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WebXtra
September/October 2008

A Comparative Analysis of Illinois, Ohio, Colorado and South Dakota Park Districts and Parks and Recreation Departments to Wisconsin, Iowa, Missouri, Kansas, Indiana, and Michigan Parks and Recreation Departments

MPSA Annual National Conference

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April 5, 2008

ABSTRACT

Since Bollens (1957) first identified special districts as a "dark continent" in political science, the number of non-school special districts in the United States has grown substantially. During the past 50 years, however, political science objections to the fragmentation of metropolitan government have remained largely theoretical.

This study examines one form of non-school special districts-- park districts-- and evaluates their efficiency and effectiveness. The study evaluates park district services compared to similar services provided by consolidated general-purpose municipal governments.

Two competing hypotheses are identified. The first states that parks and recreation departments provide higher levels of efficiency in delivering services than park districts. The second states that park districts provide higher service levels than municipal parks and recreation departments.

Midwestern states were selected for the study because they have the largest number of non-school special districts in the United States and comparable numbers of parks and recreation departments within municipalities and county governments.

Service levels, autonomy, demographic, and administrator profile data for park districts and parks and recreation departments were collected by surveying an equal number of randomly selected park district administrators and randomly selected parks and recreation department administrators in Midwestern states.

Data was analyzed using comparative means testing, bivariate and multivariate linear regression to test the relationships between service levels, and efficiency levels, as identified in the literature. In addition, these quantitative techniques were

used to test competing hypotheses identified in other studies, suggesting that staffing and professional training levels are explanations for service and budgetary levels.

The aggregate results of this study show that structure of government is not an important determinant of total recreation program levels. The study also demonstrates that structure of government is not an important determinant of levels of efficiency.

Introduction

State legislatures provide financial incentives for the consolidation of school districts because they believe there are economies of scale in large organizations (Harrigan and Vogel, 2003). This observation helps explain why the total number of school districts in the United States declined from 108,579 in 1942 to 13,726 in 2002[1]. However, states do not believe there are economies of scale in non-school special districts (Dye, 2003). This observation helps explain why, between 1942 and 2002, the number of non-school special districts increased from 8,299 to 35,052[2].

According to the Census of Governments, all 50 states now have non-school special districts, but each state has its own preference about what services it will allow special districts to provide. For instance, North Dakota has 762 non-school special districts. Of these, 245 provide parks and recreation services. Between 1997 and 2002, North Dakota created no new special districts. Neighboring South Dakota has 373 non-school special districts, of which none provide parks and recreation

[1] Source: Statistical Abstract of the United States; 2002.
[2] Source: U.S. Census; 1942-2002.

services. Between 1997 and 2002, South Dakota created 74 special districts, 54 of which were highway districts[3].

To illustrate the proliferation of non-school special districts, Table 1 lists the number of non-school special districts that states have created. Table 1 shows that Illinois has the largest number of non-school special districts with 3,146, followed closely by California with 2,829. Alaska and Hawaii have the lowest number with 15 each. Other states, such as Wisconsin, are somewhere in between, with the average per state just over 700.

Table 1

Alabama	525
Alaska	15
Arizona	306
Arkansas	693
California	2829
Colorado	1415
Connecticut	382
Delaware	259
Florida	626
Georgia	580
Hawaii	15
Idaho	793
Illinois	3146
Indiana	1126
Iowa	549
Kansas	1533
Kentucky	716
Louisiana	45
Maine	220
Maryland and Washington DC	88
Massachusetts	403
Michigan	367
Minnesota	414
Mississippi	457
Missouri	1514
Montana	694
Nebraska	1144
Nevada	158
New Hampshire	150
New Jersey	278
New Mexico	626
New York	1136

[3] Source: U.S. Census of Governments; 1997 and 2002.

North Dakota	762
North Carolina	319
Ohio	630
Oklahoma	559
Oregon	928
Pennsylvania	1886
Rhode Island	75
South Carolina	301
South Dakota	373
Tennessee	476
Texas	2255
Utah	299
Vermont	152
Virginia	196
Washington	1177
West Virginia	342
Wisconsin	693
Wyoming	546
Total	35052[4]

Considering there are more than 35,000 special districts, comprising nearly half of the governments in the United States, there should be a large body of knowledge describing their basis for existence, characteristics and value as public policy alternatives.

