect more favorable outcomes of better turnover and absenteeism rates when employees feel their organization is willing to reward their hard work and commitment with actions that convey commitment on the organization's part.

Organizational support was measured using Eisenberger's 9-item scale, which has been used to study the attitudes of nurses, engineers, accountants, educators, and public employees.

ANALYSES

Descriptive statistics that measured job satisfaction, affective commitment, normative commitment, outcome fairness, procedural fairness, and organizational support were calculated for KYTC as a whole. These summary statistics were compared to archival data collected from other public institutions in order to evaluate how KYTC's morale looks in general. Next, descriptive statistics were calculated by division/district and across various background variables (sex, age, tenure with state government, ethnicity, education, and grade level) and statistical comparisons made within KYTC.

Cabinet-wide Results

Table 2 shows descriptive statistics on each attitudinal variable as well as normative data from comparable samples. In comparison to employees from other government institutions, KYTC employees reported lower job satisfaction, outcome fairness, process fairness, loyalty-based commitment, obligation-based commitment, and organizational support. These results suggest that, on average, KYTC employees have lower morale than other government workers.

Breakdown by Background Variables

Sex differences. Table 3 shows a breakdown by employee sex. The only statistically significant differences were for the measures of fairness for which men reported that they were treated more fairly (in terms of the outcomes they receive and

in terms of the processes used to achieve those outcomes) compared to their female counterparts. Men and women did not differ in terms of their job satisfaction, their commitment to the organization, or their perception of the organization's commitment to them.

Age differences. Table 4 shows a breakdown by employee age. Means tests across the five age groups suggested statistically significant differences for all of the attitudinal variables. A plot of these means revealed a curvilinear relationship between age and morale; morale was highest among employees under the age of 24 and those over the age of 50. Employees between the ages of 25 and 49 reported relatively low levels of job satisfaction, outcome fairness, process fairness, loyalty-based commitment, and organizational support.

Differences by tenure. Table 5 shows a breakdown by employee tenure with state government. Means tests across the five tenure categories suggested statistically significant differences on all of the attitudinal variables. A plot of the means revealed a curvilinear relationship between tenure and morale; individuals with less than 1 year of tenure and those with over 20 years of tenure generally held more favorable attitudes than those with between 1 and 20 years of tenure.

Differences by level of education. Table 6 shows a breakdown by level of education. Means tests across the five levels of education suggested statistically significant differences on all of the attitudinal variables. A plot of the means suggested that individuals with the least education generally held more favorable attitudes than those with more education.

Differences by ethnicity. Table 7 shows a breakdown by ethnicity. There were statistically significant differences on the measures of loyalty-based commitment and obligation-based commitment. In each case, black employees reported less favorable attitudes compared to others.

Differences by supervisory status. Table 8 shows the breakdown by supervisory status. There were statistically significant differences on the measures of job satisfaction, loyalty-based commitment, obligation-based commitment, and organizational support. In each case, individuals employed in a supervisory capacity reported more favorable attitudes compared to individuals who did not have supervisory responsibilities.

Differences by job grade. Table 9 shows the breakdown by job grade. There were statistically significant differences for all of the attitudinal measures. In general, individuals with higher job grades held more favorable attitudes compared to those with lower job grades.

Summary analyses. In order to provide an overall assessment of the relative importance of each background variable, regression equations for each attitudinal variable were evaluated. These analyses, which are summarized in Table 10, suggest that, cabinet-wide, sex and ethnicity were not strongly related to the attitudinal variables when the other background variables were controlled. Sex was unrelated to the criteria in this analysis and ethnicity was related to only one of the variables, loyalty-based commitment (caucasians reported greater loyalty-based commitment

than non-caucasians). Less educated employees, employees holding supervisory positions, and employees with higher job grades reported more favorable attitudes. Table 10 also shows that the terms representing the non-linear effects of age and tenure were related to employees' attitudes. Younger and older employees held more favorable attitudes compared to employees between the ages of 25 and 49, and employees with less than 1 year of tenure and those with over 20 years of tenure held more favorable attitudes compared to employees with between 1 and 19 years of tenure.

Results by District and Division

Table 11 shows the means on each attitudinal variable for KYTC's Districts and Divisions. In order to evaluate which districts and divisions were sources of low morale, each group's mean was tested against the mean for all other groups combined.

Job Satisfaction. The following groups reported significantly lower levels of job satisfaction compared to the rest of the KYTC: District 2, District 5, Motor Carriers, and MV Licensing.

The following groups reported significantly higher job satisfaction compared to the rest of the KYTC: District 9, Secretary's Office, General Counsel, Safety and Health, Information Technology, Management Services, Vehicle Regulation, MV Commission, State Highway Engineer, and Transportation Planning.

Outcome Fairness. The following groups reported significantly lower levels of outcome fairness compared to the rest of the KYTC: District 2, District 12, Driver

Licensing, and MV Licensing.

The following groups reported significantly higher outcome fairness compared to the rest of the KYTC: District 7, District 10, Secretary's Office, General Counsel, Rural and Municipal Affairs, and State Highway Engineer.

Procedural Fairness. The following groups reported significantly lower levels of process fairness compared to the rest of the KYTC: District 2, District 12, MV Enforcement, MV Licensing, and Aeronautics.

The following groups reported significantly higher process fairness compared to the rest of the KYTC: Secretary's Office, General Counsel, MV Commission, and Rural and Municipal Affairs.

Loyalty-Based Commitment. The following groups reported significantly lower levels of loyalty-based commitment compared to the rest of the KYTC: District 2, District 5, Audits Review, Fleet Management, Driver Licensing, MV Licensing, and Equipment.

The following groups reported significantly higher loyalty-based commitment compared to the rest of the KYTC: District 1, District 9, Secretary's Office, Personnel Management, Toll Facilities, and Rural and Municipal Affairs.

Obligation-Based Commitment. The following groups reported significantly lower obligation-based commitment compared to the rest of the KYTC: District 2, Audits Review, Driver Licensing, MV Licensing, Environmental Analysis, Highway Design, and Equipment.

The following groups reported significantly higher levels of obligation-based commitment compared to the rest of the KYTC: District 1, District 8, District 9, District 10, Secretary's Office, General Counsel, and Toll Facilities.

Organizational Support. The following groups reported significantly lower organizational support compared to the rest of the KYTC: District 2, District 12, MV Enforcement, MV Licensing, Environmental Analysis, and Equipment.

The following groups reported significantly higher levels of organizational support compared to the rest of the KYTC: Secretary's Office, General Counsel, Safety Health, Information Technology, Management Services, Real Property, Service and Supply, Rural and Municipal Affairs, and Materials.

Summary. Given that the KYTC as a whole reported lower morale than normative samples, the groups reporting lower morale than the rest of the KYTC should be regarded as glaring trouble spots. Groups with significant morale problems are District 2, District 12, Driver Licensing, and MV Licensing (Vehicle Regulation). Groups also at risk are Audits Review, Fleet Management, MV Enforcement, Environmental Analysis, Equipment, and Aeronautics.

Results Within District and Division

Tables 12 to 137 show breakdowns by the demographic variables within the following groups: *District 1, District 2, District 3, District 4, District 5, District 6, District 7, District 8, District 9, District 10, District 12, District 12, Fiscal Management* (consisting of Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review,

Division of Toll Facilities), *Administrative Services* (consisting of Commissioner of Administrative Services, Worker's Compensation, Division of Employees Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply), *Vehicle Regulation* (consisting of Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission), *Design* (Deputy State Highway Engineer for Design, Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, Division of Right of Way and Utilities), *Construction and Operations* (consisting of Department of State Highway Engineer for Construction and Operations, Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic), and *Planning* (consisting of Deputy State Highway Engineer for Planning, Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning).

What follows is a summary of these analyses. This summary identifies groups displaying demographic effects that mirror those apparent in the KYTC as a whole (i.e., the curvilinear effect of age, the curvilinear effect of tenure, the negative effect for education, the positive effect for supervisory status, and the positive effect for supervisory status).

Age. The curvilinear effect for age emerged in the following groups: District 6, District 7, District 8, Vehicle Regulation, and Construction and Operation.

Tenure. The curvilinear effect for tenure emerged in the following groups: District 2, District 4, District 9, District 10, District 11, Fiscal Management, Administrative Services, and Vehicle Regulation.

Education. The negative effect for education emerged in the following groups: District 3, District 6, District 7, District 9, District 11, Fiscal Management, and Construction and Operations.

Supervisory Status. The positive effect for supervisory status emerged in the following groups: District 2, District 5, Vehicle Regulation, and Construction and Operations.

Job Grade. The positive effect for job grade emerged in the following groups: District 1, District 2, District 4, District 5, District 7, District 8, District 9, Administrative Services, and Vehicle Regulation.

TABLE 1: RESPONDENTS' BACKGROUND: CABINET WIDE

SEX:	76% male
	24% female
AGE:	5% under the age of 24
	19% ages 24 to 34
	48% ages 35 to 49
	26% ages 50 to 64
	2% over the age of 64

TABLE 1 continued

TENURE:	7% less than 1 year of tenure
	19% between 1 and 5 years of tenure
	17% between 6 and 10 years of tenure
	28% between 11 and 20 years of tenure
	29% with more than 20 years of tenure
EDUCATION:	9% did not complete high school
	44% received high school diploma or equivalent
	24% attended college
	15% received undergraduate degree
	8% received a graduate or professional degree
ETHNICITY:	88% caucasian
	7% black
	5% other
SUPERVISORY STATUS:	72% no supervisory responsibilities
	28% employed in a supervisory capacity

TABLE 1 continued

JOB GRADE:	22% grades 4 to 6
	28% grades 7 to 9
	38% grades 10 to 14
	10% grades 15 to 17
	2% grades 18 and higher or ungraded

TABLE 2: DESCRIPTIVE STATISTICS: CABINET-WIDE

Variable	KYTC		Normative Data	
	M	SD	M	SD
1. Job Satisfaction	3.59	0.65	3.79	0.55
2. Outcome fairness	2.80	1.04	3.06	1.07
3. Process fairness	2.94	0.87	3.06	0.96
4. Affective commitment (loyalty)	3.17	0.78	3.39	0.71
5. Normative commitment (obligation)	2.92	0.82	3.27	0.79
6. Organizational support	3.01	0.89	3.40	0.68

From 6486 surveys sent, 3375 employees of KYTC completed the items. All items used a 5-point response format where a higher score indicates greater amounts of the attribute being measured. The job satisfaction scales were normed across several

samples of government employees (over 20,000 total). The fairness scales were normed with a sample of 741 government employees. The commitment and support scales were normed with a sample of 383 government employees. All means are significantly different ($p < .01$).

