

The Consequences of Specialized Governance on Spending and Expansion of Public Transit*

Christopher B. Goodman[†] *Northern Illinois University*

Suzanne M. Leland *University of North Carolina at Charlotte*

Olga Smirnova *East Carolina University*

Special purpose governments are commonly characterized as hidden governments with less taxpayer accountability and can issue debt (Foster 1997; Greer 2016). However, little research has been conducted to see if operating and capital expenses are driven by the public's perception of need or are a policy consequence of functional specialization. The following study tests how problem salience and form of government interact to impact local governments' expenditures. We use National Transit Data (2013-2014) to test these moderating relationships. Our findings indicate that at least in the context of public transit, service area characteristics play a larger role in the spending and expansion than either the form of government or issue salience (as measured in this paper). This also indicates that the moderating effect of salience and governance (Mullin 2008) does not appear to be significant for public transit policy.

Keywords: special districts, issue salience, expenditures, public budgeting, transportation policy

Introduction

Special purpose governments (special districts, authorities and government corporations) have rapidly spread in popularity as an alternative service delivery mechanism at the local level (Miller 2002; Macedo 2005; Hooghe and Marks 2009; Martell 2007; Heikkila and Isett 2007). While they typically have narrow missions, serve a specific area, have less diversified economic bases, and limited tax bases, they still generally possess the powers to tax and issue debt authorized by state law (Greer 2016). According to the US Census Bureau definition, special purpose governments have sufficient administrative autonomy and fiscal autonomy to be considered separate governments (U.S. Census Bureau 2013). Special purpose governments are political subdivisions and have legal rights and duties. Sometimes referred to as public corporations, they provide various services such as fire protection, water, public transit, library districts and conservation.

This study compares special purpose governments' operating and capital expenditures for expansion when compared to general purpose governments (cities and counties) while controlling for need. We focus on this distinction for two reasons. First, special purpose governments are the fastest growing form of US local government and can typically incur large amounts of debt (Foster 1997; Martell 2007; Greer 2016). In fact, special purpose government growth is viewed as the key driver of local government debt and because these governments have limited economic bases, they also bring about different types of risks in borrowing (Greer 2016).

*Preliminary Draft, Please do not cite or circulate without author's permission.

[†]March 9, 2020

Second, their governance structures are often criticized by the literature as less accountable and less transparent than general purpose governments (Heikkila and Isett 2007). Studies indicate that when compared to cities and counties, citizens are less aware of the debt they issue when it comes to special purpose governments (Martell 2007). They are viewed as more 'hidden from the public because they can have low visibility and no regular election of officers (Foster 1997). This lack of public participation in special purpose governments makes them more susceptible to special interests, in particular private interests who invest in influencing their public officials through lobbying (Burns 1994).

However, there is little empirical evidence that supports the argument that these assumptions are uniform across policy issues and different public services. Only Mullin's (2008) empirical study on water rate structures ties issue salience to differences in forms of government and suggests the responses of different forms of government may be conditioned on issue salience. For these reasons our study looks at the specific conditions in which special purpose governments operate and when they may be most vulnerable to narrower interests than cities or counties because of their lack of public participation. Building upon Mullin's study and the notion that the visibility of special purpose and general-purpose governments may vary to the public based on issue salience, this paper looks at how form of government and measures of issue salience interact to produce different levels of operating expenditures and service expansion.

Public transportation provides an ideal test for understanding the differences between how special purpose governments and general purpose governments respond to problem severity because transit services are provided by different types of governments, and the two largest forms are represented by general purpose (49% of the total) and special purpose governments (30%). The National Transit Database (NTD) includes information on the funds directly generated by transit agencies, various sources of federal funds, different taxes financing public transit along with performance measures and service area characteristics (population and area size). To measure problem severity, we use congestion costs from the Urban Mobility Scorecard (2015) data published by the Texas A&M Transportation Institute. This allows us to test the interaction with form of government and problem severity and examine its impact on spending and expansion.

