

# Green Tape: A Theory of Effective Organizational Rules

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## ABSTRACT

Public management scholars over the past decade have shed significant light on ineffective rules or “red tape.” This article takes a different approach by conceptualizing a theory of green tape or effective rules. The theory argues that the probability of rule effectiveness depends on the combined presence of (1) written requirements, (2) with valid means-ends relationships, which (3) employ optimal control, (4) are consistently applied, and that have (5) purposes understood by stakeholders. A study of city employees provides the data for theory development and testing. The resulting theory emphasizes technical proficiency and stakeholder cooperation in effective rule design and implementation.

Public management scholars over the past decade have shed significant light on the nature and consequences of ineffective rules or “red tape.” Red tape has been conceptually defined (Bozeman 1993), operationalized (Rainey, Pandey, and Bozeman 1995) and distinguished from formalization (Pandey and Scott 2002). The assumption that public organizations have more red tape than private organizations has been called into question (Rainey and Bozeman 2000; Bretschneider and Bozeman 1995). Red tape has been correlated with negative organizational impacts, such as reduced services to clients (Scott and Pandey 2000) and higher managerial alienation (DeHart-Davis and Pandey 2005). These and other findings are no small achievement given that red tape was not a clear intellectual concept prior to the 1990s, despite its place in common parlance to indicate the inefficiencies of government (Bozeman 2000).

Although red tape is an important topic for public administration scholars and practitioners alike, some scholars suggest that additional attention be paid to crafting and implementing effective rules (Goodsell 2000). Such an endeavor is timely given that one strategy of government reform is to reduce internal public sector rules, based on the assumption that rules inhibit creativity and flexibility (Graham and Hays 1986) and that reducing rules will reduce red tape, unleash entrepreneurial energy, and improve the performance of government organizations (Denhardt 1993; Dilulio, Garvey, and Kettl 1993; Osborne and Gaebler

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1992). These arguments view rules as a whole without considering individual rule attributes that may lend themselves to more or less organizational benefit. Thus, advice to cut internal rules without theory or evidence as to the functions of rule attributes throws the proverbial baby out with the bathwater and ignores evidence that rules have positive social psychological effects for employees (Adler and Borys 1996; Michaels et al. 1988; Organ and Greene 1981; Podsakoff, Williams, and Todor 1986).

Another limitation to government reform perspectives, as well as the red tape literature, is the disproportionate focus on middle- and upper-level managers. This focus excludes the majority of organizational members who reside at lower organizational levels and experience bureaucratic structure very differently (Argryis 1964; Gouldner 1954). Although upper management perspectives on rules and reform are valuable, they provide an incomplete and biased portrait of these critical public administration issues (Walker and Enticott 2004).

This article begins to fill these knowledge gaps by identifying a theory of effective organizational rules—referred to here as green tape<sup>1</sup>—based on a wider range of hierarchical perspectives.<sup>2</sup> Effective rules are labeled green tape to contrast with red tape: whereas red tape pertains to organizational pathology, green tape is envisioned as part of normal bureaucracy. With this “stop-go” distinction in mind, green tape is delineated by five attributes:

- (1) Written requirements, (2) with valid means-ends relationships, which (3) employ optimal control, (4) are consistently applied, and have (5) purposes understood by stakeholders.

These attributes are expected to make rules technically capable as well as acceptable to stakeholders, those who must explain, enforce, or comply with rules. The consideration of stakeholder reactions is consistent with the notion that private acceptance of authority furthers voluntary compliance (Weber 1968, 251) and that eliciting such cooperation is far more efficient and effective than coercing it (Tyler 2006, 376). Each attribute is expected to contribute to rule performance, with the combined presence of all attributes anticipated to increase the probability of rule effectiveness.

This article outlines the empirical and theoretical foundations of green tape theory and provides a preliminary test of the theory’s validity. The data for conceptualizing green tape were collected during a study of the employees of four cities in a Midwestern U.S. state. Open-ended interviews were conducted with a subset of employees in each city ( $n = 90$ ) to explore normative judgments of workplace rules. The interview data were analyzed to identify patterns of effective rule attributes, which were then translated into a theory of green tape with support from a range of social science literatures. The interview data were also used to develop a mail survey instrument, which was distributed to all employees of the four cities. Bivariate correlations and principle component analysis of the mail survey data ( $n = 645$ ) provide an initial empirical test of construct validity.

The article is organized as follows. The first section describes the study design. The second section reports the patterns of effective rule attributes that surfaced during interviews and elaborates and extends these rule attributes using concepts and evidence from

1 Bozeman (1993, 276) refers to organizationally beneficial rules as white tape, a term not used here because of the theoretical emphasis on rule effectiveness and not organizational beneficence.

2 The term “rule” applies here to policies governing organizational activity that emanate down from the top of an organization (Ouchi 1980). This emphasis excludes group norms, which represent forms of social control that are informally derived and enforced (Axelrod 1986; Feldman 1984).

a range of social science literatures. The third section reports the results of testing the theory's construct validity. The fourth and final section discusses contributions of the theory and directions for future research.

## RESEARCH DESIGN

Green tape theory is developed and its construct validity tested using qualitative and quantitative data gathered from a study of the employees of four cities in a Midwestern U.S. state: a small city with an agricultural economy (City A); a slightly larger, but still small city with a light industrial economic base (City B); a mid-size city located near a military base (City C); and an affluent metropolitan city (City D). The study's qualitative data were collected through open-ended semi-structured interviews with a subset of employees in each city ( $n = 90$ ). Quantitative data were collected by a mail survey distributed to all employees of each city ( $n = 645$ ). The study was conducted between June 2005 and December 2006.

Within each city, interview invitations were sent to a random sample of employees. Employees who volunteered to be interviewed were asked in advance to think on their opinions of workplace rules, both good and bad. Interviews were held in the conference rooms of buildings selected for their location away from employee worksites. At the outset of the interview, the researcher explained the study purposes, the confidentiality of results, and the interview consent form and provided the employee the chance to ask questions about the study. Once the interview consent form was signed by both researcher and employee, the employee was asked about their role in the organization and the type of rules they encountered in their workplace. Employees were encouraged to construe rules broadly: candidates for discussion could include ordinance, policy or regulation, issued by the city, department, or externally. Employees were then asked to discuss workplace rules they considered good and bad, however they defined those terms. This approach sought to give voice to employee perceptions of rule quality, as opposed to anchoring their responses in preexisting theory (Glaser and Strauss 1999).