To the contrary, the volume of literature is small, making special districts a "dark continent" in political science (Bollens, 1957).

This study will attempt to explore the "dark continent," by selecting one highly regarded variety of non-school special districts for evaluation: park districts. This study will focus on one state, Illinois, where park districts are the strongest and where there is also a strong system of competing municipal services provided by general-purpose governments.

This study will also focus on Midwestern states which consider recreation and tourism as a major industry, some of which have park districts, some of which have parks and recreation departments, and some of which have both.

[4] Source: 2002 Census of Governments

This study will identify differences between governing by special district and governing by consolidated municipal government. The study will create a methodology for operationalizing and testing the hypotheses that there are differences.

Findings will be reviewed and policy implications considered. All of this will be done in order to shed additional light on a structure of government where far too little is known, and far too little is understood.

The Proliferation of Special Districts

Non-school special districts exist in all states, but not in all varieties. Bollens (1957) suggested that special districts exist because of the "unsuitability of existing general local governments in terms of their area, financing functions, or administration, or the attitudes of those controlling them" (1957, p. 6).

To illustrate the diversity of non-school special districts, Table 2 lists the categories and number of special districts that existed in the United States in 2002.

Table 2

Airport	510
Cemetery	1666
Drainage	2600
Electric Power	150
Fire Protection	5783
Flood Control	647
Gas Supply	50
Highway	743
Hospital and Health	1464
Housing and Community Development	3399
Industrial Development	208
Irrigation	837
Library	1580
Mass Transit	285
Mortgage Credit	26
Multifunction	1569
Natural Resource	320
Nursing Home	57

Parking Facility	46
Parks and Recreation	1287
Reclamation	171
School Building	518
Sea and Inland Port	159
Sewerage	2004
Sewerage and Water Supply	1446
Soil and Water Conservation	2506
Solid Waste Management	455
Water Supply	3405
Unallocable	1161
Grand Total	35052[5]

As Table 2 demonstrates, fire protection districts are the largest category of non-school special district. Fire protection districts exist in all states except Delaware, Maryland, Virginia, Minnesota, Wisconsin and New Mexico[6] because many municipalities exclude people living in townships from municipal fire protection unless they pay for it. And since county governments do not consider fire protection to be an appropriate function of county government, states allow citizens to create fire protection districts to meet those needs (Bollens, 1957; Foster, 1997).

In the case of parks and recreation services, the dynamic is somewhat different. Cities, villages and towns have a threshold population that must be reached before their governing boards become willing to provide parks and recreation services. In states like Colorado, North Dakota, Ohio, and Illinois, park districts can be created by referendum to meet parks and recreation needs before the population threshold is attained. In the states like Wisconsin, Indiana, Iowa, Missouri, and Kansas, legislatures have not permitted the creation of park districts; citizens must wait until municipal boards are ready (Humke and Brademas, 1976; Emanuelson, 2002).

[5] According to the 2002 Census of Governments
[6] According to the 2002 Census of Governments

That states would allow park districts to proliferate in this way flies in the face of political science's view that metropolitan government should be consolidated. Bollens was the first to strongly criticize the creation of park districts, arguing that "there seems no logical reason for the continuance of the park function apart from city government, but logic does not always prevail in human situations" (1957, p.138). Others have raised more specific objections (Ross and Levine, 2001).

Advocates of regional planning argue that fragmented systems of local government create weak "political authorities" and "strong private interests" that make it difficult to gather the resources necessary to solve regional problems (Harrigan and Vogel, 2003, p.16-7). Other regional planning advocates argue that fragmentation of metropolitan government is prohibitively difficult because too many governmental units need to be at the planning table (Orfield, 1997).

Still other regional planning advocates raise equity-based objections, arguing that suburbanization itself denies wealthy suburbs' resources from being shared with inner cities. The latter suggests that further fragmentation of metropolitan government exacerbates that inequity (Downs, 1994).

Public choice advocates disagree. These "theorists focus on how fragmented government provides individuals with the ability to choose what community to live in on the basis of the level of services and taxes that best meet their needs" (Harrigan and Vogel, 2003, p. 13). Public choice advocates argue that fragmented metropolitan government fosters competition that benefits consumers (Harrigan and Vogel, 2003).

