Politics and Pavement: An Examination of the Allocation of Alabama **Highway Construction and Maintenance Dollars**

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The Public Affairs Research Council of Alabama (PARCA) reported the allocation of highway maintenance and construction funds across Alabama's 67 counties. They note a wide variation in county funding versus indicators of county need. In this paper, the role of politics is examined in road building. Politicians, no matter how public spirited they claim to be, have a strong incentive to search for programs that benefit their home districts. We find evidence that suggests that the executive guides dollars to the districts of his friends in the legislature and that legislators use their position on powerful committees to steer funds to their home districts. A pure political model explains roughly one-third of total spending.

INTRODUCTION

A recent article "Alabama Transportation Projects Hit Roadblock Without Additional Funding," brings attention to the need for highway maintenance and construction in Alabama. Increasing traffic congestion levels and deteriorating road conditions are among the major concerns. During the last twenty years vehicle travel has increased in Alabama by twenty billion vehicle miles of travel. Additional increases in state population and economic development during the next twenty years is expected to raise vehicle miles of travel to approximately eighty billion in 2030. This increasing use of Alabama's highway system will necessitate additional yearly maintenance as well as new road construction to mitigate traffic congestion.

If state government were efficient, the allocation of road building and highway maintenance funds would be based solely on need. Highways would be repaired where traffic counts merited such expenditures and new roads would be constructed where potential traffic flows and actual congestion were greatest.

Of course, in reality, government falls far short of meeting this standard. Politics plays a role in establishing which districts get maintenance and construction dollars. Ray Bass-who served twelve years as State Transportation Director in Alabama-sums it up concisely: "every public road is a political road." Bass noted that need is not totally ignored but also stressed the role of politics: "It's always been a fact that road decisions tend to favor areas where the support [of the governor] came from" (decaturdaily/ news/050529/bass.ghtml).

In Alabama, the chief executive wields great influence over highway construction and maintenance decisions as the governor appoints the Transportation Director. Thus, with each new administration, the completion of certain road projects move up the ladder in terms of importance while others are simply shifted to the back burner. E.J Ellington, of the Decatur Daily News, asserts, "Partially completed roads and seemingly abandoned road projects in the state are symptoms of the way priorities change" (decaturdaily/news/050417/roads.shtml).

In 2005, legislation was introduced in the Alabama legislature to establish a transportation commission with commissioners to be appointed by the governor with advice and consent from the Senate. Commissioners would serve six-year terms and the terms would be staggered. Commissioners would then select a Transportation Director. The impetus for the legislation is to provide at least a measure of continuity to road building and repair in the state. However, the bill's sponsor, Representative Cam Ward, suggested the legislation would also limit the role of politics in decision-making. Regarding politics, Ward points to the executive branch: "There have been administrations in the past-both Republicans and Democrats-that have used the Department of Transportation to get votes over here in the Legislature" (decaturdaily/news/050417/roads.shtml).

Data generated by the Public Affairs Research Council of Alabama (PARCA) makes it possible to empirically analyze how road building and maintenance funds were distributed across Alabama's 67 counties between 1994 and 1998-the last year this data was produced. The data is found in their report, "The Quality and Cost of Alabama's Roads, Bridges and Transit Programs." PARCA researchers determined that a wide gap exists between county funds received and county measures of need. In this paper, we investigate how politics influences the laying of pavement. However, we do not limit the search to the chief executive; the legislative branch's influence is also analyzed. The paper is organized as follows. In the next section, a brief look at the literature surrounding the influence of politics is discussed. Then, the data used is presented and analyzed. The last section includes the results and some final concluding remarks.

PUBLIC CHOICE ECONOMICS

Public choice economists have investigated the role of politicians and have advanced our understanding of the actions undertaken by those in the public sector. Before these insights were incorporated into our understanding, policies adopted that seemed contrary to the public interest were explained by asserting that policymakers made mistakes, lacked information or simply were not given the resources to adequately carry out the task. Public choice scholars have shown that no matter how publicspirited politicians may be, their strongest desire is to be reelected. Thus, the public's frequent outcry that government actions seldom solve real problems is misguided since the goal of the policy is not to offer a solution but instead to build a winning coalition for the next election. In addition, both the executive and the legislative branches of government use the apparatus of government for reelection purposes.