Governance Arrangements & Fragmentation

In general, special purpose governments increase local government fragmentation by providing a new service or extracting an existing municipal service from a city or county. Under inter-jurisdictional competition models, special purpose governments can provide the optimal scale for specific services because fragmentation creates choice and allocational efficiency (Tiebout 1956). Functional specialization can produce economies of scale (Ostrom, Tiebout, and Warren 1961) and regional flexibility (Olberding 2002; Mullin 2008). This improves accountability due to the creation of multiple access points for the public to give input (Ostrom, Tiebout, and Warren 1961) and because there is now a single group of officials who are responsible for one specific service.

Opponents of local government fragmentation often argue for regionalism because local government fragmentation creates duplication of services and creates additional transactions costs, and therefore reduces the overall efficiency of local governments (Pierce, Johnson, and Hall 1993; Downs 1994; Rusk 1993; Orfield 1997). More narrowly, the critics of special purpose governments contend that they are created not for the purpose of greater efficiency, but instead to circumvent

debt limitations placed on local governments (Sbragia 1996). Also, special purpose governments face different legal requirements with regards to sources of revenue generation.

The literature is generally supportive of the assertion that special purpose governments will spend more than general purpose governments on a particular service; something Foster Foster (1997, 148) calls “the upward spending bias.” Under the public choice or an intergovernmental competition perspective, this upward bias in spending occurs because special purpose governments match the demands for spending with a form of government capable of meeting those demands. Under the regionalist or reform perspective, special purpose governments will spend more because they exploit their monopoly power over a particular service area. Absent the competition between services that exists in general purpose governments, special purpose governments may be less efficient in their service delivery driving up costs (Goodman 2015). Regardless of perspective, the expectation is that special purpose governments will spend more on a service than a general purpose government.

Governance in Public Transit Policy

The search for the most suitable form of government to deliver public services is a reoccurring theme in the public policy and public administration literatures (Burns 1994; Foster 1997; Clinger-mayer and Feiock 2001; Feiock and Kim 2001; Greer 2016). It has been studied to a certain extent in transportation policy because it is viewed as an important institutional arrangement that impacts efficiency and effectiveness (Perry and Babitsky 1986; Leland and Smirnova 2008; Zullo 2008) and federal aid (Smirnova, Leland, and Johnson 2008)), and involves large amounts of public expenditures.

Both Perry and Babitsky (1986) and Leland and Smirnova (2008) look at how different governing arrangements such as special purpose governments and general purpose governments for bus service impact transit efficiency and effectiveness. Perry and Babitsky (1986) found no major differences between different forms of governments, except that privately operated agencies were more efficient. Twenty-five years later, Leland and Smirnova (2008) still do not find major differences between special and general purpose governments, and they also find privately operated agencies are no longer more efficient than government. Both special and general purpose governments that contract out demonstrate lower service efficiency than governments that provide the service in-house. However, the picture is more complicated once we consider responsiveness to citizens in a representative democracy. Therefore, this paper explores the following question: Are general purpose governments or special purpose governments more responsive to issue salience?

Salience of Public Policy Issues

A highly salient issue is defined as one that affects the public in a significant way (Gormley 1986). It has long been viewed as a key element of democratic responsiveness. Citizens that care about a particular problem are more likely to take elected officials actions on that issue into account when voting. This in turn leads elected officials to be particularly responsive to more salient issues (Price 1978; Burstein 2003; Wlezien 2004). Salience is typically low for public policy issues unless it impacts a large number of people to the point where the intensity of the conflict is high, and the scope of the conflict is broad (Gormley 1986; Shattschneider 1960). Issue salience can change

if the underlying problem worsens or improves; demographic conditions change, or an issue is redefined by a policy entrepreneur (Gormley 1986).

Mullin (2008) examines the interaction of specialized governance and issue salience. She finds that governing structure matters depending upon the salience of the problem in the area of water policy. She uses a Heckman probit model to determine the adoption of local progressive water rates by whether the governing body is elected (general purpose governments) or appointed (special districts). Our study builds upon her idea that the policy consequences of delegating policy problems to special purpose governments may be conditional on the severity of the problem and manifest themselves in different levels of operating expenses and probability of spending capital on expansions.