The mail survey distributed to city employees asked questions related to perceptions of workplace rules. The survey process began with an alert letter from the city manager's office to employees expressing support for the study and encouraging participation. Within 2 weeks, an envelope was attached to employee paychecks that contained a cover letter from the researcher inviting survey participation and stressing the confidentiality of results, the mail survey, a stamped return envelope addressed to the researcher's university, and a postcard with a survey identification number that employees were asked to return separately from the mail survey.<sup>3</sup> The postcard's purpose was to track responses to the survey

3 A reviewer raised the concern that paycheck distribution would intimidate city employees into survey completion. The choice of survey distribution through paychecks was made in partnership with city managers, who volunteered to include their cities in the study in order to generate employee feedback on a range of workplace issues, for example, performance evaluation processes, career banding systems, and potential policy changes. Paycheck distribution was selected in comparison with distribution to home addresses (which was deemed a violation of employee privacy) and departmental distribution (which raised concerns that employees might be unintentionally or intentionally discouraged to participate if seen taking or declining to take a survey package). Self-addressed stamped return envelopes mailed directly to the principle investigator also offered the advantage of anonymity to superiors since supervisors and managers had no way of knowing who did or did not participate. The results of survey and interview data analysis suggest that employees viewed study participation as a mechanism for expressing their voice in a way that they could not do otherwise. For example, critical written comments far outnumbered positive comments, with several employees attaching a page of typed comments to their surveys.

without linking survey results to employee identities. This process produced response rates of 61% in City A, 83% in City B, 43% in City C, and 45% in City D. These differential response rates may be a function of city size and thus the ease of encouraging survey participation: Cities A and B have fewer employees, whereas Cities C and D have more employees. The overall response rate was 49% ( $n = 645$ ) out of a sampling frame of 1,325.

### **QUALITATIVE ANALYSIS AND INTERPRETATION**

The theoretical elements of effective rules were identified using a grounded theory approach. Grounded theory is an inductive method that translates evidence into theory (Glaser and Strauss 1999). The translation process involves identifying and categorizing patterns in the data and integrating those categorized patterns into theory. The path from identifying patterns to developing theory is nonlinear and iterative: patterns are identified and categorized simultaneously, categories are constantly revised, and evidence is continually revisited to identify new patterns.

The interview data collected by this study were analyzed using ATLAS.ti, a grounded theory software that enables researcher to easily explore, code, extract, and compare excerpts from data. The resulting analysis yielded five rule attributes that tended to foster employee judgments of city rules. Specifically, city employees tended to evaluate rules as “good” or “bad” according to whether they were (1) written, (2) designed with valid means-ends relationships, (3) employed optimal (as opposed to excessive) control, (4) were consistently applied, and (5) had purposes that the employee understood. These attributes are discussed below with support from selected interview excerpts (tables 1–5), as well as social science theories that identify potential mechanisms by which rule attributes increase the probability of rule effectiveness.

#### **Written Rules**

One criterion by which city employees evaluated rules was the extent to which they were written. Written rules were valued for their ability to empower rule implementation, both by validating rule requirements to the regulated and neutralizing the appearance of authority. Unwritten rules—of which city workers seemed keenly aware—were viewed as incapable of fulfilling these functions and sometimes working against them.

For example, a plans examiner noted her inability to enforce unwritten city policies due to the absence of documentation proving to regulated entities the validity of requirements and her authority to implement them (table 1 [1]). Conversely, she expected written rules to validate the requirements to builders and empower her to enforce them. Unwritten policies also led to conflicting interpretations of requirements by her superiors and coworkers, thus making her uncertain of the requirements she could impose and softening her “backbone” with builders.

In another example, a fire department lieutenant explained that some internal departmental rules were in the process of being documented to provide upper management with the authority needed to enforce them (table 1[2]). Without written rules, management lacked “a leg to stand on.” That departmental leaders needed to document internal policies in order to enforce them is striking for two reasons. First, fire departments are paramilitary organizations that tend to privilege top-down authority. Second, the lieutenant’s fire department is nonunionized, thus removing collective bargaining pressures as a confounding

**Table 1**  
Supporting Excerpts from City Employee Interviews Regarding Written Rules

1. Some rules for development are not in writing. The fire chief will tell me one requirement, my coworker tells me a second, and my boss gives me a third. Enforcing rules is easier when they are in writing; it gives me backbone with builders, residents, homeowners.—*Plans Examiner*
2. Our department policies are being updated to formalize unwritten policies, like call in hour before if you are sick. If the policy is not written, management doesn't have a leg to stand on when calling someone on carpet.—*Fire Department Lieutenant*
3. A good rule is our snow removal policy. . . Before it snows, we line up the materials, labor and routes, all planned for the good of the city as whole. This prioritized order determines the routes, with residences last. . . Citizens are not happy with the order, even though I explain it to them. Why don't you plow driveways, they ask? One person even accused us of intentionally plowing snow on her driveway, even though she was "the best citizen on the block." I can refer citizens to our procedures and show that they are not being picked on.—*Public Works Secretary*
4. Laws make it easier to do our job. The city's adopted the codes so I can show I'm not making up the rules. In most cases I can say "I don't have any leeway." It provides me with an out if someone wants to argue with me.—*Fire Codes Inspector*
5. The biggest problem in our department is a "policy of the week" syndrome. Informal rules are put in place and things are changing all the time. Other departments don't have these policies; it creates chaos and confusion. For example, our director made a new rule saying that if you have over nine incidences of six leave in six months, you can be demoted, suspended or fired. That's not a city policy and it's not right! The city is one entity, not individual islands. Rules should be signed off by human resources and two weeks notice given. Here's another example: our director announced that no more overtime would be paid, that we would only be paid straight time. I knew the rule was illegal and called a lawyer about it. It violates state labor law. And guess what? The rule went away.—*Wastewater Treatment Plant Foreman*

*Note:* Excerpts from interviews with 90 employees of four cities in a Midwestern state. Interviewees were responding to a question about good and bad rules in their workplace, however they defined the terms.

factor in the push for formalization. That a nonunionized fire department needed to document rules to enforce them underscores the empowerment function of written requirements.

Written rules were also valued by city employees for their ability to neutralize the appearance of their own authority, thereby making rule requirements more palatable to the regulated. To illustrate, one city's written snow removal policy enabled a secretary to demonstrate to irate citizens—after her verbal explanation failed to persuade—that snow plowing patterns were dispassionately and methodically planned and not devised by her personally (table 1[3]). In a different strategy, a fire codes inspector cited written rules to distance himself from code requirements and emphasize his lack of discretion. In doing so, he diverted attention from his own authority and increased the willingness of recalcitrant business owners to cooperate (table 1[4]).

In contrast with the validating and neutralizing nature of written rules, unwritten rules were sometimes portrayed as invalid and arbitrary. A plant foreman illustrated this observation through a story involving his department director (table 1[5]), who imposed unwritten rules in "policies of the week" that created "chaos and confusion" in his work environment. The director also attempted to eliminate overtime pay for mandatory overtime work, an informal procedural change that proved illegal. The foreman's proposed solution to the dilemma was to require written rules that had to be approved by human resources, with advanced "notice" of implementation given to employees. In his mind,

such a process would vet rules to ensure their organizational validity and to curb the department director's power.