TABLE 3: ANALYSIS BY SEX: CABINET WIDE

Variable	Men	Women	p
1. Job Satisfaction	3.59	3.58	ns
2. Outcome fairness	2.82	2.72	*
3. Process fairness	2.95	2.87	*
4. Loyalty-based commitment	3.18	3.14	ns
5. Obligation-based commitment	2.93	2.90	ns
6. Organizational support	3.01	2.99	ns

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 4: ANALYSIS BY AGE: CABINET-WIDE

Variable	<25	25-34	35-49	50-64	>64	p
1. Satisfaction	3.60	3.54	3.57	3.65	3.75	**
2. Outcomes	3.06	2.74	2.69	2.95	3.15	***
3. Procedures	3.10	2.94	2.86	3.00	3.24	***
4. Loyalty	3.12	3.08	3.13	3.28	3.46	***
5. Obligation	2.87	2.84	2.87	3.06	3.29	***
6. Support	3.07	2.97	2.95	3.10	3.53	***

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 5: ANALYSIS BY TENURE: CABINET-WIDE

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
1. Satisfaction	3.79	3.56	3.47	3.57	3.65	***
2. Outcomes	3.26	2.80	2.61	2.70	2.88	***
3. Procedures	3.35	3.00	2.80	2.87	2.92	***
4. Loyalty	3.38	3.14	3.00	3.14	3.26	***
5. Obligation	3.12	2.95	2.77	2.90	2.96	***
6. Support	3.38	3.05	2.85	2.95	3.04	***

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 6: ANALYSIS BY LEVEL OF EDUCATION: CABINET-WIDE

Variable	1	2	3	4	5	p
1. Satisfaction	3.66	3.58	3.53	3.65	3.62	**
2. Outcomes	3.09	2.79	2.65	2.90	2.76	***
3. Procedures	3.17	2.93	2.87	2.95	2.82	***
4. Loyalty	3.29	3.17	3.12	3.15	3.21	*
5. Obligation	3.24	2.95	2.82	2.86	2.82	***
6. Support	3.21	3.01	2.90	3.08	3.01	***

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 7: ANALYSIS BY ETHNICITY: CABINET-WIDE

Variable	Caucasian	Black	Other	p
1. Satisfaction	3.60	3.51	3.55	ns
2. Outcomes	2.80	2.77	2.81	ns
3. Procedures	2.93	2.95	3.03	ns
4. Loyalty	3.19	2.98	3.16	**
5. Obligation	2.93	2.78	2.94	**
6. Support	3.02	2.98	2.95	ns

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 8: ANALYSIS BY SUPERVISORY STATUS: CABINET-WIDE

Variable	Non-supervisor	Supervisor	p
1. Satisfaction	3.55	3.69	***
2. Outcomes	2.78	2.84	ns
3. Procedures	2.93	2.94	ns
4. Loyalty	3.11	3.31	***
5. Obligation	2.89	2.99	**
6. Support	2.97	3.10	***

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 9: ANALYSIS BY JOB GRADE: CABINET-WIDE

Variable	4-6	7-9	10-14	15-17	>18	p
1. Satisfaction	3.53	3.51	3.62	3.74	3.99	***
2. Outcomes	2.86	2.66	2.75	3.02	3.39	***
3. Procedures	3.04	2.83	2.91	2.94	3.44	***
4. Loyalty	3.14	3.11	3.15	3.33	3.56	***
5. Obligation	2.97	2.89	2.87	2.92	3.42	***
6. Support	3.03	2.89	3.01	3.12	3.53	***

ns = non-significant

* = $p < .05$

** = $p < .01$

*** = $p < .001$

TABLE 10: RELATIVE IMPORTANCE OF BACKGROUND VARIABLES
CABINET-WIDE

Variable	Satisfaction	Outcomes	Procedures
1. Ethnicity			
2. Sex			
3. Age	(+)**	(+)**	(+)*
4. Education	(-)**	(-)**	(-)**
5. Supervisory status	(+)**		
6. Tenure	(-)**	(-)**	(-)**
7. Grade	(+)**	(+)**	(+)**
8. Age ²		(+)**	(+)*
9. Tenure ²	(+)**	(+)**	(+)**

Ethnicity was coded as follows: 1 = caucasian, 2 = not caucasian.

* $p < .05$

** $p < .01$

*** $p < .001$

- = negative effect

+ = positive effect

TABLE 10: Continued

Variable	Support	Loyalty	Obligation
1. Ethnicity		(-)**	
2. Sex			
3. Age	(+)***	(+)***	(+)***
4. Education	(-)**	(-)***	(-)***
5. Supervisory status	(+)**	(+)***	(+)***
6. Tenure	(-)***	(-)***	(-)***
7. Grade	(+)***	(+)**	(+)*
8. Age ²	(+)**		(+)*
9. Tenure ²	(+)***	(+)*	(+)***

Ethnicity was coded as follows: 1 = caucasian, 2 = not caucasian.

* $p < .05$

** $p < .01$

*** $p < .001$

- = negative effect

+ = positive effect

TABLE 11: ANALYSIS BY DEPARTMENT & DISTRICT

Department	%Return	Job Satisfaction	Outcome Fairness	Process Fairness	Loyalty Commitment	Obligation Commitment	Organizational Support
KYTC Means		3.59	2.80	2.94	3.17	2.92	3.01
District 1	197/409	3.67	2.85	2.99	3.37**	3.06*	3.12
District 2	244/421	3.34**	2.47**	2.66**	2.95**	2.71***	2.69***
District 3	178/326	3.50	2.73	2.85	3.10	2.92	3.01
District 4	176/359	3.57	2.93	2.94	3.15	2.90	3.02
District 5	260/430	3.50*	2.73	2.86	3.05**	2.90	2.97
District 6	130/335	3.61	2.78	2.98	3.13	2.81	2.99
District 7	304/425	3.65	2.91*	3.02	3.21	2.94	3.04
District 8	233/351	3.57	2.85	2.91	3.19	3.05*	2.96
District 9	219/354	3.68*	2.82	3.03	3.28*	3.03*	3.03
District 10	116/398	3.59	3.06**	2.96	3.27	3.12**	3.10
District 11	187/374	3.62	2.89	3.05	3.19	2.97	2.98
District 12	122/369	3.50	2.49**	2.76**	3.29	2.91	2.63**
Secretary's Office	10/21	4.27**	3.76**	3.64*	4.02***	3.85***	3.88**
Env Aff Office	6/7	3.73	2.90	3.20	2.92	2.56	3.35
Policy & Budget	3/7	3.63	2.80	3.00	3.11	2.78	2.89

Group means were tested for significance against the mean for all other groups combined.

TABLE 11: Continued

Department	%Return	Job Satisfaction	Outcome Fairness	Process Fairness	Loyalty Commitment	Obligation Commitment	Organizational Support
KYTC Means		3.59	2.80	2.94	3.17	2.92	3.01
Public Affairs	1/5	4.05	2.20	3.40	4.33	3.33	3.56
General Counsel	12/20	4.02*	3.47*	3.52*	3.39	3.39*	3.58*
Personnel Mgmt	17/25	3.88	2.96	3.26	3.57*	3.18	3.43
Minority Aff	14/17	3.50	2.63	2.94	2.98	2.77	3.21
Fiscal Mgmt	12/14	3.59	2.85	3.08	2.97	2.82	2.89
Accounts	28/40	3.69	2.50	2.93	3.25	2.83	3.07
Audits Review	22/34	3.51	2.53	2.65	2.80*	2.42**	3.19
Toll Facilities	137/320	3.59	2.89	3.01	3.35**	3.15**	3.15
Admin Services	0/4						
Worker's Comp	0/4						
Safety & Health	16/20	3.92*	2.61	3.29	3.47	3.00	3.56*
Fleet Mgmt	31/40	3.49	2.83	2.96	2.89*	2.85	2.95
Info Tech	52/58	3.78*	2.95	3.02	3.22	2.84	3.27*
Mgmt Services	11/14	4.09*	3.40	3.53	3.18	2.97	3.58*
Purchases4/11		4.14	2.30	3.50	3.58	3.17	3.47

Group means were tested for significance against the mean for all other groups combined.

TABLE 11: Continued

Department	%Return	Job Satisfaction	Outcome Fairness	Process Fairness	Loyalty Commitment	Obligation Commitment	Organizational Support
KYTC Means		3.59	2.80	2.94	3.17	2.92	3.01
Real Property	33/42	3.69	2.58	2.99	3.19	3.04	3.34*
Service & Supply	32/44	3.78	3.12	3.23	3.35	3.01	3.44**
Vehicle Reg	4/10	4.29*	3.35	3.05	3.76	3.38	3.50
Driver Licensing	61/128	3.45	2.39**	2.82	2.95*	2.70*	2.87
Motor Carriers	12/47	3.17*	2.32	2.52	2.78	2.53	2.81
MV Enforcement	61/297	3.47	2.66	2.67*	3.08	2.85	2.77*
MV Licensing	37/74	3.12**	2.32***	2.35**	2.54***	2.35***	2.55**
MV Commission	9/11	4.09*	3.27	3.91***	3.48	3.44	3.74*
Rural & Mun Aff	14/14	4.17***	3.56**	3.60**	3.66*	3.19	3.49*
St Hwy Engineer	14/25	4.03*	3.38*	3.17	3.41	3.34	3.20
Prog Mgmt Staff	5/10	4.04	3.20	3.56	3.40	3.00	3.56
Drive SMART	4/5	3.54	2.75	2.50	3.25	2.38	2.64
Dep St Hwy Eng	0/3						
Bridge Design	20/34	3.60	2.86	2.60	2.94	2.68	2.79
Env Analysis	15/28	3.52	2.32	2.88	2.84	2.48*	2.55*

Group means were tested for significance against the mean for all other groups combined.

TABLE 11: Continued

Department	%Return	Job Satisfaction	Outcome Fairness	Process Fairness	Loyalty Commitment	Obligation Commitment	Organizational Support
KYTC Means		3.59	2.80	2.94	3.17	2.92	3.01
Hwy Design	46/74	3.66	2.76	3.00	3.08	2.61**	3.10
Prof Services	3/11	3.37	2.00	3.33	3.00	2.50	2.89
Right Way & Util	15/29	3.66	2.88	2.84	3.07	2.89	3.15
Eng Constr & Ops	0/3						
Construction	16/27	3.61	2.66	2.99	3.39	2.94	3.15
Contract Procure	11/23	3.76	3.04	3.25	3.24	2.83	3.22
Equipment	23/61	3.44	2.53	2.65	2.78*	2.52*	2.64*
Materials	79/91	3.68	3.00	3.12	3.33	2.99	3.28**
Operations	28/53	3.44	2.74	2.65	3.02	2.82	2.73
Traffic	16/37	3.76	2.70	3.05	3.14	2.72	3.05
St Hwy Planning	1/4	4.05	1.80	3.00	3.67	3.83	3.11
Aeronautics	11/17	3.30	2.72	2.33*	2.94	2.58	2.82
Multimodal	21/24	3.84	3.18	3.14	3.17	2.80	3.30
Trans Planning	40/51	3.80*	3.10	3.20	3.17	2.89	3.27

Group means were tested for significance against the mean for all other groups combined.