One proxy for issue salience in local public transit provision is congestion. Congestion can become worse because of insufficient capacity due to demographic and geographic changes and/or ineffective management of capacity. Temporary issues such as work zones, bad weather and accidents also contribute to the daily problems. Public transit is seen as an important solution to congestion because it offers alternative modes of transportation other than the automobile and can transport more passengers at once. There are multiple ways congestion is measured. Higher average speeds of a service area may indicate less congested or suburban areas, while the slower average speed¹ of a transit agency may pinpoint agencies located in congested areas or densely populated urban centers. This measure may also be impacted by local speed limits. Texas A&M Transportation Institute publishes the annual Urban Mobility (2015) Report which draws on the traffic speed data, and provides a measure of congestion costs, including congestion costs per commuter. This measure translates the congestion issue into monetary value. The data indicates that the urban areas with the highest density usually have the highest congestion. Therefore, we use the measure of congestion costs as a proxy of issue saliency. Also, it may take several years for citizens to recognize the issue as being important. We use 10-year congestion costs lags to incorporate the time it may take to recognize the congestion as an important factor.

Data and measurements

We utilize the National Transit Database (NTD) for a two-year period, 2013 and 2014. The NTD is a comprehensive source about U.S. transit systems. This data set contains information about individual transit agencies that provide services in mostly urban areas. According to American Public Transportation Association (APTA) in 2015, approximately 98% of transit passenger trips in 2013 were carried out by the agencies contained in the database. Statistics are reported by 849 agencies during the two year period studied for our research. Small agencies receive system waivers if they operate less than 30 vehicles. The recipients of the Urbanized Area Formula Program or the Rural Formula program are required by law to submit their data if they continue to operate any items purchased with federal funds. The other urban transit agencies are also encouraged to volunteer their information to the database in to secure federal funding in the future. About 12% of NTD reporters are volunteers, and 50% of these volunteers are small systems.

Under models of government fragmentation (Pierce, Johnson, and Hall 1993; Downs 1994; Orfield 1997), special purpose governments are said to spend more on their operations due to a

¹We also ran models using average speeds as issue salience proxy. The results are similar, but the form of government interaction term and average speeds are statistically significant. This may stem from the differences in measurement.

reduction in their overall efficiency. For this reason, our study uses two measures of spending: total operating expenses for the agency and operating expenses for bus operations only, both scaled by service area population. Total operating expenses capture the administrative premium that special purpose governments may incur by focusing on just one service. At the same time, special purpose governments may be less efficient through their specialized focus on one goal (e.g. bus service provision). Therefore, we look at both total operating expenses and operating expenses for bus services in this study. We concentrate on bus operations because it is the most widely used public transportation service in the United States.

According to inter-jurisdictional competition models (Olberding 2002; Mullin 2008), special purpose governments have greater regional flexibility than general purpose governments thus allowing them to expand their operations easier. Also, special purpose governments expand their operations with fewer constraints than general purpose governments because service expansion does not have to compete with other government goals. Hence, our other set of dependent variables deals with the capital spending on expansion of service. We test for both expansion of the system overall and for bus services expansion in particular.

There are multiple ways of measuring service expansion. In line with the literature, we focus on new operations (e.g. expansion of hours or a new bus route), specifically operations that require capital expenditures. Therefore we are able to focus on new services specifically and do not include capital expenses that enhance existing services. We use dichotomous measures that signal whether an agency expanded capital for new services (1) or no new services (0). There are other approaches to measuring this type of expansion, but they all include other factors which may use congestion cost measures. For example, if we measure the rate of change in the hours worked by the agency, the measure will also capture increased congestion time, not simply increased hours due to new operations. An addition of a new route can be measured as a change in the number of miles traveled in service, but again, this measure, especially during shorter time frame may incorporate construction projects and required detours, not just new services.

Table 1 contains the list of all variables with their definitions.

We measure general purpose governments as all departments of municipal and county governments providing transit services. Special purpose governments are represented by authorities and special districts. Our form of government variable equals one for special purpose governments, and zero for general purpose governments. There are 254 authorities or special districts reporting to the NTD and 419 general purpose governments.