From a scholarly perspective, the idea that written rules empower organizational members may occur through *legitimacy*—defined as “a psychology property of authority that leads those connected to it to believe it to be appropriate, proper, and just” (Tyler 2006). The notion that written rules legitimize required actions dates back to Weber (1947, 332), who listed written rules as a characteristic of rational legal authority, one of three sources of voluntary submission to authority.

The form of legitimacy inherent in written rules pertains to *authorization*, the support of superordinates for a person, action, or position (Ford and Johnson 1998; Zelditch and Walker 1984). Such support imparts organizational power on rule implementers, including the threat of sanctions (Dornbusch and Scott 1975, 60). Without authorization, implementers are viewed as less powerful and thus more vulnerable to noncompliance (Ford and Johnson 1998; Walker and Zelditch 1993; Zelditch and Walker 1984, 17). A lack of authorization power may be particularly undermining for organizational members who lack traditional social power, such as the female plans examiner enforcing city code among mostly male builders (table 1[1]).

The authorization communicated by written rules is also thought to provide regulated parties with valid identities and justifications for compliance in specific situations (Thomas, Walker, and Zelditch 1986, 380). Gouldner's (1954, 155–56) research on industrial bureaucracy supports this contention. In the gypsum plant he studied, a supervisor cited written rules to workers when enforcing disagreeable requirements. This tactic shifted attention away from the supervisor's authority (which highlighted the relative inferiority of the worker, an unacceptable identity) to the authority of the written rule (maintaining the workers' sense of equality with the supervisor, an acceptable identity). The fire codes inspector interviewed for this study behaved similarly: he appealed to the written rules as a way of making it “ok” for business owners to comply with codes perceived as onerous (table 1[4]).

Other organizational effects of written rules are documented in the literature on formalization, defined as the extent of written rules, regulations, and procedures within an organization (Pugh et al. 1968). Formalization has been associated with both positive and negative organizational outcomes. On the positive side, formalization has been theorized to reduce role conflict and role ambiguity, thereby relieving role stress (Jackson and Schuler 1985). These assertions are supported in studies of salespeople (Michaels et al. 1988), technical professionals (Organ and Greene 1981), and professionals and non-professionals (Podsakoff, Williams, and Todor 1986). With regards to negative effects, high levels of formalization imply that superiors prescribe work routines rather than allow workers to decide how things are done (Agarwal 1993). Such prescription, in turn, is expected to aggravate feelings of powerlessness and work's meaninglessness. Supporting evidence links formalization with higher alienation among engineers (Greene 1978), welfare agency workers (Aiken and Hage 1966), and public and private sector employees (Zeffane 1994).

Although these mixed results *prima facie* question the notion that written documentation increases the probability of rule effectiveness, it is important to consider that these studies do not evaluate formalization, nor do they distinguish formalization from red tape. Consequently, it is unclear that the quality of the formalization (such as level of control), not the formalization itself, is influencing the morale or alienation observed in these



studies. (Adler and Borys [1996] made this argument with regards to the differential effects of enabling versus coercive formalization.) With regards to red tape, scholars have observed that formalization and red tape are distinct concepts (Bozeman and Scott 1996; Pandey and Scott 2002), with the former pertaining to the extent of written rules, regulations, and procedures and the latter pertaining to ineffective written rules, regulations, and procedures. Furthermore, one study of both formalization and red tape observed that formalization was associated with lower managerial alienation, whereas red tape was associated with higher managerial alienation (DeHart-Davis and Pandey 2005). Given the uncertain quality of formalization in the studies citing negative organization effects, this literature does not necessarily contradict the theoretical effects of rule documentation on rule effectiveness.

It should also be noted that the theoretical effects of unwritten rules—less legitimacy, weaker empowerment potential, lower perceived neutrality, and, subsequently, a lower likelihood of rule effectiveness—pertain to unwritten bureaucratic policies and not to organizational norms or managerial discretion. Indeed, documenting norms or guidelines for discretion might undercut the informal power of norms or undercut the flexibility and creativity that can arise from discretion. Although determining the conditions under which organizational policy should be documented in writing is beyond the scope of this analysis, future research should seek to identify criteria that organizations use to trigger such formalization.

### Valid Means-Ends Relationships

City employees also evaluated rules according to the perceived validity of their means-ends relationships. Specifically, good rules were identified by means that appeared logically connected to ends, and bad rules were identified by means and ends that did not seem to logically relate to one another. Valid rules tended to be recalled generically, through comments such as *my department's rules are good because they serve their purposes* or *our safety rules do what they are supposed to*. Invalid rules were more specifically recalled. To illustrate, a codes enforcer explained that his city's licensing examination for contractors covered too few of his city's codes to ensure a working knowledge of them, the primary purpose of such a test (table 2[1]). Furthermore, the examination's difficulty made it harder for smaller firms to pass the test, leading some firms to function without a license, further undercutting the goal of qualified contractors. A transportation department head complains about an ordinance requiring all city employees to live within city limits (table 2[2]). The purpose of the rule was to maintain the city's economic viability, but in reality, it limited the city's employment pool and failed to retain shoppers to the extent desired. In the case of the maintenance worker, the city's ban of cell phones in maintenance trucks did not eliminate distractions (such as the radio), the primary goal of the rule (table 2[3]). Furthermore, the ban precluded the use of cell phones as backup when the radio failed, thus undermining the radio's purpose of reliable communications. In each of these cases, rule requirements were perceived as not achieving desired ends and, in some cases, yielded unintended consequences that undermined those ends.

In summary, city employees regarded rules perceived as having invalid means-ends relationships to be fundamental failures that incurred unintended consequences. Their assessment jibes with scholarly perspectives, who note that a rule without validity will not be useful to the organization (Landau and Stout 1979, 153), much less achieve its intended purposes (Bozeman 2000). Further, invalid means-ends relationships are fertile

**Table 2**  
Supporting Excerpts from City Employee Interviews Regarding Valid Means-Ends Relationships

1. My boss was told to pick a licensing test for contractors, so he picked the broadest, which is also the hardest. The problem with it is that only six percent of our code is covered under their test. So contractors learn a bunch of stuff they don't need to know for our codes and don't learn what we need them to. The large firms have people who have taken the test before, but it's harder for the small firms to pass it. And sometimes firms that don't or can't pass the test build anyway.—*Codes Enforcer*
2. The city limit rule makes us lose potential employees who don't apply if they have to move. The mayor and council have a different outlook: if you work here, you should live here, shop here, and pay taxes. That doesn't prevent a lot of folks from traveling to the nearest city to shop for what they can't get here.—*Transportation Department Head*
3. Cell phones are not allowed, but the radios sometimes don't work depending on where you are at in the city. Besides, radios can be just as distracting as the cell phones and are less accessible. We have to get out of the truck to check loads or move things—when we do, we can't hear the radio. With the blue tooth technology, you can have it always with you and hands free even if you've stepped out of the truck to throw garbage.—*Sanitation Worker*

*Note:* Excerpts from interviews with 90 employees of four cities in a Midwestern state. Interviewees were responding to a question about good and "bad" rules in their workplace, however they defined the terms.

ground for unintended consequences: the implementation of *X* requirements means that something, *Z*, is going to happen, just not the *Y* outcome originally planned. Although not all unintended consequences are organizationally adverse, at a minimum, they represent unplanned and unauthorized action that may drain organizational resources.