Metropolitan ecologists share a similar view. "Ecologists' positive view of special-purpose governments rests in part on their geographic, functional, and

financial flexibility in meeting a wide variety of service delivery needs without jeopardizing the viability of individual governmental units" (Foster, 1997, p.44).

The history of park districts originated with the creation of the New York Central Park Commission in 1854. Accounts of its creation state that the Central Park Commission was considered a political reform that sought to depoliticize parks and recreation services by creating a special purpose governmental unit independent from the Tammany Hall political machine that ran New York City government.

Park district advocates point to the initial success that this early "park district" achieved in building Central Park as evidence that park districts provide a more effective structure of government than departments of municipalities in delivering leisure services because they are able to avoid the inevitable patronage that suppresses service levels (McLaughlin, 1983).

Advocates also observe how the success of the Central Park Commission was reversed when Tammany Hall convinced the New York Legislature to eliminate the special district function and make it part of city government (Platt, 1996).

Such support provides rationale to legislatures for the existence of park districts as special purpose governments (Stetzer, 1975). Recently, members of the Illinois General Assembly expanded the conventional wisdom that park districts are effective service delivery systems[7] to include a belief that park districts are also more efficient than parks and recreation departments at providing these services.[8]

[7] Effective is defined to mean that park districts provide higher levels of services than park and recreation departments.
[8] Efficient is defined to mean that park districts provide services at a lower cost per unit than park and recreation departments.

Evidence of this legislative perspective is available in the form of an Illinois Association of Park Districts (IAPD) video titled *The Park District Advantage* (IAPD, 2001). In this video, State Representative Andrea Moore encourages Illinois communities without park districts to create them and communities with park districts to retain them. Moore states, "services that are provided by park districts… aren't able to be provided by other forms of local government in as efficient a way as they can by districts themselves" (IAPD Video, 2001).

Considering the strong views expressed by advocates of park districts, it might be assumed that these views are based on research of the relationship between structure of government and levels of service. However, such is not the case. To date, there exists little more than historical and theoretical support for the park district model.

Likewise, there exists little more than theoretical evidence for the consolidationist model. That is why research into the efficiency of consolidated metropolitan governance should shed light on the "dark continent" of special districts.

In states that allow park districts, there are different levels of authority allowed to the governing boards. These include budgetary oversight, authority over staff, and authority over fee structures and recreation programs in general.

In states which only allow parks and recreation as a function of general purpose government, appointed parks and recreation department boards enjoy no such authority over departmental operations. Their responsibilities are strictly advisory, with the department head answering to the city or village administrator and the common council.

Some states, like Illinois and Colorado, have park districts and parks and recreation departments. In these states, the emulation of park district autonomy is such that parks and recreation departments have a dedicated property tax rate that cannot be used for other municipal purposes. Park and recreation tax monies are segregated into park funds, not co-mingled with general funds.

In states that do not permit park district, there is typically no such distinction. Parks and recreation tax funds are at the discretion of the elected common council. Departmental budgets are typically part of the general fund, totally at the discretion of the council (Emanuelson, 2006).

Considering the literature of parks and recreation, public administration and political science, the theoretical constructs tested in this study is that structure of government is one possible explanation for the difference between service and efficiency levels. In this study, other explanations will also be considered.

The Methodology of the Study

In Illinois, there are 355 park and forest preserve districts and 125 municipal parks and recreation departments. These competing structures of government offer similar services in virtually the same political culture. Illinois is unique in that way because no other state has such a large number of competing agencies for the same service.

Since parks and recreation services at the local level are provided somewhat differently in various Midwestern states, agencies need to be distinguished in terms of comparability.

In many communities within states not allowing park districts, park services are provided by public works departments. These are not always comparable to Illinois park districts or parks and recreation departments.

For instance, in Wisconsin 22 communities provide recreation services through taxes allowed by the legislature as departments of school districts. These also are not comparable to park districts or parks and recreation departments and have not been included in the data for this study.

The database for this study has identified 30 Indiana municipal parks and recreation departments, 85 Wisconsin parks and recreation departments, 85 parks and recreation departments in Iowa, 70 in Missouri, 35 in Kansas, and 103 in Michigan, to compare to the 125 parks and recreation departments and 355 park districts in Illinois, 10 park districts in North Dakota, 90 park districts in Ohio, 35 park districts in Colorado, and 10 in North Dakota.