Because politicians represent particular geographic areas, they can enhance their reelection fortunes by promoting policies that promote the well being of their constituents while passing on the costs of the policy to taxpayers in general. In short, politicians act in their own self interest. The fact that PARCA found a disparity between funds allocated and an assessment of need is hardly surprising when the motivation of politicians is considered. A vast literature exists that supports this assertion. Wright (1974), Anderson and Tollison (1991), and Couch and Shughart (1998) found that politics played an important role in the allocation of New Deal appropriations during the Great Depression. Despite the eloquent speeches of Roosevelt about helping those in distress, economic need was virtually ignored when dollars were distributed across the nation. Instead, empirical evidence supports a reelection strategy to the allocation.

Bureaus and Agencies are vulnerable to political pressure as well. Young et al. (2001) found a political component to IRS enforcement patterns. Garrett and Sobel (2003) noted that FEMA disaster

expenditures were guided, at least in part, by the president's reelection strategy. Likewise, enforcement by the Environmental Protection Agency (Couch, Williams and Wells 2008) and by Antitrust authorities (Faith, Leavens and Tollison 1982) was found to be politically motivated. Even the allocation of troops during the Vietnam War was determined to be influenced by politics with more troops from states with less political clout deployed to more dangerous locations and in more risky activities (Goff and Tollison 1987).

DATA

The PARCA report, "The Quality and Cost of Alabama's Roads, Bridges and Transit Programs," details how dollars were distributed among Alabama's 67 counties between the years 1994 and 1998. The authors state, "there is no statutory distribution formula for state road funds." Instead, funds are allocated on the basis of a 5-year construction and maintenance-spending plan determined by the Joint Transportation Subcommittee. The Committee was charged to "review and concur in a long-range federal-aid highway plan for proposed highway construction." In addition, "prior to any deviation from the intent of the 5-year plan, the Joint Transportation Committee shall review and concur in the deviation." Despite this oversight, PARCA reported that regarding maintenance funding for example, 21 counties received at least 25% more money than their share of traffic and road miles would indicate, while 10 counties received at least 25% less." Obviously, some factors other than need contributed to the distribution of dollars across Alabama.

Could the self-interest of politicians influence the distribution of dollars across the state? In an effort to test for pork barrel spending, an econometric model is constructed to identify political factors that may have exerted an influence on where funds were allocated. The percentage of total Alabama Department of Transportation (ALDOT) expenditures that flowed to each county for highway construction and maintenance between 1994 and 1998 serves as the dependent variable. We hypothesize that Alabama legislators will use their political clout to direct largess to their home district. Clout, in our analysis, comes in the form of seniority and membership on key committees associated with spending in general and transportation in particular.

As outlined above, the political independent variables include the following on the senate delegation for each county: Average seniority (SAS) which is total years of continuous service divided by the number of senators representing the county, average party affiliation (SPA) with a value equal to 1 representing a county with only Democratic Senators and a value of 0 if the senate delegation of that county is solely Republican, total years of seniority if the county had a member on the Senate Finance and Taxation General Fund Committee (SFT) and zero otherwise, total years of seniority if the county had a member on the Senate Commerce, Transportation and Utilities Committee (SCT) and the Transportation and Utilities Subcommittee (SST) and zero otherwise.

Political influence by members of the House of Representatives from each county includes average seniority (HAS) which is total years of continuous service divided by the number of representatives from each county, average party affiliation (HPA) of House members representing each county where again a value of 1 denotes an explicitly Democratic delegation and a Republican only composition represented by 0, total years of seniority if the county was represented by a member of the House Ways and Means Committee (HWM) and zero otherwise. Finally, the seniority of a county's senators and representatives was entered in the model if their legislator was a member of the Joint Transportation Committee (JC). Counties with no legislators serving on the JC were assigned a value of zero. Utilizing these variables the basic model has the following form:

where denotes the percentage of total expenditures for highway maintenance (m) or construction (c) flowing into the i^{th} county during the study period. A second model, omitting SFT and SST, is also estimated to test for multicollinearity. The results for this specification are denoted as model

RESULTS AND CONCLUSIONS

Results for maintenance and construction regressions are located in Tables One and Two respectively. The evidence suggests that politics certainly plays a significant role in the allocation of highway dollars across Alabama. A political model explains between 34 and 37 percent of the variation of the distribution of highway maintenance funds and between 28 and 30 percent of the distribution of highway construction funds. Thus, roughly one-third of the allocation of dollars is politically driven according to the results.