TABLE 12: ANALYSIS BY SEX: DISTRICT 1

Variable	Men	Women	p
Cases	157	36	
1. Job Satisfaction	3.68	3.69	ns
2. Outcome fairness	2.82	3.06	ns
3. Process fairness	3.03	2.92	ns
4. Loyalty-based commitment	3.37	3.46	ns
5. Obligation-based commitment	3.07	3.00	ns
6. Organizational support	3.14	3.06	ns

ns = non-significant

* = $p < .05$

TABLE 13: ANALYSIS BY AGE: DISTRICT 1

Variable	<24	25-34	35-49	50-64	>64	p
Cases	15	43	89	46	3	
1. Satisfaction	3.86	3.57	3.68	3.67	4.25	ns
2. Outcomes	3.35	2.62	2.85	2.90	3.00	ns
3. Procedures	3.35	3.05	2.93	2.90	4.07	ns
4. Loyalty	3.44	3.32	3.33	3.45	4.17	ns
5. Obligation	3.30	3.00	3.00	3.13	3.56	ns
6. Support	3.28	3.16	3.05	3.12	4.22	ns

ns = non-significant

* = $p < .05$

TABLE 14: ANALYSIS BY TENURE: DISTRICT 1

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	19	51	26	60	40	
1. Satisfaction	3.73	3.72	3.47	3.64	3.80	ns
2. Outcomes	3.37	2.98	2.32	2.61	3.16	ns
3. Procedures	3.37	3.04	2.68	2.92	3.10	ns
4. Loyalty	3.45	3.35	3.24	3.28	3.63	ns
5. Obligation	3.15	3.15	2.85	3.00	3.13	ns
6. Support	3.40	3.18	2.79	3.05	3.25	ns

ns = non-significant

* = $p < .05$

TABLE 15: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 1

Variable	1	2	3	4	5	p
Cases	19	98	49	20	8	
1. Satisfaction	3.52	3.65	3.65	3.91	4.01	ns
2. Outcomes	2.66	2.82	2.85	3.12	3.32	ns
3. Procedures	2.87	2.93	3.22	3.01	3.08	ns
4. Loyalty	3.23	3.28	3.49	3.52	3.86	ns
5. Obligation	3.25	3.02	3.11	3.05	3.08	ns
6. Support	2.94	3.09	3.17	3.31	3.38	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 16: ANALYSIS BY ETHNICITY: DISRICT 1

Variable	Caucasian	Non-caucasian	p
	176	20	
1. Satisfaction	3.69	3.56	ns
2. Outcomes	2.88	2.65	ns
3. Procedures	3.01	2.85	ns
4. Loyalty	3.41	3.11	ns
5. Obligation	3.09	2.80	ns
6. Support	3.15	2.92	ns

ns = non-significant

* = $p < .05$

TABLE 17: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 1

Variable	Non-supervisor	Supervisor	p
Cases	148	48	
1. Satisfaction	3.64	3.81	ns
2. Outcomes	2.87	2.80	ns
3. Procedures	3.01	2.95	ns
4. Loyalty	3.35	3.47	ns
5. Obligation	3.07	3.02	ns
6. Support	3.13	3.12	ns

ns = non-significant

* = $p < .05$

TABLE 18: ANALYSIS BY JOB GRADE: DISTRICT 1

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	65	57	56	8	4	
1. Satisfaction	3.56	3.59	3.87	3.74	4.08	*
2. Outcomes	2.94	2.64	2.90	2.90	3.65	ns
3. Procedures	3.05	2.88	3.14	2.68	2.85	ns
4. Loyalty	3.20	3.29	3.61	3.74	3.25	*
5. Obligation	3.06	2.90	3.21	2.85	3.04	ns
6. Support	3.07	3.06	3.26	3.03	3.03	ns

ns = non-significant

* = $p < .05$

TABLE 19: ANALYSIS BY SEX: DISTRICT 2

Variable	Men	Women	p
Cases	192	50	
1. Job Satisfaction	3.35	3.31	ns
2. Outcome fairness	2.48	2.43	ns
3. Process fairness	2.72	2.44	*
4. Loyalty-based commitment	2.98	2.85	ns
5. Obligation-based commitment	2.75	2.58	ns
6. Organizational support	2.73	2.56	ns

ns = non-significant

* = $p < .05$

TABLE 20: ANALYSIS BY AGE: DISTRICT 2

Variable	<24	25-34	35-49	50-64	>64	p
Cases	12	43	119	66	3	
1. Satisfaction	3.01	3.37	3.33	3.43	3.00	ns
2. Outcomes	2.45	2.67	2.36	2.54	2.73	ns
3. Procedures	2.93	2.86	2.56	2.67	2.80	ns
4. Loyalty	2.74	2.91	2.98	3.01	2.39	ns
5. Obligation	2.56	2.71	2.71	2.79	1.89	ns
6. Support	2.55	2.85	2.62	2.74	2.56	ns

ns = non-significant

* = $p < .05$

TABLE 21: ANALYSIS BY TENURE: DISTRICT 2

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	26	49	39	84	46	
1. Satisfaction	3.47	3.28	3.05	3.38	3.51	*
2. Outcomes	2.91	2.57	2.27	2.33	2.55	ns
3. Procedures	3.02	2.85	2.30	2.54	2.80	**
4. Loyalty	3.15	3.01	2.44	2.99	3.11	***
5. Obligation	2.88	2.71	2.25	2.79	2.88	**
6. Support	2.88	2.98	2.42	2.56	2.73	*

ns = non-significant

* = $p < .05$

TABLE 22: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 2

Variable	1	2	3	4	5	p
Cases	32	121	60	21	8	
1. Satisfaction	3.33	3.29	3.39	3.53	3.28	ns
2. Outcomes	2.63	2.46	2.41	2.53	2.18	ns
3. Procedures	2.68	2.70	2.57	2.83	2.15	ns
4. Loyalty	2.99	2.94	2.89	3.13	2.18	ns
5. Obligation	3.03	2.69	2.60	2.73	2.56	ns
6. Support	2.69	2.70	2.59	2.93	2.50	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 23: ANALYSIS BY ETHNICITY: DISRICT 2

Variable	Caucasian	Non-caucasian	p
	217	19	
1. Satisfaction	3.37	3.17	ns
2. Outcomes	2.47	2.54	ns
3. Procedures	2.67	2.81	ns
4. Loyalty	2.96	2.77	ns
5. Obligation	2.71	2.78	ns
6. Support	2.71	2.57	ns

ns = non-significant

* = $p < .05$

TABLE 24: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 2

Variable	Non-supervisor	Supervisor	p
Cases	179	65	
1. Satisfaction	3.25	3.60	***
2. Outcomes	2.41	2.64	ns
3. Procedures	2.61	2.80	ns
4. Loyalty	2.87	3.12	*
5. Obligation	2.64	2.91	*
6. Support	2.61	2.91	*

ns = non-significant

* = $p < .05$

TABLE 25: ANALYSIS BY JOB GRADE: DISTRICT 2

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	64	79	85	6	4	
1. Satisfaction	3.10	3.22	3.55	3.93	3.60	***
2. Outcomes	2.38	2.28	2.69	2.50	2.75	ns
3. Procedures	2.65	2.46	2.78	2.93	3.20	ns
4. Loyalty	2.79	2.90	3.04	3.42	3.17	ns
5. Obligation	2.54	2.67	2.82	2.92	3.20	ns
6. Support	2.65	2.43	2.87	3.37	3.25	**

ns = non-significant

* = $p < .05$

TABLE 26: ANALYSIS BY SEX: DISTRICT 3

Variable	Men	Women	p
Cases	146	30	
1. Job Satisfaction	3.48	3.61	ns
2. Outcome fairness	2.77	2.59	ns
3. Process fairness	2.88	2.73	ns
4. Loyalty-based commitment	3.11	3.01	ns
5. Obligation-based commitment	2.94	2.82	ns
6. Organizational support	3.02	2.94	ns

ns = non-significant

* = $p < .05$

TABLE 27: ANALYSIS BY AGE: DISTRICT 3

Variable	<24	25-34	35-49	50-64	>64	p
Cases	9	34	80	48	5	
1. Satisfaction	3.38	3.59	3.44	3.58	3.34	ns
2. Outcomes	3.44	2.76	2.52	2.95	2.60	*
3. Procedures	2.53	2.78	2.83	2.99	3.04	ns
4. Loyalty	2.76	3.02	3.04	3.28	3.33	ns
5. Obligation	2.57	2.84	2.85	3.16	2.90	ns
6. Support	2.87	2.94	2.91	3.23	3.16	ns

ns = non-significant

* = $p < .05$

TABLE 28: ANALYSIS BY TENURE: DISTRICT 3

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	9	38	41	48	40	
1. Satisfaction	3.50	3.41	3.41	3.58	3.58	ns
2. Outcomes	3.20	2.75	2.65	2.69	2.76	ns
3. Procedures	2.87	2.88	2.76	2.84	2.96	ns
4. Loyalty	2.85	2.82	3.11	3.33	3.12	*
5. Obligation	2.93	2.69	2.87	3.06	3.03	ns
6. Support	3.01	3.02	2.83	3.02	3.16	ns

ns = non-significant

* = $p < .05$

TABLE 29: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 3

Variable	1	2	3	4	5	p
Cases	26	71	39	34	6	
1. Satisfaction	3.49	3.55	3.50	3.52	2.93	ns
2. Outcomes	3.18	2.68	2.58	2.89	1.53	**
3. Procedures	3.09	2.90	2.68	2.81	2.80	ns
4. Loyalty	3.24	3.14	3.04	3.05	2.56	ns
5. Obligation	3.26	2.92	2.91	2.79	2.25	*
6. Support	3.36	2.94	3.00	3.00	2.44	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 30: ANALYSIS BY ETHNICITY: DISRICT 3

Variable	Caucasian	Non-caucasian	p
	154	20	
1. Satisfaction	3.47	3.80	*
2. Outcomes	2.73	2.92	ns
3. Procedures	2.80	3.29	*
4. Loyalty	3.06	3.41	*
5. Obligation	2.90	3.14	ns
6. Support	2.96	3.43	*

ns = non-significant

* = $p < .05$

TABLE 31: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 3

Variable	Non-supervisor	Supervisor	p
Cases	120	55	
1. Satisfaction	3.49	3.53	ns
2. Outcomes	2.76	2.68	ns
3. Procedures	2.86	2.86	ns
4. Loyalty	3.05	3.20	ns
5. Obligation	2.87	3.02	ns
6. Support	2.95	3.14	ns

ns = non-significant

* = $p < .05$

TABLE 32: ANALYSIS BY JOB GRADE: DISTRICT 3

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	30	62	68	11	3	
1. Satisfaction	3.42	3.59	3.47	3.98	3.60	ns
2. Outcomes	2.63	2.86	2.73	3.73	2.75	ns
3. Procedures	2.89	2.98	2.72	2.73	3.20	ns
4. Loyalty	3.04	3.11	3.09	3.11	3.17	ns
5. Obligation	3.01	2.91	2.92	3.06	3.20	ns
6. Support	3.02	3.07	2.95	3.04	3.25	ns

ns = non-significant

* = $p < .05$

TABLE 33: ANALYSIS BY SEX: DISTRICT 4

Variable	Men	Women	p
Cases	140	32	
1. Job Satisfaction	3.60	3.47	ns
2. Outcome fairness	3.00	2.56	*
3. Process fairness	2.96	2.81	ns
4. Loyalty-based commitment	3.14	3.19	ns
5. Obligation-based commitment	2.90	2.93	ns
6. Organizational support	3.03	2.89	ns