Based on the cases made for and against park districts, the research hypotheses for this study are as follows:

> Illinois park districts are more effective in terms of the levels of service they provide than Illinois and Wisconsin municipal parks and recreation departments; and Illinois and Wisconsin municipal parks and recreation departments are more efficient in terms of the levels of service they provide than Illinois park districts.

Considering the research question of whether park districts are more effective than parks and recreation departments, the following definition is assumed:

1. Effectiveness—a measurement of the number of recreational facilities and programs that a recreational agency provides (Bannon and McKinney, 1980).

Based on the research hypothesis that parks and recreation departments are more efficient than park districts at providing these parks and recreation services because of economies of scale, the following definition is assumed:

1. Efficiency-- a measurement comparing service level outputs to the relative per unit costs of providing those services (Taylor, 1911).

Taking these definitions into consideration, in conjunction with Smith's (1975) delineation of the programs and facilities which comprise park and recreation services levels, a survey instrument was developed. In February 2008, 975 questionnaires were sent to parks and recreation administrators in the aforementioned states. Thus far, 253 surveys have been returned, a 26% return rate. The survey is in the Appendix.

The questionnaires[9] collected service level output data through responses to questions 2 through 7. Using responses to question 9, 10, and 12, budgetary data were collected. Budgetary data may be considered input or output data, and it is used to create the efficiency ratios for subsequent analysis.

Questions 18 and 19 collected data about total staff. Question 16 asked the state within which the agency resided and Question 20 asked if the agency was a departments of the village, school district, township, or county, or a municipal or county park district.

Questions 21 through 27 and question 8, 11 and 13 asked about the respondent professionals training, experience, salary and attitudes about their levels of autonomy and satisfaction.

[9] The complete survey instrument is in the Appendix

Using these data to create measures of effectiveness was possible on several levels. Responses to questions 2 through 8 operationally defined interval level variables related to facility outputs. The array of local programs as representative of national programmatic benchmarks was collected using questions 9 through 13:

Within the parks and recreation field, there have not been standards for measuring the efficiency of parks and recreation service delivery. Scholars have suggested standards on such variables as total park acreage, acreage per one thousand persons served, and the numbers of recreation programs an agency offers.

In addition, the field has yet to produce anything approaching national standards of service delivery efficiency (Theobold, 1979). The field of public administration also has not generated standards for efficiency, although many authors have spoken about how important it is that public agencies achieve efficiencies in the delivery of public services (Gulick, 1937).

The field of economics has focused on private sector markets and developed models of efficiencies within these markets that attempt to explain the meaning of efficiency and quantify its effects.

In *Law and Economics,* Cooter and Ulen (2000) observed that:

> A production process is said to be productively efficient if either of two conditions holds:
>
> 1. it is not possible to produce the same amount of output using a lower cost combination of inputs, or
> 2. it is not possible to produce more output using the same combination of inputs (Cooter & Ulen, 2000, p. 12).

These definitions define when productive systems achieve optimum maximum efficiency. Efficient producers are more likely to drive less efficient competitors out of the market. While optimum efficiency is not at issue in this study, what is at issue

is which structure of government, either park districts or parks and recreation departments, delivers services more efficiently per unit of service output (Brewer and deLeon, 1983). Brewer and deLeon (1983) have offered a simple definition of that type of efficiency as it applies to two competing public policy choices:

> A technical definition of efficiency is easy: the ratio between input (*I*) and outputs (*O*). Inputs are resources transformed through activities to produce outputs. For two programs (production units in usual usage), *X* and *Y*, using comparable inputs and outputs, program *X* is more efficient than *Y* if,
>
> $O_x/I_x > O_y/I_y$ *or* $I_x/O_x < I_y/O_y$ (Brewer & deLeon, 1983, p. 335).

Using the data gathered from the questionnaire presented in Appendix A of this study, new variables were created that standardized the services provided by each agency. Creating new input variables of operating budget per one thousand persons for both park districts and parks and recreation departments, and dividing acres per thousand by operating budget per thousand, resulted in a simple but useful index for comparing the efficiency of park districts to parks and recreation departments.