In addition to providing the "blueprint" for a rule, valid means-ends relationships also convey the rationality of organizational activities (Berger, Berger, and Kellner 1973, 45, 53; Landau and Stout 1979). The appearance of rationality is particularly important for bureaucracies, for whom means and ends are the "technology" used to carry out abstract activities (Berger, Berger, and Kellner 1973, 42). The absence of valid means-ends relationships reduces the comprehensibility of social arrangements, which are critical to stakeholder support and cooperation (Ashforth and Gibbs 1990). Extending these propositions to rules, valid means-ends relationships legitimate rules by conveying their rational bases, thus facilitating stakeholder cooperation with implementation and enabling the effective pursuit of rule objectives.

The validity of a rule is akin to *accurate behavioral forecasts*, drawn from red tape scholarship. Accurate behavioral forecasts pertain to causal relationships between rule requirements and desired behavior, the knowledge of which public managers are encouraged to pursue through trial and error (Bozeman 2000; Landau and Stout 1979). In contrast with the experimentation approach of accurate behavioral forecasts, valid means-ends relationships emphasize careful managerial reasoning during rule formulation. Front-end reasoning is emphasized over trial-and-error experimentation because there is little evidence that public managers have the time or the inclination to experiment. And while both accurate behavioral forecasts and valid means-ends relationships seek effective rule mechanisms, valid means-ends relationships also seek to legitimate rules to stakeholders by conveying the rationality of their requirements.

### Optimal Control

Rules were also evaluated for the level of control they imposed. Good rules imposed what was perceived as just the right amount of control, whereas bad rules were perceived as



imposing control beyond that needed to achieve rule objectives. (Undercontrol surfaced during interviews as a topic related to rules but tended to be associated with a lack of rules rather than an attribute of established rules.). Optimally controlling rules were spoken of as *reasonable*, *not too picky*, and *flexible*, whereas overcontrolling rules were referred to as *nitpicking*, *picky*, *silly*, and *inflexible*.

In the first example of perceived rule overcontrol, the requirement to obtain permission to adjust even a penny to a customer's account reduced the speed with which the representative assisted customers (table 3[1]). In the second example of perceived overcontrol, a patrol officer sees speed limit restrictions on police chases as limiting his ability to catch speeding motorists (table 3[2]). Third, a building inspector regards his city's building foundation requirements as beyond the minimum needed to prevent frost damage (table 3[3]). These illustrations of overcontrol suggest that there exists an optimal level of control for achieving rule objectives, whether it is a maximum dollar amount that facilitates adjusting utility bills, a "little faster" speed limit to aid traffic stops, or a minimum foundation requirement that prevents frost damage. Exceeding these thresholds is perceived as inefficient and counterproductive to performance, which in these cases involve quickly processing citizens, catching traffic violators, or imposing effective building development requirements.

Rule overcontrol was also associated by some employees as a matter of managerial trust in employees. A public works administrative assistant interpreted the accounting department's follow-up questions regarding reimbursement requests as distrust in her department's capability to ensure the validity of such claims (table 3[4]). A police officer notes that the installation of Automatic Vehicle Location Systems in police cars—which record interactions with citizens and monitor officer location and vehicle speed—are perceived by officers as ironic distrust, given that the public trusts them with guns (table 3[5]). Finally, an assistant human resource director notes that time clocks have been resisted by her city's upper management because of the distrust that such a system would convey employees, despite the increased operational efficiencies provided by such a system (table 3[6]).

From a scholarly perspective, the notion of optimal bureaucratic structure is not a new one: organizations are thought to seek optimal levels of bureaucratization based on rational decision processes (Wintrobe 1982), optimal managerial control has been conceptually linked to organizational effectiveness (Bozeman 2000, 95), and optimal levels of rules for particular organizational sizes and sectors have been proposed as a diagnostic tool for red tape (Bretschneider and Bozeman 1995). Although the interview data and scholarly writings emphasize overcontrol, (Landau and Stout 1979), managerial undercontrol can undercut organizational effectiveness and must be considered in crafting an effective rule (Bozeman 2000, 95).

The primary benefit of an optimally controlling requirement is the efficient pursuit of rule objectives, achieved through the imposition of minimum constraint necessary for achieving rule objectives. By comparison, undercontrolling rules impose inadequate constraints for achieving rule objectives and thus waste resources (Bozeman 2000, 95), whereas overcontrolling rules impose more constraint than necessary for achieving rule objectives and waste resources (Bozeman 2000; Landau and Stout 1979).

Optimally controlling rules also provide two social psychological benefits that mirror the social psychological costs of undercontrol and overcontrol. First, optimally controlling rules convey a commitment to achieving desired objectives, as opposed to undercontrolling rules which can indicate an insincere or superficial commitment to rule objectives. This

**Table 3**  
Supporting Excerpts from City Employee Interviews Regarding Control

1. We have a rule that requires me to seek authorization for adjustments to utility bills regardless of how small the amount. It's a waste of time, both mine and customers. Please give me a dollar amount below which I can authorize it myself.—*Customer Service Representative*
2. We have too many rules that prevent us from doing our jobs. The speed cap is bad. What if I'm pulled over to the side of the road and someone blazes by me? I won't be able to catch them because I can't go 15 miles per hour over the speed limit in the city. If I could go a little faster, I could do a better job.—*Traffic Patrol Officer*
3. Our foundation requirements recently increased, although there is no evidence that a thicker foundation (34 inches) is better than 30 inches for reducing frost damage. This came about because the new building code gave gray area, so our building officer picked a number based on informal research, including what other cities were using. In thousands of inspections I've done, I've never seen frost damage from thirty inches.—*Building Inspector*
4. Sometimes, we get nitpicked about justification for invoices, like buying clothing. There are too many questions. It's the supervisors' jobs to ensure purchases are approved. It's as if they don't trust us that we are doing our jobs properly.—*Public Works Administrative Assistant*
5. The AVL also has locators that are used to track location and movement of officers. Some officers feel like supervisors are micromanaging their movements and how long they remain parked in a location. They feel it's an issue of trust. "Why don't you trust us? You've trusted us enough to give us a gun."—*Police Officer*
6. We need time clocks, which upper management has resisted because in their minds it says they don't trust employees. Too much hassle, they say. But it would be more efficient for payroll processing; the data could go directly to her computer. It would also provide better accountability and lower liability: right now we can't prove that an employee was not at work when hurt because we only know the amount of hours and not the times worked.—*Assistant Human Resource Director*

*Note:* Excerpts from interviews with 90 employees of four cities in a Midwestern state. Interviewees were responding to a question about "good" and bad rules in their workplace, however they defined the terms.

contention is supported by the theory that organizational structure is sometimes "ceremonial," implemented to signal legitimacy, but relegated to the organizational outskirts to prevent inspection from revealing its superficial nature (Meyer and Rowan 1977). Although undercontrolling rules can be intentional or unintentional, they are nonetheless thought to alienate stakeholders by conveying normlessness that, in turn, can trigger rebellion or superficial compliance (Barakat 1969).