We also use a 10-year lag of congestion costs per commuter as a measure representing the salience of the issue. The use of this measure limits the number of agencies that are included in the estimation because the annual Urban Mobility Report information is available only to 101 largest UZAs over time; starting 2014, the data is available for over 270 UZAs. An extension of Mullin's (2008) moderation hypothesis implies that the effect of the governance is moderated or altered with the level of the congestion as a form of problem severity. Hence, we create an interaction term for the form of governance and congestion costs. Congestions costs as well as a

³In 2013, the operating expenses included purchased transportation funds reported separately, perhaps leading to the larger number of operating expenses for the agencies that contract out, and may be double-counted if both agencies report data. In 2014, the total operating expenses number reported included both amounts with and without operating expenses on contracts. This may lead to smaller amounts, but eliminated the problem of double-counting operating expenses. While we report 2014-definition for both years, we have also run models using 2013 definition, and since the correlation coefficients for these measures are 0.99, the models are nearly identical to the ones presented here.

³https://www2.census.gov/geo/pdfs/maps-data/maps/reference/us_regdiv.pdf

Table 1: Variables and measurements

Variable	Definition
<i>Dependent variables</i>	
Operating expenses (2014 format ²) per service population	Total operating expenses for all operations, the expenses include PT funds reported separately, divided by the service area population of the transit agency
Operating expenses (bus only, 2014 format) per service population	Total operating expenses for bus operations, the expenses exclude PT funds reported separately, divided by the service area population of the transit agency
Expanding overall operations (dichotomous)	Expand equals 1 if an agency spends capital funds on the expansion of services (e.g. new routes or expanded times on existing services), and 0 otherwise
Expanding bus operations (dichotomous)	Expand equals 1 if an agency spends capital funds on the expansion of bus services, and 0 otherwise
<i>Explanatory variables</i>	
Form of government	Special governance (mainly represented by authorities) equals 1; city and county operated transit services (0)
10-year lag of congestion cost per commuter (ln)	The 10-year lag of annual congestion costs per commuter (e.g. for 2013 it represents 2003 value)
Interaction of congestion costs per commuter and form of government	The interaction term between the form of government and congestion cost (a continuous interaction terms which coefficient indicates the effect of congestion for special governance on DVs).
<i>Control variables</i>	
VOMS (size) (ln)	log of vehicles operated in maximum service (VOMS) per service area population
Bus plus (dummy)	equals 1 for operating any other mode in addition to buses, equal 0 if the agency operates only bus services
Dedicated at source state and local (ln)	Log of dedicated at source state and local funding per service area population
Federal funds (ln)	Log of total federal funds per service area population
State funds and local funds (ln)	Log of state and local funds general revenue funds received by an agency per service area population
Contract out bus (dummy)	A dichotomous variable that equals 1, if an agency contracts out bus operations
Year dummy (2014)	Equals 1 for 2014 records
Region US Census ³	Equals 1 for South, as per US Bureau Census regions

number of control variables are also positively skewed; hence, we logged-transform them (Oliver and Norberg 2010).

All models include vehicles operated in maximum service (VOMS) to approximate the fleet size and are frequently used by the NTD to mark the relative size of a transit agency. Larger transit agencies can face different demands for both debt formation and revenue generation. We also control for whether a transit agency operates other modes than busses (the bus plus measure). Operating multiple modes of transportation may allow agencies to enjoy economies of scope (e.g. use the same maintenance facilities for different modes) or create a different level of complexity of operations (e.g. scheduling both light rail and buses to complement each other). Agencies operating rail modes, for example, usually have higher capital expenditures, and in some areas may have higher operating expenses.

Some transit agencies have certain funds dedicated at source from the state or local taxes. Such funds may provide additional fiscal stability, but for local governments, especially general-purpose governments, such sources usually are arrived at through voting or direct involvement of electorate. Not all transit agencies receive dedicated funds based on per service area population, some receive funds from general revenues. Such funds may compete with other functions, creating functional competition even for special purpose governments. Finally, we also account for the federal funds per service area population to account for any other significant sources of funding which may finance additional spending and expansion of services.

Finally, we control for whether an agency contracts out for part of their services based on a previous study by Leland and Smirnova (2008) find this influences the level of efficiency. Additional controls in the model include dichotomous variables for year 2014 and the South, based on previous studies where there are regional differences. In the models with operating expenses, we also control for whether an agency spent capital on expanding their existing operations. This often requires additional operating expenditures as well.