Similar efficiency ratios were developed for other variables. Recreation facilities per thousand were divided by per capita capital budget. Other efficiency ratios were constructed using the number of full-time or part-time and seasonal staff totals per thousand as the input variables and programs or facilities per thousand as the output variables. Still other efficiency ratios were constructed using indices of programs combined with facilities per thousand persons and dividing these by staff or budget expenditures per thousand residents.

With four input and six output variables, 12 efficiency indices were possible quantifying the possible differential effects of governmental structure. These indices facilitated the testing of the plausible rival wealth and location hypotheses as they relate to the efficient provision of park district services. They are representative of

the Brewer and deLeon (1983) model of outputs divided by inputs, that is, measures of service levels divided by the monetary and human costs of providing those services.

Inputs	Outputs
Total Staff	Total Programs
Total Budget	Total Facilities
	Total Services
	Total Acres
Per Capita Total Staff	Per Capita Total Programs
Per Capita Total Budget	Per Capita Total Facilities
	Per Capita Total Services
	Acres per Thousand

Total programs, total facilities and total services divided by total staff or total budget, not controlling for population represents Smith's (1975) definition of outcome divided by input variables. Per capita total programs, per capita total facilities and per capita total services divided by per capita total staff or total budget represents Bannon and McKinney's (1980) definition of outcome divided by input variables.

The Findings

Testing the research hypothesis that park districts provide higher levels of services than parks and recreation departments begins with a comparison of the means differences between park districts parks and recreation departments for four indicators of park and recreation service levels.

The first indicator of service levels is total facilities, which is a sum of the total facilities an agency provides, determined by summing the responses from questions

2[10] and 4[11] regarding the total number of separate park sites and the total number of other facilities (such as swimming pools, community centers and golf courses).

The second indicator is the total of all programs, which is the sum of total youth and adult athletics and total recreation programs in Questions 5[12], 6[13] and 7[14].

The third indicator is total services, which is the sum of total facilities and total programs.

The fourth indicator of total services is acres per thousand, which is a function of the number of acres indicated in responses in Question 3, divided by population divided by 1,000. This indicator is a standard by which parks and recreation agencies compare themselves in terms of the levels of parks they provide (van der Smissen, 1999).

Table 3 makes that comparison.

[10] Question 2: How many **geographically separate park sites** does your parks and recreation department or park district own, operate and maintain during the current fiscal year?
[11] Question 4: How many **geographically separate facilities** of the following types does your park district or parks and recreation department **own and operate** during the current fiscal year?
[12] How many geographically separate indoor swimming pools/aquatic centers will your parks and recreation agency have owned and operated by the end of this current fiscal year?
[13] According to your best estimate, how many adult athletic programs (of all types) will your park district or parks and recreation department have operated by the end of this current fiscal year?
[14] According to your best estimate, how many youth instructional programs will your parks and recreation department or park district have operated by the end of this current fiscal year?

Table 3

Comparison of Government Structures by Means of Service Level Categories

	classification	N	Mean	Std. Deviation	Significance
total facilities	park districts	82	61.78	58.208	6.428
	park departments	118	42.84	37.948	3.493
total program	park districts	85	14.95	8.979	.974
	park departments	116	11.65	6.350	.590
total services	park districts	82	76.79	62.729	6.927
	park departments	115	54.49	40.271	3.755
acres per thousand	park districts	82	16.2181	17.83306	1.96933
	park departments	117	19.8429	21.21521	1.96135

The findings in Table 3 suggest that park districts provide higher levels of total services but parks and recreation departments provide higher acres per thousand. Total facilities and total services are statistically significant while acres per thousand are not.

By employing independent samples means testing in Table 4, the levels of budgetary and staff efficiency can be compared. As was presented earlier in the study, budgetary efficiency is a function of total services divided by the per capita spending of the organization, including operating and capital budget amounts.

The first test is to compare the average per capita expenditures of park district compared to parks and recreation departments. A second level of comparison is the per capita staffing levels of park districts compared to parks and recreation departments. The following table makes that comparison.