ns = non-significant

* = $p < .05$

TABLE 34: ANALYSIS BY AGE: DISTRICT 4

Variable	<24	25-34	35-49	50-64	>64	p
Cases	12	23	101	37	2	
1. Satisfaction	3.46	3.71	3.55	3.58	3.18	ns
2. Outcomes	2.98	3.36	2.77	3.02	3.20	ns
3. Procedures	2.80	3.31	2.83	3.01	3.20	ns
4. Loyalty	3.19	3.30	3.07	3.27	2.58	ns
5. Obligation	2.76	2.83	2.86	3.14	2.42	ns
6. Support	2.60	3.36	2.89	3.22	3.61	*

ns = non-significant

* = $p < .05$

TABLE 35: ANALYSIS BY TENURE: DISTRICT 4

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	27	23	17	52	56	
1. Satisfaction	3.76	3.50	3.20	3.43	3.75	**
2. Outcomes	3.41	2.87	2.64	2.70	2.99	*
3. Procedures	3.28	2.99	2.64	2.80	2.94	ns
4. Loyalty	3.42	3.15	2.93	2.96	3.25	*
5. Obligation	3.10	2.80	2.66	2.86	2.97	ns
6. Support	3.23	2.93	2.67	2.90	3.14	ns

ns = non-significant

* = $p < .05$

TABLE 36: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 4

Variable	1	2	3	4	5	p
Cases	14	97	35	17	12	
1. Satisfaction	3.79	3.57	3.38	3.56	3.81	ns
2. Outcomes	3.65	2.85	3.65	3.21	3.07	*
3. Procedures	3.23	2.95	2.79	2.88	2.92	ns
4. Loyalty	3.40	3.17	3.08	2.80	3.39	ns
5. Obligation	3.12	3.00	2.75	2.51	2.88	ns
6. Support	3.26	3.07	2.75	2.86	3.17	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 37: ANALYSIS BY ETHNICITY: DISRICT 4

Variable	Caucasian	Non-caucasian	p
Cases	140	35	
1. Satisfaction	3.65	3.25	**
2. Outcomes	2.96	2.78	ns
3. Procedures	2.95	2.84	ns
4. Loyalty	3.19	2.97	ns
5. Obligation	2.91	2.88	ns
6. Support	2.07	2.77	ns

ns = non-significant

* = $p < .05$

TABLE 38: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 4

Variable	Non-supervisor	Supervisor	p
Cases	134	40	
1. Satisfaction	3.52	3.74	ns
2. Outcomes	2.86	3.09	ns
3. Procedures	2.94	2.88	ns
4. Loyalty	3.13	3.21	ns
5. Obligation	2.92	2.84	ns
6. Support	2.97	3.10	ns

ns = non-significant

* = $p < .05$

TABLE 39: ANALYSIS BY JOB GRADE: DISTRICT 4

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	50	48	51	13	4	
1. Satisfaction	3.59	3.35	3.63	3.83	4.04	ns
2. Outcomes	3.07	2.62	2.74	3.58	3.60	**
3. Procedures	3.08	2.77	2.83	3.00	4.15	*
4. Loyalty	3.21	2.97	3.19	3.08	3.75	ns
5. Obligation	3.05	2.79	2.84	2.79	3.17	ns
6. Support	3.17	2.71	2.98	3.08	4.06	***

ns = non-significant

* = $p < .05$

TABLE 40: ANALYSIS BY SEX: DISTRICT 5

Variable	Men	Women	p
Cases	220	35	
1. Job Satisfaction	3.51	3.40	ns
2. Outcome fairness	2.71	2.71	ns
3. Process fairness	2.85	2.90	ns
4. Loyalty-based commitment	3.05	2.97	ns
5. Obligation-based commitment	2.88	2.98	ns
6. Organizational support	2.96	3.00	ns

ns = non-significant

* = $p < .05$

TABLE 41: ANALYSIS BY AGE: DISTRICT 5

Variable	<24	25-34	35-49	50-64	>64	p
Cases	8	35	154	58	4	
1. Satisfaction	3.64	3.60	3.46	3.49	3.74	ns
2. Outcomes	3.15	2.85	2.58	2.95	3.25	ns
3. Procedures	3.18	3.04	2.74	3.02	3.10	ns
4. Loyalty	3.10	3.07	2.99	3.15	3.50	ns
5. Obligation	3.04	2.90	2.84	3.02	3.33	ns
6. Support	3.22	3.03	2.88	3.08	3.75	ns

ns = non-significant

* = $p < .05$

TABLE 42: ANALYSIS BY TENURE: DISTRICT 5

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	7	34	33	104	82	
1. Satisfaction	3.89	3.56	3.67	3.46	3.42	ns
2. Outcomes	3.40	3.06	2.81	2.57	2.71	ns
3. Procedures	3.77	2.98	2.98	2.77	2.82	*
4. Loyalty	3.64	2.95	3.22	3.00	3.03	ns
5. Obligation	3.36	2.84	2.93	2.88	2.91	ns
6. Support	3.76	3.14	3.06	2.85	2.96	ns

ns = non-significant

* = $p < .05$

TABLE 43: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 5

Variable	1	2	3	4	5	p
Cases	17	122	64	35	21	
1. Satisfaction	3.75	3.45	3.47	3.61	3.44	ns
2. Outcomes	3.15	2.72	2.64	2.70	2.71	ns
3. Procedures	3.12	2.81	2.81	2.90	3.03	ns
4. Loyalty	3.26	3.01	3.00	3.10	3.17	ns
5. Obligation	2.98	2.93	2.74	2.96	3.06	ns
6. Support	3.40	2.92	2.92	2.99	3.06	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 44: ANALYSIS BY ETHNICITY: DISRICT 5

Variable	Caucasian	Non-caucasian	p
Cases	208	46	
1. Satisfaction	3.49	3.51	ns
2. Outcomes	2.75	2.68	ns
3. Procedures	2.84	2.99	ns
4. Loyalty	3.08	2.91	ns
5. Obligation	2.97	2.66	*
6. Support	2.96	3.06	ns

ns = non-significant

* = $p < .05$

TABLE 45: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 5

Variable	Non-supervisor	Supervisor	p
Cases	175	84	
1. Satisfaction	3.47	3.57	ns
2. Outcomes	2.71	2.76	ns
3. Procedures	2.85	2.91	ns
4. Loyalty	2.96	3.23	*
5. Obligation	2.82	3.06	*
6. Support	2.91	3.11	ns

ns = non-significant

* = $p < .05$

TABLE 46: ANALYSIS BY JOB GRADE: DISTRICT 4

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	47	70	117	18	2	
1. Satisfaction	3.58	3.45	3.43	3.74	4.18	ns
2. Outcomes	3.06	2.59	2.55	3.29	3.80	**
3. Procedures	3.20	2.66	2.76	3.26	3.90	***
4. Loyalty	3.09	3.01	2.95	3.69	3.25	*
5. Obligation	3.00	2.87	2.79	3.32	2.92	ns
6. Support	3.22	2.85	2.84	3.42	4.28	**

ns = non-significant

* = $p < .05$

TABLE 47: ANALYSIS BY SEX: DISTRICT 6

Variable	Men	Women	p
Cases	112	17	
1. Job Satisfaction	3.60	3.64	ns
2. Outcome fairness	2.78	2.81	ns
3. Process fairness	2.99	2.88	ns
4. Loyalty-based commitment	3.11	3.28	ns
5. Obligation-based commitment	2.79	2.94	ns
6. Organizational support	2.97	3.16	ns

ns = non-significant

* = $p < .05$

TABLE 48: ANALYSIS BY AGE: DISTRICT 6

Variable	<24	25-34	35-49	50-64	>64	p
Cases	8	17	64	36	3	
1. Satisfaction	3.69	3.58	3.43	3.87	4.05	**
2. Outcomes	2.69	2.71	2.50	3.28	3.60	**
3. Procedures	3.38	3.13	2.73	3.20	3.33	*
4. Loyalty	3.04	3.06	2.95	3.45	3.67	*
5. Obligation	2.67	2.84	2.60	3.08	3.67	*
6. Support	3.18	3.20	2.74	3.29	3.81	**

ns = non-significant

* = $p < .05$

TABLE 49: ANALYSIS BY TENURE: DISTRICT 6

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	7	21	22	30	49	
1. Satisfaction	3.82	3.58	3.38	3.57	3.71	ns
2. Outcomes	2.57	2.76	2.38	2.89	2.93	ns
3. Procedures	3.28	3.08	2.75	2.88	2.04	ns
4. Loyalty	3.10	3.03	3.01	3.04	3.30	ns
5. Obligation	2.76	2.93	2.82	2.75	2.80	ns
6. Support	3.46	3.06	2.72	3.09	2.98	ns

ns = non-significant

* = $p < .05$

TABLE 50: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 6

Variable	1	2	3	4	5	p
Cases	10	63	22	18	16	
1. Satisfaction	4.10	3.62	3.39	3.77	3.36	*
2. Outcomes	3.60	2.78	2.63	2.76	2.60	ns
3. Procedures	3.72	3.02	2.88	2.93	2.45	**
4. Loyalty	3.22	3.14	2.95	3.39	3.03	ns
5. Obligation	2.97	2.92	2.48	3.04	2.44	*
6. Support	3.71	3.01	2.74	3.04	2.80	*

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 51: ANALYSIS BY ETHNICITY: DISRICT 6

Variable	Caucasian	Non-caucasian	p
	119	9	
1. Satisfaction	3.61	3.58	ns
2. Outcomes	2.79	2.80	ns
3. Procedures	2.97	3.04	ns
4. Loyalty	3.15	3.04	ns
5. Obligation	2.81	2.91	ns
6. Support	2.99	3.23	ns

ns = non-significant

* = $p < .05$

TABLE 52: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 6

Variable	Non-supervisor	Supervisor	p
Cases	93	36	
1. Satisfaction	3.54	3.78	*
2. Outcomes	2.71	2.96	ns
3. Procedures	2.99	2.93	ns
4. Loyalty	3.06	3.33	ns
5. Obligation	2.85	2.69	ns
6. Support	2.95	3.12	ns

ns = non-significant

* = $p < .05$

TABLE 53: ANALYSIS BY JOB GRADE: DISTRICT 6

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	28	37	47	14	2	
1. Satisfaction	3.68	3.51	3.61	3.81	3.20	ns
2. Outcomes	2.99	2.66	2.65	3.19	2.50	ns
3. Procedures	3.17	2.94	2.89	3.01	2.60	ns
4. Loyalty	3.09	3.10	3.10	3.54	2.83	ns
5. Obligation	2.97	2.85	2.74	2.60	3.00	ns
6. Support	3.09	2.97	2.97	3.08	2.72	ns

ns = non-significant

* = $p < .05$

TABLE 54: ANALYSIS BY SEX: DISTRICT 7

Variable	Men	Women	p
Cases	242	55	
1. Job Satisfaction	3.66	3.60	ns
2. Outcome fairness	2.91	2.87	ns
3. Process fairness	3.03	2.92	ns
4. Loyalty-based commitment	3.21	3.18	ns
5. Obligation-based commitment	2.91	2.99	ns
6. Organizational support	3.03	3.04	ns

ns = non-significant

* = $p < .05$

TABLE 55: ANALYSIS BY AGE: DISTRICT 7

Variable	<24	25-34	35-49	50-64	>64	p
Cases	30	48	132	85	9	
1. Satisfaction	3.64	3.68	3.59	3.73	3.89	ns
2. Outcomes	3.17	2.90	2.79	3.00	3.07	ns
3. Procedures	3.09	2.98	2.92	3.16	3.01	ns
4. Loyalty	2.98	3.15	3.15	3.39	3.37	*
5. Obligation	2.79	2.80	2.84	3.17	3.39	**
6. Support	3.13	3.06	2.92	3.15	3.54	ns

ns = non-significant

* = $p < .05$

TABLE 56: ANALYSIS BY TENURE: DISTRICT 7

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	30	64	72	81	57	
1. Satisfaction	3.77	3.60	3.69	3.73	3.51	ns
2. Outcomes	3.11	2.83	2.94	2.99	2.76	ns
3. Procedures	3.23	2.99	3.03	3.06	2.87	ns
4. Loyalty	3.38	3.08	3.21	3.31	3.11	ns
5. Obligation	3.11	2.98	2.93	3.00	2.70	ns
6. Support	3.19	3.04	3.08	3.10	2.84	ns

ns = non-significant

* = $p < .05$

TABLE 57: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 7

Variable	1	2	3	4	5	p
Cases	58	121	67	38	20	
1. Satisfaction	3.74	3.59	3.69	3.68	3.68	ns
2. Outcomes	3.12	2.83	2.88	3.06	2.57	ns
3. Procedures	3.26	2.88	3.08	3.04	2.91	ns
4. Loyalty	3.32	3.17	3.22	3.12	3.22	ns
5. Obligation	3.31	2.90	2.84	2.73	2.78	**
6. Support	3.42	2.93	2.98	3.03	2.89	**