We address the issue of endogeneity by examining consecutive time periods where transit agencies did not switch their form of government. The agencies reporting form of government in this time period remain constant in our analysis. It is also important to note that bus service expansion and contraction can be achieved by contracting with other governments that already deliver transit services. This does not necessarily require a change in the form of government to accomplish. In addition to this, the data set we examine contains only agencies that deliver bus service, where assets are typically mobile as opposed to fixed (such as the case in light or heavy rail systems). We also control for agencies that operate more than just busses, and operate other modes which can require more capital intensive services. Second, we examined previous studies and find that there is little evidence that areas wishing to acquire transit service systematically prefer special districts over general purpose governments. Political constraints from the state level also restrict the change in the formation of governments lessening the chance that they will switch (Burns 1994; Foster 1997; Goodman and Leland 2019).

The descriptive statistics appear in table 2. The average operating expenses per service area population in 2013-2014 were \$57 million. They range from zero to over \$3,000 with the standard deviation of over \$128 million. In addition to a 10-year lag of congestion costs per commuter, we include the same measure in 2014 to highlight the differences in samples between these two measures. Congestion cost per commuter is lower than 10 years prior. There are 421 agencies operating in 101 of the largest UZAs that have 10 year lag data available (Texas A&M Transportation Institute, 2015).

Table 2: Descriptive statistics

Variable	Obs.	Mean	St. Dev.	Min	Max
Operating expense per service area population	1650	57.81	128.91	0	3053.91
Operating expenses (bus services only) per service area population	1298	43.53	44.0	0	378.80
Expanding any services	1352	0.16	0.37	0	1
Expanding bus services	1080	0.13	0.34	0	1
Special purpose governance	1371	0.37	0.48	0	1
Congestion costs per commuter (2014 data)	1678	759.22	507.53	30.79	1834
Congestion costs per commuter (10-year lag)	824	1296.47	421.71	176.00	2,069.00
Total VOMS per service area population	1,323	0.0003	0.0007	0	0.02
Bus plus	1352	0.18	0.39	0	1
Total dedicated at source per service area population	1,073	8.28	33.29	0	351.90
Total federal funds per service area population	1,082	9.67	20.18	0	282.72
Total general revenue funds received from both state and local sources per service area population	1,081	18.08	36.37	0	459.24
Contracting out any services	1352	0.33	0.47	0	1
Contracting out bus services only	1352	0.78	0.41	0	1
Year (2014)	1706	0.50	0.50	0	1.00
Region (South)	1706	0.34	0.47	0	1.00

The following section reports and discusses the results of our models.

Discussion of results

Table 3 reports all models with cluster robust standard errors.⁴ The overall agency expansion model and the bus expansion model only employ logistic regressions since our dependent variables are dichotomous; hence, the table reports odds ratios for these models. Both models 1 and 2 explain over 50% of the variance in the dependent variables than the capital spending on new services. However, R^2 has less applicability to logistic regression models.

Since both continuous dependent and independent variables are logged-transformed in models 1 and 2, we interpret the regression coefficients as a percentage change in the dependent variable due to the percentage change in the independent variables. The special governance variable is not significant in any of the models. This is noteworthy given the emphasis the literature has put on the differences in specialized government versus multi-purpose government. Issue salience, as measured by the 10-year lag in congestion costs per commuter, is barely significant (at the 0.10 level) for both overall and bus only operating expenses. This could be due to the fact that we have to limit our agencies to those operating in the largest areas, and they all may face the same levels of congestion during the study period. We tested different lags of congestion costs (1, 2, and 5 year lags), and they all return similar results. We also estimate models with the average speed variable

⁴Mullin (2008) uses a Heckman probit model to correct for the sample selection bias; the completion of the AWWA survey data may be biased. We use the National Transit Database which does not suffer from the same selection bias and covers all transit agencies operating in urban areas, and some rural/tribal agencies (not part of our data). Since we do not have such selection in our data, we proceed with fixed effects regressions and logit models with cluster-robust standard errors. We conducted the Hausman test for fixed effects vs. random effects; the test favors fixed effects. Also, we do not observe non-trivial instances of form of government switching during the study period.

as a proxy for congestion costs; the results appear to be different but average speeds are a much less precise measure of congestion.