Second, optimally controlling rules communicate organizational trust, defined here as "a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or the behavior of another" (Rousseau et al. 1998, 395). In the context of green tape, the minimal constraint imposed by optimally controlling rules—just enough to elicit desired outcomes—conveys that rule makers expect stakeholders to comply with rule requirements and accept the vulnerability of noncompliance with minimal constraint. Conversely, excessively controlling rules communicate that rule formulators are not willing to risk stakeholder noncompliance with lesser controlling rules. These arguments are consistent with the notion that there exists a threshold of control at which trust is communicated and beyond which distrust is communicated (Dekker 2004, 34). In turn, the messages of trust thought to emanate from optimally controlling rules are expected to increase cooperation with rule implementation. This contention is based on theory and evidence of trust responsiveness, which holds that individuals who feel trusted behave in trustworthy ways based on a desire to meet the truster's expectations (Bacharach,

Guerra, and Zizzo et al. 2001; Braithwaite and Makkai 1993; Guerra and Zizzo 2002; Pettit 1995). By contrast, the message of distrust theoretically conveyed by overcontrolling rules is expected to lower cooperation with rule implementation, a contention supported by experimental evidence that distrust is a “hidden cost” of control that lowers motivation and performance (Falk and Kosfeld 2004; Frey 1993).

Assembling these strands of thought, optimally controlling rules are thought to exist on a sort of “dose-response” curve. Control above the optimal level is thought to undercut rule efficiency and convey distrust. Control below the optimal level is expected to fail to achieve objectives and appear insincere to stakeholders. Optimal control, by contrast, is anticipated to efficiently achieve rule objectives and communicate the organizational sincerity of rule objectives and trust that stakeholders will cooperate in rule implementation without the need for additional constraints.

Of course, the notion of a dose-response curve of control raises the question of how one identifies optimality. Similar questions have been raised in the literature on street-level bureaucracy, which contends that front-line workers bend and manipulate rules in ways that, in affect, alter public policy (see Riccucci 2005 for an overview). This discretionary behavior has led some to argue for tighter controls that align such behavior with authoritative preferences (e.g., Brehm and Gates 1997), whereas others make the case for training front-line workers in moral reasoning to facilitate sound discretionary behavior (e.g., Maynard-Moody and Musheno 2003). Although the quest for optimal control may look like a Miles’ law dilemma, in which “where you stand depends on where you sit,” the process may be as straightforward as organizational decision makers anticipating the consequences of current levels of rule control and then deciding whether to live with those consequences or alter rule controls to yield more acceptable consequences. (One city manager took just such an approach by refusing to install time clocks for hourly employees because of his belief that such an action would communicate distrust to employees.) Although this approach may appear to require a rational decision approach, it fits within a bounded rationality framework in which decision makers, possibly lacking unified authority, identify options and anticipate consequences all within limited understanding and processing capacities (Simon 1997). Thus, while the quest for optimal control will inevitably produce imperfect estimates, it will do so with an awareness of the potential inefficiencies and social psychological consequences of excessive or inadequate control.

### **Consistent Rule Application**

The consistent application of rules also surfaced as an important criterion for determining rule quality. Good rules were identified by consistency of application, whereas bad rules were identified as those inconsistently applied. City employees noted that rules could be consistently or inconsistently applied to citizens, employees, and departments.

A streets and maintenance department head commented on his city commission’s tendency to overturn city policies for individual citizens (table 4[1]). In response, he had learned not to enforce rules among landowners who frequently voiced their disagreement to the commission. Doing so would waste his time when the outcome—city commission capitulation—appeared inevitable. From his perspective, city policies applied only to those citizens ignorant of their ability—or lacking the resources—to successfully seek exceptions. A dispatch operator observed that some employees were required to comply with procedures, whereas others were not, although she was not sure why. This led her to

**Table 4**  
Supporting Excerpts from City Employee Interviews Regarding Consistent Rule Application

1. The city has good policies that are overturned by the commission. If you are explaining a rule to a landowner and a landowner disagrees, and they complain to the commission, the commission will overturn it. The squeaky wheels get the grease. Not all citizens know this.—*Streets and Maintenance Department Head*
2. Our department's procedures are unevenly enforced. For example, during slow times, we are supposed to check warrants. Some do, others don't. Some who don't are written up, others who don't are not. It could be nepotism—one guy's father is a city official—or it could be that there are only three guys versus eight women in our unit. One of these guys who gets away with not following the rules, people just say, "Well that's just how he is, he's been here for a long time."—*Senior Dispatch Operator*
3. Bad policies and procedures are not equal or uniform. One department head was let out of complying with a rule because he had already promised employees that they didn't have to comply with it; he'd known the city manager for a long time. Here's another example: a coworker and I worked out of classification for three months to take over the role of a retiring coworker until she left. We received no compensation, no nothing. Another department is in the process of rewarding pay out of classification retroactively. This is not fair. Reduce department head discretion and hold all employees to the same standards.—*Administrative Assistant in Human Resources*
4. I don't like it that departments make up rules by themselves. It makes it hard for me to enforce city rules. I can't enforce no-smoking while working in the shop because the public works and utility guys are allowed to smoke in their sheds.—*Director of Parks and Recreation*
5. Departments have leeway to make their own rules. Every department is different. Wastewater is different from fire. The nature of the work makes the rules.—*Custodian*

*Note:* Excerpts from interviews with 90 employees of four cities in a Midwestern state. Interviewees were responding to a question about good and bad rules in their workplace, however they defined the terms.

speculate the reasons: nepotism, gender, or city tenure (table 4[2]). To the administrative assistant in human resources, allowing department heads to depart from city rules resulted in differential standards and rewards for employees (table 4[3]). Her solution for mitigating these inequities was to reduce department head discretion. From an upper management perspective, the parks and recreation director felt that inconsistent departmental compliance with rules undermined her ability to enforce city-wide rules (table 4[4]).

Within each of these categories of inconsistent rule application, fairness surfaced as the underlying theme. Consistently applying rules to citizens was largely viewed as an issue of justice; conversely, city workers expressed a sense of injustice on behalf of citizens when rule application favored some citizens over others. The managerial favoritism perceived to drive inconsistent rule application took on a more personal nature, with employees speculating about the attributes that earned certain employees managerial regard. And perceptions that city-wide rules applied to some departments and not others triggered feelings of organizational inequity.

It is important to note that the city employees interviewed were not advocating against exceptions to rules: their comments pertained to rules systematically inconsistent, favoring certain individuals or departments in their application. Nor did commentators wish to preclude rule differences by departments: one custodian notes that differences in the nature of departmental work led to different rules, and rightly so (table 4[5]).