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 58: ANALYSIS BY ETHNICITY: DISRICT 7

Variable	Caucasian	Non-caucasian	p
	256	47	
1. Satisfaction	3.68	3.51	ns
2. Outcomes	2.93	2.81	ns
3. Procedures	3.02	3.04	ns
4. Loyalty	3.22	3.14	ns
5. Obligation	2.97	2.81	ns
6. Support	3.08	2.89	ns

ns = non-significant

* = $p < .05$

TABLE 59: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 7

Variable	Non-supervisor	Supervisor	p
Cases	225	78	
1. Satisfaction	3.65	3.66	ns
2. Outcomes	2.97	2.73	ns
3. Procedures	3.01	3.03	ns
4. Loyalty	3.18	3.28	ns
5. Obligation	2.93	2.92	ns
6. Support	3.04	3.04	ns

ns = non-significant

* = $p < .05$

TABLE 60: ANALYSIS BY JOB GRADE: DISTRICT 7

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	79	83	99	20	9	
1. Satisfaction	3.61	3.53	3.72	3.90	3.81	ns
2. Outcomes	2.87	2.66	3.01	2.99	3.40	ns
3. Procedures	3.10	2.71	3.13	3.12	3.36	**
4. Loyalty	3.25	3.12	3.22	3.20	3.52	ns
5. Obligation	3.04	2.76	2.90	2.98	3.35	ns
6. Support	3.12	2.87	3.06	3.13	3.16	ns

ns = non-significant

* = $p < .05$

TABLE 61: ANALYSIS BY SEX: DISTRICT 8

Variable	Men	Women	p
Cases	207	22	
1. Job Satisfaction	3.57	3.61	ns
2. Outcome fairness	2.86	2.63	ns
3. Process fairness	2.91	2.76	ns
4. Loyalty-based commitment	3.17	3.27	ns
5. Obligation-based commitment	3.05	3.00	ns
6. Organizational support	2.96	2.80	ns

ns = non-significant

* = $p < .05$

TABLE 62: ANALYSIS BY AGE: DISTRICT 8

Variable	<24	25-34	35-49	50-64	>64	p
Cases	14	47	93	73	5	
1. Satisfaction	3.86	3.29	3.66	3.57	3.89	**
2. Outcomes	3.59	2.63	2.80	2.90	3.04	ns
3. Procedures	3.57	2.71	2.89	2.88	3.48	*
4. Loyalty	3.39	3.02	3.20	3.20	3.57	ns
5. Obligation	3.23	2.80	3.09	3.11	3.10	ns
6. Support	3.46	2.75	3.00	2.91	3.29	ns

ns = non-significant

* = $p < .05$

TABLE 63: ANALYSIS BY TENURE: DISTRICT 8

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	15	43	34	57	83	
1. Satisfaction	3.82	3.51	3.46	3.54	3.63	ns
2. Outcomes	3.55	2.91	2.60	2.86	2.79	ns
3. Procedures	3.56	3.06	2.69	2.90	2.80	*
4. Loyalty	3.36	3.38	2.98	3.16	3.17	ns
5. Obligation	3.19	3.18	2.94	3.04	3.00	ns
6. Support	3.25	3.12	2.72	2.93	2.93	ns

ns = non-significant

* = $p < .05$

TABLE 64: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 8

Variable	1	2	3	4	5	p
Cases	23	123	48	23	16	
1. Satisfaction	3.70	3.57	3.56	3.54	3.45	ns
2. Outcomes	3.19	2.90	2.53	2.95	2.78	ns
3. Procedures	3.38	2.93	2.80	2.79	2.60	ns
4. Loyalty	3.54	3.14	3.30	3.08	2.92	ns
5. Obligation	3.46	3.06	3.09	2.80	2.58	*
6. Support	3.34	2.99	2.76	2.89	2.81	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 65: ANALYSIS BY ETHNICITY: DISRICT 8

Variable	Caucasian	Non-caucasian	p
	202	29	
1. Satisfaction	3.58	3.48	ns
2. Outcomes	2.83	2.97	ns
3. Procedures	2.91	2.83	ns
4. Loyalty	3.18	3.23	ns
5. Obligation	3.03	3.13	ns
6. Support	2.95	2.97	ns

ns = non-significant

* = $p < .05$

TABLE 66: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 8

Variable	Non-supervisor	Supervisor	p
Cases	173	59	
1. Satisfaction	3.53	3.67	ns
2. Outcomes	2.79	2.99	ns
3. Procedures	2.89	2.94	ns
4. Loyalty	3.15	3.29	ns
5. Obligation	3.02	3.11	ns
6. Support	2.91	3.07	ns

ns = non-significant

* = $p < .05$

TABLE 67: ANALYSIS BY JOB GRADE: DISTRICT 8

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	54	76	62	22	5	
1. Satisfaction	3.66	3.49	3.65	3.56	3.87	ns
2. Outcomes	3.01	2.81	2.66	3.05	3.44	ns
3. Procedures	3.25	2.81	2.79	2.75	3.48	*
4. Loyalty	3.33	3.16	3.23	3.01	3.07	ns
5. Obligation	3.27	3.02	3.00	2.70	3.50	ns
6. Support	3.24	2.82	2.87	2.85	3.89	**

ns = non-significant

* = $p < .05$

TABLE 68: ANALYSIS BY SEX: DISTRICT 9

Variable	Men	Women	p
Cases	183	35	
1. Job Satisfaction	3.67	3.79	ns
2. Outcome fairness	2.89	2.52	*
3. Process fairness	3.06	2.86	ns
4. Loyalty-based commitment	3.25	3.45	ns
5. Obligation-based commitment	3.02	3.10	ns
6. Organizational support	3.05	3.00	ns

ns = non-significant

* = $p < .05$

TABLE 69: ANALYSIS BY AGE: DISTRICT 9

Variable	<24	25-34	35-49	50-64	>64	p
Cases	7	35	109	64	3	
1. Satisfaction	3.49	3.57	3.65	3.81	4.20	ns
2. Outcomes	2.66	2.54	2.80	3.03	3.60	ns
3. Procedures	2.89	2.93	3.01	3.13	3.27	ns
4. Loyalty	3.12	3.16	3.30	3.32	3.61	ns
5. Obligation	2.60	2.89	2.97	3.22	3.61	ns
6. Support	2.83	2.82	3.05	3.14	3.56	ns

ns = non-significant

* = $p < .05$

TABLE 70: ANALYSIS BY TENURE: DISTRICT 9

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	20	47	27	50	74	
1. Satisfaction	3.92	3.57	3.73	3.51	3.80	*
2. Outcomes	3.22	2.69	2.62	2.69	2.98	ns
3. Procedures	3.48	2.89	3.11	2.94	3.04	ns
4. Loyalty	3.52	3.17	3.27	3.24	3.32	ns
5. Obligation	3.08	3.00	2.94	2.94	3.14	ns
6. Support	3.44	2.83	3.02	2.93	3.14	*

ns = non-significant

* = $p < .05$

TABLE 71: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 9

Variable	1	2	3	4	5	p
Cases	29	115	37	23	13	
1. Satisfaction	3.74	3.66	3.61	3.77	3.80	ns
2. Outcomes	3.36	2.80	2.63	2.69	2.68	*
3. Procedures	3.33	3.03	2.83	3.06	2.82	ns
4. Loyalty	3.42	3.26	3.17	3.23	3.56	ns
5. Obligation	3.39	3.03	2.88	2.76	3.14	*
6. Support	3.29	3.05	2.83	3.01	2.97	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 72: ANALYSIS BY ETHNICITY: DISRICT 9

Variable	Caucasian	Non-caucasian	p
	186	32	
1. Satisfaction	3.70	3.63	ns
2. Outcomes	2.84	2.76	ns
3. Procedures	3.05	2.93	ns
4. Loyalty	3.29	3.20	ns
5. Obligation	3.08	2.78	ns
6. Support	3.05	2.95	ns

ns = non-significant

* = $p < .05$

TABLE 73: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 9

Variable	Non-supervisor	Supervisor	p
Cases	166	52	
1. Satisfaction	3.63	3.84	*
2. Outcomes	2.79	2.98	ns
3. Procedures	3.00	3.14	ns
4. Loyalty	3.23	3.41	ns
5. Obligation	2.99	3.17	ns
6. Support	2.98	3.22	ns

ns = non-significant

* = $p < .05$

TABLE 74: ANALYSIS BY JOB GRADE: DISTRICT 9

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	64	60	73	11	1	
1. Satisfaction	3.60	3.58	3.81	3.82	4.95	*
2. Outcomes	2.88	2.55	2.96	2.96	4.20	*
3. Procedures	3.03	2.84	3.18	3.00	4.40	ns
4. Loyalty	3.19	3.24	3.39	3.68	3.00	ns
5. Obligation	3.02	3.02	3.06	3.15	3.00	ns
6. Support	2.99	2.88	3.21	3.10	3.22	ns

ns = non-significant

* = $p < .05$

TABLE 75: ANALYSIS BY SEX: DISTRICT 10

Variable	Men	Women	p
Cases	97	19	
1. Job Satisfaction	3.58	3.64	ns
2. Outcome fairness	3.03	3.22	ns
3. Process fairness	2.98	2.89	ns
4. Loyalty-based commitment	3.23	3.47	ns
5. Obligation-based commitment	3.08	3.32	ns
6. Organizational support	3.09	3.18	ns

ns = non-significant

* = $p < .05$

TABLE 76: ANALYSIS BY AGE: DISTRICT 10

Variable	<24	25-34	35-49	50-64	>64	p
Cases	13	25	50	27	1	
1. Satisfaction	3.47	3.65	3.56	3.65	3.40	ns
2. Outcomes	3.21	3.06	2.92	3.26	2.40	ns
3. Procedures	3.15	3.09	2.79	3.11	2.20	ns
4. Loyalty	3.13	3.16	3.19	3.58	3.50	ns
5. Obligation	3.18	3.03	3.06	3.28	3.50	ns
6. Support	3.13	3.12	3.02	3.20	4.00	ns

ns = non-significant

* = $p < .05$

TABLE 77: ANALYSIS BY TENURE: DISTRICT 10

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	11	31	15	23	36	
1. Satisfaction	3.76	3.50	3.52	3.37	3.78	ns
2. Outcomes	3.69	2.94	3.21	2.49	3.27	*
3. Procedures	3.47	2.96	2.93	2.54	3.09	ns
4. Loyalty	3.47	3.23	2.97	2.96	3.56	*
5. Obligation	3.44	3.11	2.89	2.81	3.33	ns
6. Support	3.43	3.08	2.99	2.76	3.30	ns

ns = non-significant

* = $p < .05$

TABLE 78: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 10

Variable	1	2	3	4	5	p
Cases	5	67	26	14	4	
1. Satisfaction	3.69	3.66	3.45	3.48	3.64	ns
2. Outcomes	3.20	3.08	2.88	3.04	3.90	ns
3. Procedures	2.92	3.04	2.83	2.86	3.05	ns
4. Loyalty	3.23	3.35	3.06	3.32	3.13	ns
5. Obligation	3.10	3.20	2.94	3.07	3.25	ns
6. Support	3.60	3.15	2.87	3.17	3.06	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 79 ANALYSIS BY ETHNICITY: DISRICT 10