Table 3: Regression results

	Total operating expenses per service area population (ln)		Total operating expenses for bus services per service area population (ln)		Expanding operations		Expanding bus operations only	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Special governance (=1)	1.25	1.50	2.62 [^]	1.52	3.96	24.83	0.34	2.60
Congestion costs _{t-10} (ln)	0.31 [^]	0.18	0.35 [^]	0.18	1.20	0.77	1.11	0.82
Interaction of special governance and congestion costs	-0.18	0.21	-0.39 [^]	0.22	0.84	0.73	1.19	1.26
Total VOMS per service area population (ln)	0.60**	0.07	0.88**	0.10	1.30	0.23	1.13	0.35
Bus plus	0.42**	0.08	-0.20	0.12	1.79	0.70	1.33	0.48
Total dedicated at source (ln)	0.07**	0.02	0.02	0.04	1.25 [^]	0.15	1.06	0.13
Expanding services	0.13	0.08	n/a	n/a	n/a	n/a	n/a	n/a
Expanding bus services	n/a	n/a	0.00	0.11	n/a	n/a	n/a	n/a
Contracting out services (=1)	-0.043	0.063	n/a	n/a	0.553*	0.249	n/a	n/a
Contracting out bus services (=1)	n/a	n/a	-0.21	0.14	n/a	n/a	0.92	0.48
Total federal funds per service population (ln)	0.11**	0.03	0.10 [^]	0.06	1.50**	0.18	1.42*	0.18
General revenue funds per service population (ln)	0.10**	0.02	0.02	0.03	0.98	0.10	0.85	0.12
South (=1)	-0.10	0.09	0.12	0.09	1.83	0.72	2.43 [^]	1.22
2014 (=1)	0.05	0.03	0.04	0.05	0.80	0.11	1.02	0.15
intercept	6.57**	1.37	8.72**	1.63	0.24	1.16	0.18	1.15
N	421 (95 clusters)		337 (95)		421 (95)		343 (95)	
Adj. R ²	0.679**		0.551**		0.124**		0.030**	

Note: ** p<0.001, * p<0.05, [^] p<0.10; McFadden's Adj. R² is reported for logistic regressions.

The interaction of governance and issue saliency is marginally significant (at the 0.10 level) for the bus operations (See model 2). On average, for a 10% increase in congestion costs (both models 1 and 2 are significant at the p<0.10 level), a transit agency may expect to spend about 3%⁵ more. Special purpose governments may spend 26% more on bus operations (model 2, significant at the p<0.10 level) compared to general purpose governments. But the interaction effect in model 2 suggests that as congestion costs increase, special purpose governments spend 3.9% less on bus operations on average compared to general purpose governments. The tentative support for the moderating effect between the form of government and congestion costs on bus operations holds only in one model (model 2) and may be measurement and sample dependent. These results suggest there is limited evidence to support the assertion that special districts respond differently to congestion pressures than general purpose governments.

⁵The coefficients in the table are exponentiated to receive percentages that we can report; that is to find an increase in the overall operating expenses due to the rise of congestion costs, we raise 1.1 (equivalent of 10% increase in the independent variable) to the power of the corresponding coefficient (0.31) to get about 103% overall increase in the dependent variable, which is reported as a percentage change (3%).

The most consistent predictor of transit spending is agency size (measured by the vehicles operated in maximum service (VOMS)). A 10 percent increase in VOMS per capita leads to 5.9% increase in overall operation expenses and 8.8% increase in the bus operating expenses on average. Finally, we find that resources are associated with transit expenditures; however, the effect is generally inconsistent across our specifications. This leads us to conclude there is little systematic effect between resources and spending with the exception of federal funds (see below).

Models 3 and 4 are statistically significant but we caution over interpretation of these specific coefficients because overall precision of the models are low (the variable specific standard errors are much larger and the pseudo-adjusted R^2 much lower than models 1 and 2). The findings do suggest that form of government, congestion, and the interaction of the two are not associated with service expansion. Only the variable for federal funding per population served, seems to increase the likelihood of expansion by 42-50% (the odds ratio for federal funding is 1.42 for bus expansion and 1.5 for overall expansion of services). This result may be an indication of the “flypaper effect” in public transit (Courtant, Gramlich, and Rubinfeld 1979);⁶ however, our measures from the NTD are poorly tuned to completely confirm this effect.