Table 4

Comparison of Government Structure by Means of Budgetary and Staff Allocation

	classification	N	Mean	Std. Deviation	Std. Error Mean
Per capita total budget	Park districts	78	222.74	182.509	20.665
	Park departments	110	78.64	59.808	5.702
Staff per thousand	Park districts	83	8.82	7.318	.803
	Park departments	116	6.61	5.402	.502

Table 4 shows that park districts spend substantially more per capita than do parks and recreation departments, $222.74 per resident compared to $78.64. Likewise, park districts have 8.82 staff per thousand population compared to 6.61 for parks and recreation departments.

As previously considered, budgetary efficiency is a function of total services divided by per capita spending and staff efficiency is a function of total services divided by staff per thousand. The following table shows the comparison of the mean of the populations of respondent park districts and parks and recreation departments.

Table 5

Comparison of Population Means by Structure of Government

	classification	N	Mean	Std. Deviation	Std. Error Mean
total residents	Park districts	82	34694.29	39475.966	4359.391
	Park departments	119	20279.71	25026.881	2294.210

Table 5 shows that respondent park districts reported serving larger populations than parks and recreation departments, 34,694 compared to 20,279 people. So, not only do park districts spend more money per capita than parks and recreation departments, they serve more people, creating substantially larger operating budgets.

To determine if park districts provide services efficiently, the following table compares the budgetary and staff efficiencies of the two structures of government.

Table 6

Comparison of Government Structure by Means of Efficiencies

	classification	N	Mean	Std. Deviation	Significance
Budgetary efficiency	Park districts	76	.561354	.5655256	.0648702
	Park departments	105	.996452	.9799834	.0956366
Staff efficiency	Park districts	78	21.731848	42.0700898	4.7634996
	Park departments	110	16.467149	22.5307432	2.1482221

The findings in Table 6 suggest that parks and recreation departments, while providing lower levels of services than park districts, do so at higher levels of budgetary efficiency. This finding is intuitive, since Table 4 showed that per capita budgetary allocations of park districts are substantially higher.

On the other hand, Table 6 also shows that respondent park districts provided higher levels of staff efficiencies than did parks and recreation departments. This finding would also be intuitive, since the per thousand staffing levels of park districts were higher than parks and recreation departments, but not in proportion to the higher levels of services that park districts provided.

One explanation for the lower levels of budgetary efficiencies of park districts compared to parks and recreation departments could be that park districts spend so much more on capital projects than do parks and recreation departments.

The following table compares the per capita operating and capital expenditures of park districts to parks and recreation departments.

Table 7

Comparison of Government Structure by Expenditures

	classification	N	Mean	Std. Deviation	Std. Error Mean
Per capita operating	Park districts	80	187.1212	167.16265	18.68935
	Park departments	114	65.2793	52.65993	4.93205
Per capita capital	Park districts	80	65.1275	201.53527	22.53233
	Park departments	112	17.5104	28.42011	2.68545

Table 7 shows that per capita operating expenditures are nearly three times as great for park districts than parks and recreation departments, and capital expenditures are nearly four times as great.

Thus far, the findings support the hypotheses that park districts are more effective in providing services. The findings also support that budgetary efficiency is greater for parks and recreation departments.

The effectiveness of park districts appears to be the result of the higher levels of operating and capital expenditures that park districts are allowed to make. The efficiency of parks and recreation departments appears to be the result of the value that they are able to receive for their expenditures.

To further test these hypotheses, linear regression is employed. The following table tests structure of government against total services to measure the strength of the relationship. In this table, park districts as a structure is the independent variable.

Table 8

Linear Regression with Structure of Government as the Independent Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.254(a)	.064	.060	50.215

a Predictors: (Constant), park district

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	49.795	4.086		12.185	.000
	park district	27.489	6.916	.254	3.975	.000

a Dependent Variable: total services

The model suggests that there is a moderate to weak relationship between park districts as a causal variable with total services as the dependent variable. With an R-square of .064, structure of government would not be a sufficient predictor alone.

A better predictor is total per capita expenditures, as the following table shows.

Table 9

Linear Regression with Per Capita Total Expenditures as the Independent Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493(a)	.243	.240	44.266

a Predictors: (Constant), Percapita total budget

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.352	4.089		9.379	.000
	Percapita total budget	.179	.022	.493	8.276	.000

a Dependent Variable: total services

The model in Table 9 suggests that per capita total budget expenditures of the governmental unit is a better predictor of total services, with an R-square of .243, which is moderately strong.