The association of consistent rule application with organizational fairness jibes with the role of consistent procedural application as one of six theoretical dimensions of procedural justice, which pertains to individual perceptions of fairness in administrative processes (Leventhal 1980, 35). Although procedural fairness originally focused on

procedures that distribute rewards and punishment, the concept has been generalized to authoritative procedures in general (Tyler 2006). Subsequently, consistent application has been empirically correlated with procedural justice in experiments with university students (Colquitt and Jackson 2006; Sheppard and Lewicki 1987; Van den Bos, Vermunte, and Wilke 1996), multinational corporate managers (Kim and Mauborgne 1991), and citizens (Tyler 1990, 1991). Furthermore, procedural consistency has also been ranked by study subjects as one of, if not, the most important of the six procedural justice principles (Barrett-Howard and Tyler 1986; Greenberg 1986).

The underling assumption of procedural justice is that fair procedures induce cooperation with mandatory requirements and thus preclude the need to evoke reward and punishment—a costly strategy—as the sole means of securing compliance. Recent studies addressing the social psychological mechanisms of this inducement tap social categorization theory, which focuses on the role of groups in shaping how individuals define themselves (Tyler and Blader 2001). According to this line of thinking, procedural fairness communicates information to individual group members about their value, social status and belonging, and lowers feelings of uncertainty (De Cremer and Tyler 2005). These and other aspects of social identity, in turn, motivate individuals to comply with rules (Tyler and Blader 2001, 2003).

A significant body of evidence supports this contention, through findings that organizations who exercise authority through fair procedures have their rules accepted more willingly by stakeholders than organizations with less fair procedures (Tyler 2000; Tyler and Blader 2001). In particular, procedural fairness has been correlated with a lower likelihood of negative work behaviors (Cohen and Spector 2001) and a higher likelihood of organizational citizenship behaviors such as survey participation (Spitzmüller et al. 2006). Procedural justice has also been linked to higher rates of compliance with organizational requirements (Friedland, Thibaut, and Walker 1973; Kim and Mauborgne 1993; Robbins, Summers, and Miller 2000; Thibaut, Friedland, and Walker 1974; Tyler 1991), as well as government regulation (Murphy 2004; Tyler and Degoe 1995). Based on this theory and evidence, consistent rule application—as a form of procedural fairness—is included as an element of effective rules for its potential to strengthen stakeholder cooperation with organizational rule requirements.

### **Purposes Understood by Stakeholders**

City employees also evaluated rules based on their understanding of rule purposes: good rules had understandable purposes, whereas bad rules lacked understandable purposes. Furthermore, learning a rule's purpose could transform it from being perceived as a bad rule into a good rule. To illustrate, travel reimbursement forms seemed "stupid" to the fire department administrative assistant until she comprehended their broader purpose (table 5[1]), whereas rules whose purposes were explained to a maintenance worker "made sense" and thus were not "bad" (table 5[2]).

Comprehending rule purposes seemed to make compliance more acceptable and less burdensome. To illustrate, a custodian's knowledge that the clean uniform rule sought to project a positive image of the city seemed to make the mental costs of compliance—fretting over uniform stains—more tolerable (table 5[3]). A public works secretary noted that understanding rule purposes enabled her to "adhere more fully" to rules, implying that the extent of compliance depends on knowing the goal of compliance (table 5[4]).

**Table 5**  
Supporting Excerpts from City Employee Interviews Regarding Rule Purposes

1. At first, travel reimbursement forms seemed stupid, but then you see the bigger picture.—*Fire Department Administrative Assistant*
2. I'll ask other employees why a rule is in place. They tell me and then the rule makes sense. I don't see any bad rules.—*Maintenance Worker*
3. My department requires us to wear clean uniforms. I'm a dirty worker, so this means I'm not as comfortable as I could be. But I understand: I have to think about how I look to the public, to the taxpayers who fund us.—*Custodian*
4. Because I take time to understand rules, I have a fuller knowledge of their purpose. I can adhere more fully than employees removed from the source of rules—*Public Works Senior Executive Secretary*
5. We have folks who don't understand rules, are ignorant of them. We try very hard to explain to folks why you have to do these things. If people understand that having a fence around a pool in the backyard is important because so many kids die per year drowning in pools, they understand. We give reasons. When you explain rules you get better results.—*Building Official*
6. Collared shirts are required by the city for those working in the field. I don't know the purpose for the requirement; it seems to make us all look the same.—*Parks and Recreation Supervisor*
7. The rules don't make no sense. Some trees can be cut, others can't. It depends on if you're a somebody or a nobody.—*Transportation Foreman on rules about cutting trees that hang over the sidewalk but are located on private property*

*Note:* Excerpts from interviews with 90 employees of four cities in a Midwestern state. Interviewees were responding to a question about good and bad rules in their workplace, however they defined the terms.

Discernible rule purposes also made compliance with city codes more palatable to homeowners, according to a building official who viewed educating citizens about rule purposes as part and parcel of his job (table 5[5]).

In the absence of discernible rule purposes, employees tended to speculate organizational intentions. To illustrate, the parks and recreation supervisor surmised that her department's collared shirt rule intended to homogenize worker appearance (table 5[6]), whereas the transportation foreman attributed inscrutable tree-trimming protocols to a system that favored socially prominent citizens (table 5[7]). Just as nature abhors a vacuum, employees disliked rules lacking discernible purposes and tended to impart on them their own (typically malevolent) organizational intent.

In summary, city employees interviewed for this study tended to demonstrate greater acceptance of rules characterized by purposes that they comprehended. This pattern supports the broader notion that understanding the goal of work makes it more meaningful and easier to perform (Hummel 1994, 111). Empirically, individuals who comprehend the social purposes of a law have been observed indicating a greater willingness to comply with them (Brown 1974). And within the private sector management literature, procedures with transparent means and ends have been argued to enable workers to contribute substantively to organizational processes (Adler and Borys 1996).

Scholarship on workplace alienation helps to conceptually link understood purposes with stakeholder cooperation with rule requirements. Workplace alienation, conceptualized as a general cognitive state of psychological disconnection from work (Kanungo 1979), is characterized in part by the absence of intrinsically meaningful activity (Seeman 1959). One way that work loses meaningfulness is by increasingly complex divisions of labor that reduce an employee's ability to see his or her contribution to the "larger logic of production processes" (Erikson 1986). When end purposes are obscured, required activities



**Table 6**  
Green Tape Elements, Mechanisms, and Effects

Element	Mechanism	Effects
Written rules	Legitimize rule requirements	Empower rule implementers Facilitate compliance
Valid means-ends relationships	Provide theoretical blueprint Convey rule rationality	Enable effective pursuit of rule objectives Elicit stakeholder cooperation
Optimal control	Achieves rule objectives without hampering organizational functions Conveys priority of rule objectives Communicates trust in stakeholders	Enables efficient pursuit of rule objectives Elicits stakeholder cooperation
Consistent application	Conveys procedural fairness	Elicits stakeholder cooperation
Understood purposes	Impart meaningfulness on requirements	Elicit stakeholder cooperation

appear meaningless and, in response, the employee emotionally distances themselves from work. This emotional distance facilitates deviation from rules and norms, as suggested by research on scientist alienation and deviation from scientific norms (Braxton 1993).