During the period covered by the PARCA report, Democratic Governor Jim Folsom served in 1994 while Republican Governor "Fob" James served the remainder of the investigation period. Thus, a Republican governor was in office during the majority of time under study. Senate party affiliation was negative and significant in three of the four models investigated. Since a Democratic delegation is represented by 1 for SPA, the results for party affiliation suggest that the Republican governor guided both maintenance and construction dollars away from districts represented by Democrats. One interpretation is that the governor is punishing representatives from the other political party. In also might be true that those districts represented by a Democrat offered fewer votes for the Republican governor and thus, the governor is rewarding his supporters by steering dollars to Republican strongholds. House affiliation was not significant in the models.

TABLE 1 MAINTENANCE EXPENDITURES

Variable	Model 1	Model 2
Intercept	1.73*** (5.2)	1.92*** (6.0)
Senate Average Seniority	-0.009 (-0.44)	-0.001 (-0.44)
Senate Party Affiliation	-0.59* (-1.93)	-0.64** (-2.0)
Senate Finance and Taxation	0.02* (1.86)	
Senate Commerce	0.03 (1.52)	0.02 (1.5)
Transportation		
Senate Subcommittee	-0.02 (-0.63)	
Transportation		
House Average Seniority	0.01 (0.46)	0.001 (0.03)
House Party Affiliation	-0.37 (-1.2)	-0.42 (1.3)
House Ways and Means	0.02*** (2.6)	0.03*** (2.9)
Joint Committee	0.33 (1.5)	0.37 (1.87)
R-Square	0.37	0.34

(t-statistics in parentheses, *10% level of confidence, ** 5% level of confidence, *** 1% level of confidence)

Both the Senate committee associated with spending (Senate Finance and Taxation) and the House committee associated with spending (House Ways and Means) were positively and significantly associated with more transportation funds. The evidence suggests that members of these key committees used their influence to guide ALDOT maintenance and construction dollars back to their district. We likewise find evidence that the Joint Transportation Committee was associated with greater maintenance expenditures. Thus, the results suggest that the activities of the Joint Committee on Transportation 5-year plan includes, at least in part, schemes to steer largess to committee members home districts.

The evidence supports the notion that politics plays a key role in the laying of payement across the state. State government is far from efficient with almost one-third of expenditures explained by a purely political model. It is also clear that efforts in the Alabama legislature to reduce the political

influence of the chief executive is merited but legislators should also look to themselves as well. Dollars are distributed in a manner that helps enhance the political fortunes of Alabama's governor and legislators.

TABLE 2 **CONSTRUCTION EXPENDITURES**

Variable	Model 1	Model 2
Intercept	2.21*** (3.4)	2.51*** (4.0)
Senate Average Seniority	-0.04 (-0.09)	-0.02 (0.54)
Senate Party Affiliation	-1.17 (-1.9)	-1.25** (-2.09)
Senate Finance and Taxation	0.034* (1.4)	
Senate Commerce	0.002 (0.04)	0.001 (0.03)
Transportation		
Senate Subcommittee	-0.01 (-0.15)	
Transportation		
House Average Seniority	-0.01 (-0.48)	-0.03 (-0.95)
House Party Affiliation	0.19 (-0.32)	0.12 (0.2)
House Ways and Means	0.06*** (3.2)	0.06*** (3.4)
Joint Committee	0.46 (1.15)	0.47 (1.25)
R-Square	0.3	0.28

(t-statistics in parentheses, *10% level of confidence, ** 5% level of confidence, *** 1% level of confidence)

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