Conclusions

This study compares special purpose governments operating and capital expenses to those operated out of a city or county while controlling for issue salience. Special purpose governments are often characterized as less accountable and less transparent when compared to general purpose governments. But is this really a fair assessment? Are they really more likely to be captured by special interests and thus less responsive to the public policy preferences because they are not typically governed by elected bodies? Our models indicate that at least in the context of public transit, the interaction of issue salience and governance arrangement do not appear to be associated with the expansion of new services and operating expenses. Conditional responsiveness for form of government only is associated with overall expenses for bus services. Therefore, our model 2 suggests that it is special purpose governments that are more responsive to the level of salience to the policy problem, directly contradicting previous research that they should be less responsive (Mullin 2008). However, the overall lack of differences between general purpose and special purpose governments (significant at the 0.05 level) is interesting in itself and may indicate that in the largest service areas of the country, governmental forms may react similarly to the overall congestion pressure. At the same time, we suggest caution in directly comparing this analysis and Mullin’s (2008) due to dissimilar policy areas and methodologically different approaches to modeling and estimation. We believe the observed differences between the two approaches are interesting; however, we urge more research be conducted in different policy areas before we pass judgement on the applicability of the interaction between institutional form and policy salience on policy outcomes.

Our results suggest that some of the organizational characteristics such as agency size impact operating expenses. We do believe that there may be some limitations to translating these results to services other than transportation such as water, which may account for the differences in the findings of Mullin (2008) study of water districts. After all, changing your water provider may be

⁶The “flypaper effect” refers to the phenomena where exogenous grant dollars stimulate more public spending than a similar increase in local income. The potential for the flypaper effect may be lessened by local matching grants as it forces local residents to perceive some portion of the cost of the grant.

impossible because there is typically only a single provider for a resident. While changing your mode of transportation is a viable option for most users. For example, a persons options may include walking, biking, driving, carpooling, and taking a taxi or ridesharing as opposed to using the public transit system.

It is possible that in some policy areas that are typified by either monopolistic service provision and/or high salience operate differently in terms of responsiveness than areas with many service providers (public or otherwise) or lower levels of salience (see Warner and Bel (2008) for a further discussion on the competition v. monopoly aspect). Form of government or salience may be more or less important in these arenas and future research should be pointed toward understanding in which areas we should expect form of government, salience, or the combination of the two to be important. We believe that future research on issue salience is critical in the field of public administration in order to continue the dialog of the importance of citizen responsiveness in a representative democracy when services are provided by special purpose governments as opposed to a city or county government.

References

- American Public Transportation Association. 2015. *2015 Public Transportation Fact Book*. Washington, D.C.: American Public Transportation Association.
- Burns, Nancy. 1994. *The Formation of American Local Governments: Private Values in Public Institutions*. New York, NY: Oxford University Press.
- Burstein, Paul. 2003. "The Impact of Public Opinion on Public Policy: A Review and an Agenda." *Political Research Quarterly* 56 (1): 29–40.
- Clingermayer, James C., and Richard C. Feiock. 2001. *Institutional Constraints and Policy Choice: An Exploration of Local Governance*. Albany: State University of New York Press.
- Courtant, Paul N., Edward M. Gramlich, and Daniel L. Rubinfeld. 1979. "The Stimulative Effects of Intergovernmental Grants: of Why Money Sticks Where it Hits." In *Fiscal Federalism and Grants-in-Aid*, ed. by Peter Mieszkowski and William H. Oakland. Washington, D.C.: Urban Institute Press.
- Downs, Anthony. 1994. *New Visions for Metropolitan America*. Washington D.C.: Brookings Institution Press.
- Feiock, Richard C., and Jae-Hoon Kim. 2001. "Form of government, administrative organization, and local economic development policy." *Journal of Public Administration Research and Theory* 11 (1): 29–50.
- Foster, Kathryn A. 1997. *The Political Economy of Special-Purpose Government*. Washington D.C.: Georgetown University Press.
- Goodman, Christopher B. 2015. "Local Government Fragmentation and the Local Public Sector: A Panel Data Analysis." *Public Finance Review* 43 (1): 82–107.
- Goodman, Christopher B., and Suzanne M. Leland. 2019. "Do Cities and Counties Attempt to Circumvent Changes in Their Autonomy by Creating Special Districts?" *The American Review of Public Administration* 49 (2): 203–217.
- Gormley, William T., Jr. 1986. "Regulatory Issue Networks in a Federal System." *Polity* 18 (4): 595–620.