Extending the concepts of workplace alienation to green tape, compliance with seemingly purposeless rules constitutes meaningless activity that alienates stakeholders and reduces the likelihood of cooperation with rule requirements. By contrast, rules with understood purposes impart meaning on rules requirements that connect employees to their work environment and enable workers to see themselves as more than just cogs in the bureaucratic machinery. This meaning, in turn, is expected to increase stakeholder cooperation in rule implementation.

### Summary

Table 6 identifies the five attributes of green tape, their theoretical effects on rule effectiveness, and the mechanisms thought to trigger those effects. Written rules are included as a green tape attribute for empowering rule implementation and facilitating compliance. A valid means-ends relationship, in which rule requirements logically yield desired outcomes, provides the theoretical “blueprint” that increases the effective pursuit of rule objectives. Valid means-ends relationships are also expected to convey a rationality that elicits stakeholder cooperation. Optimally controlling requirements should enable the efficient pursuit of rule objectives while communicating organizational trust and priority, both of which are expected to increase stakeholder cooperation. Consistent application of rules—in which no particular groups or individuals are systematically exempt from its requirements—is procedurally fair and expected to increase stakeholder cooperation. And understanding rule purposes is anticipated to increase the meaningfulness of rule requirements and thus elicit greater cooperation for rule implementation.

It should be noted that each green tape element is conceptualized as a necessary but individually insufficient condition for producing an effective rule. For example, written rules legitimize requirements but without valid means-ends relationships will probably not

achieve rule objectives. Rules with valid means-ends relationships increase the probability that rule objectives will be achieved but will be less likely to do so if stakeholders do not comprehend rule purposes and thus do not cooperate in rule implementation. Rules that are consistently applied but overly controlling may appear fair to stakeholders, but the appearance of managerial distrust may undermine cooperation. And rule purposes may be understood by stakeholders but without valid means-ends relationships may not elicit the cooperation needed for rule implementation. Thus, the theoretical production of an effective rule requires the simultaneous presence of all five rule attributes.

## DISCUSSION

The five theoretical attributes of green tape seek to achieve values associated with normally functioning bureaucracy: accountability and legitimate authority (promoted by written rules), the wise use of public resources (advanced by valid relationships between rule means and ends), managerial efficiency (facilitated by optimal control), fairness in the distribution of public resources (assisted by consistent rule application), and transparency (furthered by stakeholder understanding of rule purposes). These ends are sought by the design and implementation of rules that achieve technical proficiency as well as stakeholder acceptability.

The dual emphasis on technical proficiency and stakeholder cooperation gives green tape theory strong overtones of the human relations managerial philosophy. For example, the informal organization that surfaces in unwritten organizational policies and inconsistent rule application is consistent with Mayo's (1933) detection of an informal organization that influences work behavior. The neutrality of written rules and its theoretical effects on stakeholder cooperation with rule requirements echoes the works of Follett (1924; Graham 1995, 121–39) and Barnard (1938), both who argue that neutrally perceived authority is more likely to induce cooperation from compliant parties than authority perceived as arbitrary, personal, or biased. Just as Herzberg's (1966) asserted that the work environment affects individual identity and status, consistent rule application is expected to communicate identity and status to those required (or not) to comply. The idea that public employees will abide by optimally controlling rules because optimal control communicate trustworthiness is akin to McGregor's (1960) assertion that workers will be valuable organizational contributors if treated as such. With regards to the validity of means-ends relationships and the extent to which stakeholders understand purposes, Barnard (1938) also argues that authority will most likely be accepted if authoritative communications are understandable, consistent with the organization's purpose, and likely to render the organization more effective. Although this is not an exhaustive analysis of the linkages between green tape and human relations managerial philosophies, it indicates some of commonalities between the two.

In building green tape theory on subjective perceptions of rules, less emphasis has been placed on positing and testing explicit linkages between stakeholder cooperation and rule effectiveness beyond simple expectations of increased compliance. This is both a weakness of the theory and an opportunity for future research. As a result, it is not clear that green tape is not simply a theory of subjective preferences with little bearing on rule effectiveness. Only future research can test this counterargument. With this caveat in mind, the next section examines the construct validity of green tape theory using perceptions of rule attributes and effectiveness collected through mail surveys of city employees.

## CONSTRUCT VALIDITY OF GREEN TAPE THEORY

Green tape theory asserts that the combined presence of five rule attributes increases the probability of rule effectiveness: (1) written requirements (2) with valid means-ends relationships that are (3) consistently applied, (4) optimally controlling, and (5) that have purposes understood by stakeholders. Each attribute plays a theoretical role in a rule's technical capacity or acceptability to stakeholders. Analyses of the interim mechanisms by which these attributes elicit rule effectiveness—for example, legitimacy and procedural fairness—are beyond the scope of available data. However, data are available to investigate the theory's construct validity, with bivariate correlations and principal component analysis employed to test the relationships between these attributes and rule effectiveness. The Appendix describes the measures used in this exercise.

### Bivariate Correlations

A common method for evaluating the validity of a theoretical construct is to examine the extent to which its measures positively correlate with measures of logically similar concepts (convergent validity) and negatively correlate with measures of logically distinct concepts (divergent validity). The convergent validity of the green tape construct is tested by correlating the five green tape attributes with perceived rule effectiveness, with positive statistically significant relationships expected. Divergent validity is tested by correlating the five green tape attributes with perceived organizational red tape, with negative statistically significant relationships expected. Evidence of divergent validity will also be found in a negative correlation between rule effectiveness and red tape.

The results of this analysis (table 7) indicate convergent and discriminant validity of the green tape construct. All five green tape attributes positively correlate with rule effectiveness and negatively correlate with red tape, as expected. Rule effectiveness and red tape are negatively correlated, which is also consistent with expectations. All correlations

**Table 7**  
Correlations between Green Tape Attributes, Perceived Rule Effectiveness, and Red Tape

	Rule Effectiveness	Red Tape	Written Requirements	Valid Means-Ends Relationships	Consistent Application	Optimally Controlling	Purposes Understood
Rule effectiveness	1.00						
Red tape	-0.32	1.00					
Written requirements	0.47	-0.13	1.00				
Valid means-ends relationships	0.40	-0.27	0.32	1.00			
Consistent application	0.72	-0.37	0.45	0.48	1.00		
Optimally controlling	0.49	-0.37	0.36	0.52	0.54	1.00	
Purposes understood	0.67	-0.31	0.63	0.36	0.62	0.57	1.00

Note: All correlations are significant at the  $p < .01$  level.