Variable	Caucasian	Non-caucasian	p
	107	9	
1. Satisfaction	3.64	2.97	**
2. Outcomes	3.13	2.27	*
3. Procedures	3.00	2.53	ns
4. Loyalty	3.31	2.83	ns
5. Obligation	3.13	2.98	ns
6. Support	3.15	2.52	*

ns = non-significant

* = $p < .05$

TABLE 80: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 10

Variable	Non-supervisor	Supervisor	p
Cases	89	27	
1. Satisfaction	3.62	3.48	ns
2. Outcomes	3.05	3.07	ns
3. Procedures	2.99	2.89	ns
4. Loyalty	3.25	3.33	ns
5. Obligation	3.11	3.17	ns
6. Support	3.13	3.03	ns

ns = non-significant

* = $p < .05$

TABLE 81: ANALYSIS BY JOB GRADE: DISTRICT 10

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	33	41	28	9	3	
1. Satisfaction	3.37	3.66	3.80	3.38	3.62	ns
2. Outcomes	2.83	3.15	3.19	2.76	3.73	ns
3. Procedures	2.81	2.98	3.25	2.51	3.33	ns
4. Loyalty	3.01	3.35	3.48	3.19	3.33	ns
5. Obligation	2.86	3.21	3.36	2.81	3.33	ns
6. Support	2.93	3.16	3.32	2.64	3.44	ns

ns = non-significant

* = $p < .05$

TABLE 82: ANALYSIS BY SEX: DISTRICT 11

Variable	Men	Women	p
Cases	159	23	
1. Job Satisfaction	3.62	3.67	ns
2. Outcome fairness	2.90	2.78	ns
3. Process fairness	3.06	2.93	ns
4. Loyalty-based commitment	3.19	3.21	ns
5. Obligation-based commitment	3.00	3.04	ns
6. Organizational support	2.98	2.86	ns

ns = non-significant

* = $p < .05$

TABLE 83: ANALYSIS BY AGE: DISTRICT 11

Variable	<24	25-34	35-49	50-64	>64	p
Cases	12	37	92	41	3	
1. Satisfaction	3.81	3.44	3.65	3.69	3.83	ns
2. Outcomes	3.32	2.73	2.76	3.14	3.47	ns
3. Procedures	3.38	2.92	3.02	3.11	3.73	ns
4. Loyalty	3.29	2.96	3.18	3.39	3.39	ns
5. Obligation	2.93	2.72	2.95	3.26	3.39	ns
6. Support	3.35	2.72	2.95	3.13	3.70	ns

ns = non-significant

* = $p < .05$

TABLE 84: ANALYSIS BY TENURE: DISTRICT 11

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	15	45	32	38	55	
1. Satisfaction	3.92	3.60	3.34	3.77	3.64	*
2. Outcomes	3.69	2.97	2.52	2.88	2.82	*
3. Procedures	3.52	3.15	2.85	3.14	2.90	*
4. Loyalty	3.28	3.18	2.86	3.34	3.28	ns
5. Obligation	2.87	2.97	2.66	3.20	3.04	ns
6. Support	3.54	3.00	2.69	3.05	2.93	ns

ns = non-significant

* = $p < .05$

TABLE 85: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 11

Variable	1	2	3	4	5	p
Cases	32	89	38	18	10	
1. Satisfaction	3.53	3.76	3.45	3.38	3.83	*
2. Outcomes	3.18	3.03	2.53	2.37	3.00	*
3. Procedures	3.27	3.13	2.85	2.69	3.14	ns
4. Loyalty	3.16	3.32	3.02	2.73	3.63	**
5. Obligation	3.19	3.08	2.62	2.65	3.25	**
6. Support	3.08	3.14	2.57	2.67	3.21	*

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 86 ANALYSIS BY ETHNICITY: DISRICT 11

Variable	Caucasian	Non-caucasian	p
	160	26	
1. Satisfaction	3.65	3.53	ns
2. Outcomes	2.93	2.63	ns
3. Procedures	3.06	3.05	ns
4. Loyalty	3.24	2.91	*
5. Obligation	2.99	2.87	ns
6. Support	3.01	2.84	ns

ns = non-significant

* = $p < .05$

TABLE 87: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 11

Variable	Non-supervisor	Supervisor	p
Cases	135	51	
1. Satisfaction	3.60	3.69	ns
2. Outcomes	2.93	2.79	ns
3. Procedures	3.09	2.98	ns
4. Loyalty	3.15	3.30	ns
5. Obligation	2.96	3.04	ns
6. Support	3.00	2.93	ns

ns = non-significant

* = $p < .05$

TABLE 88: ANALYSIS BY JOB GRADE: DISTRICT 11

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	57	67	42	14	2	
1. Satisfaction	3.61	3.61	3.61	3.69	4.55	ns
2. Outcomes	3.11	2.99	2.46	2.69	3.70	*
3. Procedures	3.21	3.07	2.79	2.94	4.00	ns
4. Loyalty	3.11	3.25	3.16	3.33	3.25	ns
5. Obligation	2.86	3.11	2.86	2.94	3.58	ns
6. Support	3.04	3.06	2.71	3.00	4.11	ns

ns = non-significant

* = $p < .05$

TABLE 89: ANALYSIS BY SEX: DISTRICT 12

Variable	Men	Women	p
Cases	102	17	
1. Job Satisfaction	3.47	3.72	ns
2. Outcome fairness	2.48	2.42	ns
3. Process fairness	2.76	2.75	ns
4. Loyalty-based commitment	3.23	3.58	ns
5. Obligation-based commitment	2.89	3.04	ns
6. Organizational support	2.59	2.75	ns

ns = non-significant

* = $p < .05$

TABLE 90: ANALYSIS BY AGE: DISTRICT 12

Variable	<24	25-34	35-49	50-64	>64	p
Cases	8	33	56	19	2	
1. Satisfaction	3.45	3.47	3.47	3.67	3.90	ns
2. Outcomes	1.98	2.33	2.44	3.01	2.50	ns
3. Procedures	2.53	2.84	2.67	3.05	2.60	ns
4. Loyalty	3.19	3.48	3.20	3.25	3.17	ns
5. Obligation	2.48	3.08	2.77	3.23	3.17	ns
6. Support	1.94	2.61	2.59	2.93	3.28	ns

ns = non-significant

* = $p < .05$

TABLE 91: ANALYSIS BY TENURE: DISTRICT 12

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	8	42	14	20	35	
1. Satisfaction	3.82	3.52	3.25	3.53	3.50	ns
2. Outcomes	2.63	2.29	2.47	2.62	2.58	ns
3. Procedures	3.45	2.86	2.71	2.37	2.71	ns
4. Loyalty	3.58	3.48	2.94	3.16	3.19	ns
5. Obligation	3.08	3.11	2.83	2.70	2.79	ns
6. Support	3.63	2.48	2.67	2.52	2.57	ns

ns = non-significant

* = $p < .05$

TABLE 92: ANALYSIS BY LEVEL OF EDUCATION: DISTRICT 12

Variable	1	2	3	4	5	p
Cases	11	50	31	13	13	
1. Satisfaction	3.90	3.41	3.59	3.39	3.36	ns
2. Outcomes	2.64	2.35	2.73	2.58	1.91	ns
3. Procedures	3.35	2.69	2.85	2.34	2.57	*
4. Loyalty	3.91	3.27	3.31	2.90	3.01	ns
5. Obligation	3.20	2.95	2.93	2.59	2.65	ns
6. Support	2.40	2.42	2.76	2.84	2.78	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree.

ns = non-significant

* = $p < .05$

TABLE 93 ANALYSIS BY ETHNICITY: DISRICT 12

Variable	Caucasian	Non-caucasian	p
	113	6	
1. Satisfaction	3.53	3.04	ns
2. Outcomes	2.43	3.13	ns
3. Procedures	2.75	2.90	ns
4. Loyalty	3.29	3.11	ns
5. Obligation	2.92	2.81	ns
6. Support	2.62	2.46	ns

ns = non-significant

* = $p < .05$

TABLE 94: ANALYSIS BY SUPERVISORY STATUS: DISTRICT 12

Variable	Non-supervisor	Supervisor	p
Cases	95	23	
1. Satisfaction	3.47	3.69	ns
2. Outcomes	2.46	2.56	ns
3. Procedures	2.81	2.59	ns
4. Loyalty	3.22	3.54	ns
5. Obligation	2.92	2.91	ns
6. Support	2.62	2.61	ns

ns = non-significant

* = $p < .05$

TABLE 95: ANALYSIS BY JOB GRADE: DISTRICT 12

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	30	39	38	7	1	
1. Satisfaction	3.44	3.51	3.55	3.45	3.90	ns
2. Outcomes	2.35	2.46	2.52	2.77	2.80	ns
3. Procedures	2.94	2.83	2.63	2.29	2.80	ns
4. Loyalty	3.48	3.21	3.30	2.79	4.00	ns
5. Obligation	2.98	2.94	2.91	2.69	2.17	ns
6. Support	2.34	2.54	2.87	2.63	3.22	ns

ns = non-significant

* = $p < .05$

TABLE 96: ANALYSIS BY SEX: FISCAL MANAGEMENT

Variable	Men	Women	p
Cases	89	109	
1. Job Satisfaction	3.54	3.65	ns
2. Outcome fairness	2.75	2.82	ns
3. Process fairness	2.92	2.99	ns
4. Loyalty-based commitment	3.18	3.31	ns
5. Obligation-based commitment	2.90	3.09	ns
6. Organizational support	3.05	3.18	ns

Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 97: ANALYSIS BY AGE: FISCAL MANAGEMENT