- Greer, Robert A. 2016. "Local Government Risk Assessment: The Effect of Government Type on Credit Rating Decisions in Texas." *Public Budgeting & Finance* 36 (2): 70–90.
- Heikkila, Tanya, and Kimberley R. Isett. 2007. "Citizen involvement and performance management in specialpurpose governments." *Public Administration Review* 67 (2): 238–248.
- Hooghe, Liesbet, and Gary Marks. 2009. "Does Efficiency Shape the Territorial Structure of Government?" *Annual Review of Political Science* 12 (1): 225–241.
- Leland, Suzanne M., and Olga Smirnova. 2008. "Does government structure matter? A comparative analysis of urban bus transit efficiency." *Journal of Public Transportation* 11 (1): 4.
- Macedo, Stephen. 2005. *Democracy at Risk*. Washington D.C.: Brookings Institution Press.
- Martell, Christine R. 2007. "Debt burdens of overlapping jurisdictions." *Municipal Finance Journal* 28 (2): 1–23.
- Miller, David Y. 2002. *The Regional Governing of Metropolitan Areas*. Cambridge, MA: Westview.
- Mullin, Megan. 2008. "The Conditional Effect of Specialized Governance on Public Policy." *American Journal of Political Science* 52 (1): 125–141.
- Olberding, Julie C. 2002. "Does regionalism beget regionalism? The relationship between norms and regional partnerships for economic development." *Public Administration Review* 62 (4): 480–491.
- Oliver, Jake, and Melissa M. Norberg. 2010. "Positively Skewed Data: Revisiting the Box-Cox Power Transformation." *International Journal of Psychological Research* 3 (1): 68–75.
- Orfield, Myron. 1997. *Metropolitics: A Regional Agenda for Community and Stability*. Washington D.C.: Brookings Institution Press.
- Ostrom, Vincent, Charles M. Tiebout, and Robert Warren. 1961. "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry." *American Political Science Review* 55 (4): 831–842.
- Perry, James L., and Timlynn T. Babitsky. 1986. "Comparative Performance in Urban Bus Transit: Assessing Privatization Strategies." *Public Administration Review* 46 (1): 57–66.
- Pierce, Neal, Curtis W. Johnson, and John Stuart Hall. 1993. *Citistates: How Urban America Can Prosper in a Competitive World*. Washington D.C.: Seven Locks Press.
- Price, David E. 1978. "Policy Making in Congressional Committees: The Impact of "Environmental" Factors." *American Political Science Review* 72 (2): 548–574.
- Rusk, David. 1993. *Cities without Suburbs*. Baltimore: Johns Hopkins University Press.
- Sbragia, Alberta M. 1996. *Debt Wish: Entrepreneurial Cities, U.S. Federalism, and Economic Development*. Pittsburgh: University of Pittsburgh Press.
- Shattschneider, Elmer E. 1960. *The Semi-Sovereign People: A Realist's View of Democracy in America*. New York, NY: Holt, Rinehart / Winston.
- Smirnova, Olga, Suzanne M. Leland, and Gary A. Johnson. 2008. "Popular, but more influential? A test of whether special purpose governments affect federal transit financing." *Municipal Finance Journal* 28 (4): 43–61.
- Tiebout, Charles M. 1956. "A Pure Theory of Local Expenditures." *Journal of Political Economy* 64 (5): 416–424.

- U.S. Census Bureau. 2013. *2012 Census of Governments, Individual State Descriptions*. Washington, D.C.: Government Printing Office.
- Warner, Mildred E., and Germá Bel. 2008. "Competition or Monopoly? Comparing Privatization of Local Public Services in the US and Spain." *Public Administration* 86 (3): 723–735.
- Wlezien, Christopher. 2004. "Patterns of Representation: Dynamics of Public Preferences and Policy." *Journal of Politics* 66 (1): 1–24.
- Zullo, Roland. 2008. "Transit Contracting Reexamined: Determinants of Cost Efficiency and Resource Allocation." *Journal of Public Administration Research and Theory* 18 (3): 495–515.