**Table 8**  
Principle Component Analysis of Green Tape Measures

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.97	59.37	59.37	2.97	59.37	59.37
2	0.81	16.10	75.46			
3	0.54	10.80	86.26			
4	0.44	8.71	94.96			
5	0.25	5.04	100.00			

are significant at the  $p < .01$  level. These results provide initial evidence of the construct validity of green tape theory.

**Principle Component Analysis**

Principal component analysis with varimax rotation is used to test the dimensionality of the five green tape attributes, with an eye toward identifying dimensions in the measures of green tape attributes. If the five theoretical attributes of green tape represent a single underlying and shared reality, then principle component analysis should reveal a single dimension that captures a high level of common variance among the factors. By contrast, the assertion’s validity will be undermined by low levels of common variance or multiple subdimensions among the five attributes.

Although this exercise yielded five components (table 8), only one component generated an eigenvalue over 1, suggesting that the theoretical green tape attributes represent a single latent construct. Furthermore, the extracted factor captures nearly 60% of the variance in the measures, indicating the extent to which these attributes share an underlying reality. All five attributes exhibit high, positive factor loadings (table 9).

**Summary**

Bivariate correlations and principle component analysis support the validity of the green tape construct. Specifically, the five theoretical attributes of green tape exhibit convergent validity via significant positive correlations with rule effectiveness and divergent validity via significant negative correlations with red tape. Principle component analysis suggests that the measures share a single underlying reality. However, three caveats to these analyses should be noted. First, the inductively devised measures of green tape lack the

**Table 9**  
Factor Loadings for Green Tape Component #1

	Factor Loadings
Written	0.71
Valid	0.67
Consistently applied	0.81
Optimally controlling	0.80
Purposes understood	0.85

empirical track record of the established measures used in this study. For example, the red tape measure used in this study was developed over a decade ago (Rainey, Pandey, and Bozeman 1995), was tested for construct validity (Pandey and Scott 2002), and has been employed as both dependent and independent variables in dozens of studies (most recently Moynihan and Pandey 2007 and Turaga and Bozeman 2005). Second, the Cronbach's alphas for two of the scalar measures used (written and optimal control) are below the 0.70 threshold typically considered an acceptable measure. Third, the measures of rule effectiveness and valid means-ends relationships consist of survey responses to single survey items; thus, reliability cannot be calculated. Accordingly, improving the measurement of the theoretical attributes of green tape is a topic worthy of future investigation.

## CONCLUSION

In critiquing Bozeman's *Red Tape and Bureaucracy*, Goodsell (2000, 375) praised the book's value, noting its introduction of a valuable and testable theory of red tape. His only criticism was more a general complaint: that scholars have focused on "rules as a problem to be solved rather than an indispensable feature of democrat governance." His critique ends with a plea for researchers to figure out how to craft better bureaucratic rules.

This article responds to Goodsell's appeal by proposing a theory of green tape or effective rules. The theory identifies five attributes of a rule expected to increase both its technical capacity and acceptability to stakeholders. The inclusion of both technical capacity and stakeholder acceptance recognizes that the most perfectly designed rule will fail without the cooperation of those who must explain, enforce, or comply with the rule. Thus, the theoretical attributes of green tape—written, logical requirements that are consistently applied, optimally controlling and with purposes understood by stakeholders—create technically proficient rules that communicate legitimacy and procedural fairness, meaning and rationality, organizational trust, and priority to stakeholders. These elements, in turn, are thought to increase stakeholder acceptance of and cooperation with rule requirements.

Grounded in the voices of custodians and secretaries, human resource executives and firefighters, trash collectors, and department heads, the theory is based on a wider range of hierarchical viewpoints than typically considered in the contemporary rules and red tape literature. This expansion of perspectives has yielded rich and credible evidence for the development of a theory that appears to be conceptually valid. But much work remains to fully test theoretical validity. In particular, the mechanisms of rule attributes, their interdependencies, and the relative contribution of each attribute to rule effectiveness requires further analytical attention. Replicating the study outside a city organization context will be useful for examining the theory's generalizability. This article lays the groundwork for these endeavors, in the hopes that future studies will follow.

APPENDIX

Green Tape, Rule Effectiveness, and Red Tape Measures

Construct	Survey Item	Response Set	Source	Mean	SD
Rule effectiveness	The extent to which workplace rules are ineffective to effective	0–4	City employee interviews	2.26	0.99
Red tape	If red tape is defined as burdensome administrative policies and procedures that have negative effects on the city’s performance, please assess the level of red tape in the city of _____:	0–10	Rainey, Pandey, and Bozeman (1995)	6.01	2.46
Written (summative scale, Cronbach’s Alpha = 0.61)	The extent to which workplace rules are unwritten to written	0–4	Interview data	2.74	1.14
	Problematic nature of unwritten rules (reversed)	0 = Major Problem 1 = Somewhat a Problem 2 = Not a Problem	Interview data	1.20	0.72
Valid means-ends relationships	Whatever situation arises, my department has written policies and procedures to follow.	0 = Strongly Disagree to 3 = Strongly Agree	Aiken and Haige (1966)	1.55	0.82
	Problematic nature of rules that fail to serve their intended purposes (reversed)	0 = Major Problem 1 = Somewhat a Problem 2 = Not a Problem	Adapted from Bozeman (2000)	1.28	0.65
Consistent application (summative scale, Cronbach’s Alpha = 0.79)	Problematic nature of rules enforced unevenly across department	0 = Major Problem 1 = Somewhat a Problem 2 = Not a Problem	Interview data	0.92	0.73
	Problematic nature of enforced unevenly across department employees	0 = Major Problem 1 = Somewhat a Problem 2 = Not a Problem	Interview data	1.03	0.79
	The extent to which workplace rules are inconsistently applied to consistently applied	0–4	Interview data	2.03	1.20
	The extent to which workplace rules are applied to some employees to applied to all employees	0–4	Interview data	1.99	1.35

Continued



## APPENDIX (continued)

Construct	Survey Item	Response Set	Source	Mean	SD
Optimal control (summative scale, Cronbach's Alpha = 0.65)	Problematic nature of burdensome departmental rules	0 = Major Problem 1 = Somewhat a Problem 2 = Not a Problem	Interview data	1.44	0.63
	Problematic nature of unnecessary departmental rules	0 = Major Problem 1 = Somewhat a Problem 2 = Not a Problem	Interview data	1.37	0.64
	The extent to which workplace rules are unreasonable to reasonable	0-4	Interview data	2.56	0.97
Understood purposes (summative scale, Cronbach's Alpha = 0.73)	The extent to which workplace rules are unclear to clear	0-4	Interview data	2.49	1.06
	The extent to which workplace rules are not understandable to understandable	0-4	Interview data	2.46	0.98
	For the most part, the policies and procedures in my department make sense	0 = Strongly Disagree to 3 = Strongly Agree	Interview data	1.87	0.84

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