Variable	<24	25-34	35-49	50-64	>64	p
Cases	12	31	76	70	9	
1. Satisfaction	3.58	3.58	3.52	3.68	3.67	ns
2. Outcomes	2.87	2.62	2.63	2.93	3.56	ns
3. Procedures	3.02	2.84	2.84	3.07	3.43	ns
4. Loyalty	3.25	3.01	3.22	3.37	3.56	ns
5. Obligation	3.01	2.85	2.94	3.08	3.33	ns
6. Support	3.25	3.09	2.94	3.27	3.57	ns

Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 98: ANALYSIS BY TENURE: FISCAL MANAGEMENT

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	16	47	34	53	49	
1. Satisfaction	3.83	3.53	3.47	3.55	3.72	ns
2. Outcomes	3.29	2.76	2.34	2.83	2.95	*
3. Procedures	3.51	2.91	2.65	3.08	3.04	*
4. Loyalty	3.46	3.15	3.03	3.11	3.59	**
5. Obligation	3.46	2.93	2.84	2.93	3.12	ns
6. Support	3.58	3.21	2.79	3.07	3.20	ns

Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 99: ANALYSIS BY LEVEL OF EDUCATION: FISCAL MANAGEMENT

Variable	1	2	3	4	5	p
Cases	9	92	41	43	13	
1. Satisfaction	3.82	3.69	3.39	3.61	3.35	*
2. Outcomes	3.58	2.89	2.60	2.64	2.57	ns
3. Procedures	3.43	3.11	2.76	2.84	2.68	ns
4. Loyalty	3.56	3.40	3.09	2.95	3.46	**
5. Obligation	3.60	3.16	2.93	2.67	2.88	**
6. Support	3.64	3.24	2.89	3.11	2.80	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree. Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 100: ANALYSIS BY ETHNICITY: FISCAL MANAGEMENT

Variable	Caucasian	Non-caucasian	p
	188	10	
1. Satisfaction	3.59	3.70	ns
2. Outcomes	2.79	2.82	ns
3. Procedures	2.95	3.20	ns
4. Loyalty	3.26	2.88	ns
5. Obligation	3.01	2.76	ns
6. Support	3.12	3.19	ns

Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 101: ANALYSIS BY SUPERVISORY STATUS: FISCAL MANAGEMENT

Variable	Non-supervisor	Supervisor	p
Cases	147	51	
1. Satisfaction	3.56	3.71	ns
2. Outcomes	2.78	2.80	ns
3. Procedures	2.93	3.02	ns
4. Loyalty	3.21	3.38	ns
5. Obligation	2.96	3.11	ns
6. Support	3.11	3.16	ns

Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 102: ANALYSIS BY JOB GRADE: FISCAL MANAGEMENT

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	59	36	72	14	9	
1. Satisfaction	3.56	3.56	3.57	3.85	3.92	ns
2. Outcomes	2.89	2.54	2.79	2.76	3.18	ns
3. Procedures	3.03	2.81	2.94	2.93	3.33	ns
4. Loyalty	3.23	3.26	3.20	3.30	3.56	ns
5. Obligation	3.06	2.95	2.87	3.02	3.50	ns
6. Support	3.18	2.89	3.12	3.16	3.60	ns

Fiscal management consisted of the following groups: Commissioner of Fiscal Management, Division of Accounts, Division of Audits Review, and Division of Toll Facilities.

ns = non-significant

* = $p < .05$

TABLE 103: ANALYSIS BY SEX: ADMINISTRATIVE SERVICES

Variable	Men	Women	p
Cases	116	60	
1. Job Satisfaction	3.81	3.68	ns
2. Outcome fairness	2.87	2.94	ns
3. Process fairness	3.08	3.19	ns
4. Loyalty-based commitment	3.27	3.11	ns
5. Obligation-based commitment	2.98	2.85	ns
6. Organizational support	3.35	3.65	ns

Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 104: ANALYSIS BY AGE: ADMINISTRATIVE SERVICES

Variable	<24	25-34	35-49	50-64	>64	p
Cases	5	35	81	52	5	
1. Satisfaction	4.11	3.77	3.74	3.74	3.67	ns
2. Outcomes	3.84	2.90	2.88	2.75	3.24	ns
3. Procedures	3.28	3.22	3.09	3.05	3.36	ns
4. Loyalty	3.40	2.99	3.26	3.21	3.93	ns
5. Obligation	3.37	2.82	2.89	2.97	3.57	ns
6. Support	3.62	3.30	3.33	3.23	3.28	ns

Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 105: ANALYSIS BY TENURE: ADMINISTRATIVE SERVICES

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	16	25	34	51	51	
1. Satisfaction	4.14	3.89	3.57	3.79	3.66	*
2. Outcomes	3.51	3.18	2.72	2.70	2.85	*
3. Procedures	3.69	3.30	3.11	2.94	3.02	**
4. Loyalty	3.52	3.28	2.89	3.27	3.24	ns
5. Obligation	3.56	3.00	2.75	2.87	2.89	*
6. Support	3.78	3.56	3.20	3.25	3.21	ns

Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 106: ANALYSIS BY LEVEL OF EDUCATION: ADMINISTRATIVE SERVICES

Variable	1	2	3	4	5	p
Cases	49	63	64	32	14	
1. Satisfaction	3.81	3.80	3.71	3.65	4.02	ns
2. Outcomes	2.30	3.20	2.55	2.94	3.09	**
3. Procedures	3.20	3.26	3.10	2.89	3.01	ns
4. Loyalty	2.71	3.24	3.24	3.14	3.44	ns
5. Obligation	3.38	3.00	2.90	2.80	2.96	ns
6. Support	3.33	3.44	3.23	3.19	3.50	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree. Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 107: ANALYSIS BY ETHNICITY: ADMINISTRATIVE SERVICES

Variable	Caucasian	Non-caucasian	p
	157	21	
1. Satisfaction	3.76	3.73	ns
2. Outcomes	2.87	2.99	ns
3. Procedures	3.11	3.15	ns
4. Loyalty	3.23	3.08	ns
5. Obligation	2.92	2.98	ns
6. Support	3.33	3.22	ns

Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 108: ANALYSIS BY SUPERVISORY STATUS: ADMINISTRATIVE SERVICES

Variable	Non-supervisor	Supervisor	p
Cases	112	66	
1. Satisfaction	3.75	3.76	ns
2. Outcomes	2.89	2.87	ns
3. Procedures	3.08	3.18	ns
4. Loyalty	3.14	3.34	ns
5. Obligation	2.91	2.97	ns
6. Support	3.26	3.41	ns

Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 109: ANALYSIS BY JOB GRADE: ADMINISTRATIVE SERVICES

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	17	55	77	19	7	
1. Satisfaction	3.89	3.67	3.71	3.90	4.05	ns
2. Outcomes	3.51	2.69	2.78	3.06	3.49	ns
3. Procedures	3.69	3.11	2.97	3.05	3.37	*
4. Loyalty	3.15	3.10	3.13	3.56	3.95	*
5. Obligation	3.20	2.83	2.86	2.92	3.74	*
6. Support	3.55	3.26	3.21	3.57	3.59	ns

Administrative Services consisted of the following groups: Commissioner of Administrative Services, Worker's Compensation, Division of Employee Safety and Health, Division of Fleet Management, Division of Information Technology, Division of Management Services, Division of Purchases, Division of Real Property, and Division of Service and Supply.

ns = non-significant

* = $p < .05$

TABLE 110: ANALYSIS BY SEX: VEHICLE REGULATION

Variable	Men	Women	p
Cases	82	100	
1. Job Satisfaction	3.49	3.35	ns
2. Outcome fairness	2.66	2.41	ns
3. Process fairness	2.84	2.61	ns
4. Loyalty-based commitment	3.14	2.77	**
5. Obligation-based commitment	2.89	2.58	*
6. Organizational support	2.94	2.73	ns

Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 111: ANALYSIS BY AGE: VEHICLE REGULATION

Variable	<24	25-34	35-49	50-64	>64	p
Cases	10	44	83	40	5	
1. Satisfaction	3.36	3.14	3.44	3.63	3.77	*
2. Outcomes	2.60	2.31	2.45	2.80	3.08	ns
3. Procedures	3.02	2.46	2.68	2.89	3.35	ns
4. Loyalty	2.85	2.67	2.89	3.28	3.88	**
5. Obligation	2.58	2.56	2.69	2.86	3.43	ns
6. Support	3.09	2.58	2.77	3.00	3.67	*

Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 112: ANALYSIS BY TENURE: VEHICLE REGULATION

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	15	31	44	61	33	
1. Satisfaction	3.69	3.45	3.25	3.67	3.60	ns
2. Outcomes	3.17	2.50	2.29	2.45	2.70	*
3. Procedures	3.15	2.92	2.46	2.56	2.96	*
4. Loyalty	3.24	2.87	2.64	2.99	3.21	*
5. Obligation	3.01	2.87	2.42	2.66	2.92	*
6. Support	3.55	2.98	2.49	2.74	2.95	**

Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 113: ANALYSIS BY LEVEL OF EDUCATION: VEHICLE REGULATION

Variable	1	2	3	4	5	p
Cases	0	75	75	22	11	
1. Satisfaction		3.49	3.38	3.34	3.55	ns
2. Outcomes		2.39	2.53	2.59	3.25	*
3. Procedures		2.57	2.72	2.75	3.20	ns
4. Loyalty		2.88	2.91	3.05	3.24	ns
5. Obligation		2.57	2.77	2.94	2.74	ns
6. Support		2.79	2.73	2.95	3.30	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree. Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 114: ANALYSIS BY ETHNICITY: VEHICLE REGULATION

Variable	Caucasian	Non-caucasian	p
	166	15	
1. Satisfaction	3.44	3.31	ns
2. Outcomes	2.55	2.35	ns
3. Procedures	2.74	2.44	ns
4. Loyalty	2.97	2.73	ns
5. Obligation	2.73	2.58	ns
6. Support	2.88	2.40	*

Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 115: ANALYSIS BY SUPERVISORY STATUS: VEHICLE REGULATION

Variable	Non-supervisor	Supervisor	p
Cases	138	46	
1. Satisfaction	3.38	3.55	ns
2. Outcomes	2.52	2.54	ns
3. Procedures	2.73	2.66	ns
4. Loyalty	2.83	3.29	**
5. Obligation	2.66	2.89	ns
6. Support	2.81	2.86	ns

Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 116: ANALYSIS BY JOB GRADE: VEHICLE REGULATION

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	16	48	103	12	0	
1. Satisfaction	3.16	3.29	3.49	3.63		ns
2. Outcomes	2.64	2.37	2.50	3.10		ns
3. Procedures	2.66	2.63	2.72	2.98		ns
4. Loyalty	2.81	2.72	2.95	3.81		*
5. Obligation	2.72	2.56	2.71	3.34		*
6. Support	2.74	2.79	2.81	3.13		ns

Vehicle Regulation consisted of the following groups: Commissioner of Vehicle Regulation, Division of Driver Licensing, Division of Motor Carriers, Division of Motor Vehicle Enforcement, Division of Motor Vehicle Licensing, and Motor Vehicle Commission.

ns = non-significant

* = $p < .05$

TABLE 117: ANALYSIS BY SEX: DESIGN

Variable	Men	Women	p
Cases	68	30	
1. Job Satisfaction	3.62	3.58	ns
2. Outcome fairness	2.71	2.69	ns
3. Process fairness	2.88	2.86	ns
4. Loyalty-based commitment	3.05	2.90	ns
5. Obligation-based commitment	2.65	2.61	ns
6. Organizational support	2.94	2.97	ns

Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 118: ANALYSIS BY AGE: DESIGN

Variable	<24	25-34	35-49	50-64	>64	p
Cases	0	28	46	24	0	
1. Satisfaction		3.51	3.55	3.82		ns
2. Outcomes		2.59	2.64	2.95		ns
3. Procedures		2.61	2.97	2.99		ns
4. Loyalty		2.86	2.98	3.22		ns
5. Obligation		2.40	2.62	2.94		*
6. Support		2.67	2.97	3.22		*

Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 119: ANALYSIS BY TENURE: DESIGN

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	2	8	20	32	36	
1. Satisfaction	3.65	3.84	3.39	3.53	3.75	ns
2. Outcomes	3.70	3.08	2.34	2.51	2.93	ns
3. Procedures	3.30	3.10	2.52	3.02	2.87	ns
4. Loyalty	3.00	3.15	2.73	2.99	3.15	ns
5. Obligation	2.42	2.77	2.30	2.62	2.82	ns
6. Support	3.11	3.10	2.63	2.92	3.09	ns

Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 120: ANALYSIS BY LEVEL OF EDUCATION: DESIGN

Variable	1	2	3	4	5	p
Cases	0	15	20	39	24	
1. Satisfaction		3.50	3.52	3.70	3.60	ns
2. Outcomes		2.64	2.43	2.99	2.49	ns
3. Procedures		2.83	2.79	3.12	2.58	ns
4. Loyalty		2.67	2.95	3.23	2.90	ns
5. Obligation		2.57	2.48	2.88	2.42	ns
6. Support		2.83	2.92	3.13	2.74	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree. Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 121: ANALYSIS BY ETHNICITY: DESIGN

Variable	Caucasian	Non-caucasian	p
	88	9	
1. Satisfaction	3.57	4.00	*
2. Outcomes	2.69	2.84	ns
3. Procedures	2.83	3.40	*
4. Loyalty	2.99	3.24	ns
5. Obligation	2.64	2.56	ns
6. Support	2.90	3.53	*

Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 122: ANALYSIS BY SUPERVISORY STATUS: DESIGN

Variable	Non-supervisor	Supervisor	p
Cases	69	30	
1. Satisfaction	3.60	3.66	ns
2. Outcomes	2.78	2.53	ns
3. Procedures	2.99	2.66	ns
4. Loyalty	3.00	3.05	ns
5. Obligation	2.68	2.55	ns
6. Support	3.03	2.77	ns

Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 123: ANALYSIS BY JOB GRADE: DESIGN

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	2	10	42	43	0	
1. Satisfaction	4.00	3.49	3.60	3.62		ns
2. Outcomes	3.30	2.48	2.61	2.79		ns
3. Procedures	3.10	2.80	2.93	2.82		ns
4. Loyalty	3.50	2.88	2.98	3.00		ns
5. Obligation	3.00	2.68	2.56	2.65		ns
6. Support	3.17	3.06	2.94	2.89		ns

Design consisted of the following groups: Deputy State Highway Engineer (Design), Division of Bridge Design, Division of Environmental Analysis, Division of Highway Design, Division of Professional Services, and Division of Right of Way and Utilities.

ns = non-significant

* = $p < .05$

TABLE 124: ANALYSIS BY SEX: CONSTRUCTION AND OPERATIONS

Variable	Men	Women	p
Cases	123	46	
1. Job Satisfaction	3.64	3.59	ns
2. Outcome fairness	2.88	2.69	ns
3. Process fairness	3.00	2.87	ns
4. Loyalty-based commitment	3.21	3.15	ns
5. Obligation-based commitment	2.88	2.83	ns
6. Organizational support	3.12	2.94	ns

Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 125: ANALYSIS BY AGE: CONSTRUCTION AND OPERATIONS

Variable	<24	25-34	35-49	50-64	>64	p
Cases	3	39	74	50	3	
1. Satisfaction	3.60	3.82	3.63	3.42	3.93	*
2. Outcomes	2.97	2.95	2.71	2.87	3.80	ns
3. Procedures	3.17	3.34	2.89	2.71	3.80	**
4. Loyalty	3.12	3.24	3.18	3.16	3.28	ns
5. Obligation	2.57	3.10	2.74	2.83	3.89	*
6. Support	3.51	3.30	3.04	2.83	3.89	*

Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 126: ANALYSIS BY TENURE: CONSTRUCTION AND OPERATIONS

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	4	21	29	45	74	
1. Satisfaction	3.85	3.69	3.64	3.66	3.54	ns
2. Outcomes	2.85	2.43	2.77	2.74	3.04	ns
3. Procedures	3.20	3.10	3.19	3.00	2.82	ns
4. Loyalty	3.42	2.96	3.24	3.08	3.28	ns
5. Obligation	2.79	2.70	2.98	2.83	2.88	ns
6. Support	3.58	3.18	3.09	3.02	3.03	ns

Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 127: ANALYSIS BY LEVEL OF EDUCATION: CONSTRUCTION AND OPS

Variable	1	2	3	4	5	p
Cases	0	59	48	41	25	
1. Satisfaction		3.52	3.56	3.86	3.54	*
2. Outcomes		2.84	2.70	3.07	2.70	ns
3. Procedures		2.96	2.93	3.19	2.70	ns
4. Loyalty		3.17	3.07	3.46	3.03	*
5. Obligation		2.92	2.72	3.10	2.61	ns
6. Support		3.03	3.04	3.28	2.86	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree. Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 128: ANALYSIS BY ETHNICITY: CONSTRUCTION AND OPERATIONS

Variable	Caucasian	Non-caucasian	p
	164	9	
1. Satisfaction	3.61	3.80	ns
2. Outcomes	2.82	3.16	ns
3. Procedures	2.95	3.38	ns
4. Loyalty	3.19	3.07	ns
5. Obligation	2.87	2.80	ns
6. Support	3.05	3.42	ns

Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 129: ANALYSIS BY SUPERVISORY STATUS: CONSTRUCTION AND OPS

Variable	Non-supervisor	Supervisor	p
Cases	108	65	
1. Satisfaction	3.59	3.65	ns
2. Outcomes	2.76	2.97	ns
3. Procedures	2.90	3.08	ns
4. Loyalty	3.09	3.35	*
5. Obligation	2.84	2.90	ns
6. Support	2.97	3.24	*

Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 130: ANALYSIS BY JOB GRADE: CONSTRUCTION AND OPERATIONS

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	10	26	90	45	0	
1. Satisfaction	3.46	3.60	3.62	3.64		ns
2. Outcomes	2.72	2.56	2.84	3.01		ns
3. Procedures	2.98	2.98	2.99	2.89		ns
4. Loyalty	3.05	3.12	3.15	3.33		ns
5. Obligation	2.70	2.97	2.81	2.93		ns
6. Support	2.97	2.97	3.08	3.09		ns

Construction and Operations consisted of the following groups: Deputy State Highway Engineer (Construction and Operations), Division of Construction, Division of Contract Procurement, Division of Equipment, Division of Materials, Division of Operations, and Division of Traffic.

ns = non-significant

* = $p < .05$

TABLE 131: ANALYSIS BY SEX: PLANNING

Variable	Men	Women	p
Cases	53	20	
1. Job Satisfaction	3.79	3.63	ns
2. Outcome fairness	3.19	2.68	ns
3. Process fairness	3.08	2.97	ns
4. Loyalty-based commitment	3.21	2.96	ns
5. Obligation-based commitment	2.88	2.71	ns
6. Organizational support	3.27	3.06	ns

Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

TABLE 132: ANALYSIS BY AGE: PLANNING

Variable	<24	25-34	35-49	50-64	>64	p
Cases	0	14	34	23	0	
1. Satisfaction		3.81	3.72	3.80		ns
2. Outcomes		3.12	2.96	3.16		ns
3. Procedures		3.27	3.02	2.96		ns
4. Loyalty		2.85	3.18	3.33		**
5. Obligation		2.80	2.87	2.81		*
6. Support		3.30	3.19	3.22		ns

Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

TABLE 133: ANALYSIS BY TENURE: PLANNING

Variable	<1 year	1-5 years	6-10 years	11-20 years	>20	p
Cases	2	13	10	18	30	
1. Satisfaction	3.53	3.75	3.71	3.64	3.83	ns
2. Outcomes	2.50	3.05	2.70	3.16	3.14	ns
3. Procedures	3.10	3.32	3.24	3.00	2.89	ns
4. Loyalty	3.08	2.88	2.98	3.06	3.36	ns
5. Obligation	2.58	3.10	2.88	2.63	2.83	ns
6. Support	3.11	3.41	3.33	3.02	3.20	ns

Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

TABLE 134: ANALYSIS BY LEVEL OF EDUCATION: PLANNING

Variable	1	2	3	4	5	p
Cases	0	15	20	24	14	
1. Satisfaction		3.62	3.50	3.80	4.12	*
2. Outcomes		2.61	2.68	3.35	3.53	*
3. Procedures		3.00	2.75	3.30	3.10	ns
4. Loyalty		3.13	3.08	2.99	3.50	ns
5. Obligation		2.71	2.63	2.93	3.08	ns
6. Support		3.21	2.93	3.25	3.52	ns

Education was coded as follows: 1 = did not complete high school, 2 = received high school diploma or equivalent, 3 = attended college, 4 = received undergraduate degree, and 5 = received graduate or professional degree. Construction and Operations consisted of the following groups: Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

TABLE 135: ANALYSIS BY ETHNICITY: PLANNING

Variable	Caucasian	Non-caucasian	p
	64	8	
1. Satisfaction	3.73	3.83	ns
2. Outcomes	2.98	3.40	ns
3. Procedures	3.05	3.30	ns
4. Loyalty	3.14	3.19	ns
5. Obligation	2.82	3.10	ns
6. Support	3.22	3.28	ns

Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

TABLE 136: ANALYSIS BY SUPERVISORY STATUS: PLANNING

Variable	Non-supervisor	Supervisor	p
Cases	46	27	
1. Satisfaction	3.65	3.90	ns
2. Outcomes	2.97	3.18	ns
3. Procedures	3.13	2.90	ns
4. Loyalty	3.00	3.38	*
5. Obligation	2.71	3.02	ns
6. Support	3.18	3.26	ns

Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

TABLE 137: ANALYSIS BY JOB GRADE: PLANNING

Variable	4-6	7-9	10-14	15-17	>18	p
Cases	2	3	44	23	0	
1. Satisfaction	3.53	3.87	3.64	3.93		ns
2. Outcomes	2.50	2.73	2.90	3.39		ns
3. Procedures	3.10	3.27	2.97	3.15		ns
4. Loyalty	3.08	3.39	2.98	3.38		ns
5. Obligation	2.58	3.06	2.70	3.01		ns
6. Support	3.11	3.48	3.09	3.37		ns

Planning consisted of the following groups: Deputy State Highway Engineer (Planning), Division of Aeronautics, Division of Multimodal, and Division of Transportation Planning.

ns = non-significant

* = $p < .05$