In testing all of the plausible variables that could affect total services, one additional independent variable which can be added to improve the model is professional certification of the staff.

Professional training in the parks and recreation field is part of professional certification, intended to train staff about pursuing professional goals and objectives. Among these are the professional values of increasing services, and avoidance of political complications that would suppress services.

The following table shows the added affect of professional training on total services.

Table 10

Linear Regression with Total Per Capita Expenditures and Professional Certification as Independent Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.529(a)	.280	.273	43.349

a Predictors: (Constant), les/rec cert, Percapita total budget

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.567	4.390		7.419	.000
	Percapita total budget	.157	.022	.432	7.049	.000
	les/rec cert	20.929	6.301	.203	3.321	.001

a Dependent Variable: total services

Table 10 suggests that the model's R-square improves to .280, still in the moderately strong range and higher than with per capita total budget alone.

Considering the effect of structure of government upon budgetary efficiency, the following table shows the relationship between it and structure of government, where being a parks and recreation department is the causal variable.

The following table compares the percentages of respondents that were certified professionals as park district administrators compared to parks and recreation department administrators.

Table 11

Certification by Structure of Government

	Classification	N	Mean	Std. Deviation	Std. Error Mean
les/rec cert	Park districts	84	.52	.502	.055
	Park departments	116	.41	.493	.046

Table 11 shows that park districts are more likely to employ certified professionals than parks and recreation departments, 52% compared to 41%. This would suggest that the benefits that structure of government has upon total services is indirect.

Park districts have larger budgets and employ professionally trained administrators in higher percentages, both of which lead to higher levels of services. But as Table 8 shows, structure of government is not sufficient as an explanation of service levels.

Table 12

Linear Regression with Structure of Government as the Independent Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.087(a)	.008	.003	1.0565985

a Predictors: (Constant), department of city

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.812	.101		8.025	.000
	department of city	.184	.144	.087	1.275	.204

a Dependent Variable: Budgetary efficiency

Table 12 shows that there is a very weak relationship between being a parks and recreation department and budgetary efficiency taking place, with an R-square at .008. In addition, the independent variable is not statistically significant.

Table 13

Linear Regression with Structure of Government as the Independent Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.039(a)	.002	-.003	42.89480

a Predictors: (Constant), park district

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	25.196	3.587		7.024	.000
	park district	-3.464	6.038	-.039	-.574	.567

a Dependent Variable: Staff efficiency

Likewise, structure of government is neither meaningful nor statistically significant as a predictor of staff efficiency as Table 13 shows.

In fact, further testing of regression models shows there are no meaningful or significant predictors of budgetary or staff efficiency available from the data collected in this study.

Conclusions

This study tested four measures of effectiveness; total facilities, total programs, total services and acres per thousand population. It also tested two measures of efficiency; budgetary efficiency and staff efficiency.

This study focused on comparisons between municipal parks and recreation departments and park districts. Comparisons were made and other variables tested.

The initial findings of differences in means of levels of service and efficiency support the theories contained in the literature of public choice and metropolitan ecology theory.

Park districts appear to represent a public choice that provided greater effectiveness, defined as higher levels of services, than parks and recreation departments.

However, the data shows that per capita spending on parks and recreation services is a better predictor of services and that professional training is also important.

The finding also suggests that consolidation of park districts with municipalities does not provide the economy of scale that consolidationists theorize.

The cumulative implications of these findings are that Bollens' assertion that "both significant economies and better city-wide services from the consolidation" of park districts with municipalities is not supported (1957, p. 138). There is only weak evidence that consolidation provides economies of scale, with no practical meaningfulness to these findings.

The policy implications of this study are that park districts represent a satisfactory alternative to municipal government providing parks and recreation services at the local level. It does not appear to cost more for park district services than if parks and recreation services were provided by the general-purpose municipality and the levels of services are somewhat higher when park districts provide them

As a service delivery alternative, the park district system appears to provide some of its promised advantages while appearing to provide none of the predicted disadvantages. As a policy choice, there does not appear to be compelling evidence to change it.

Appendix
Parks and Recreation
Questionnaire

1. What is the **total number of residents** who currently live within the boundaries of your agency?

   Population_____

2. How many **geographically separate park sites** does your agency own, operate and maintain during the current fiscal year?

   Total number of parks_____

3. How many **total acres of park land** does your agency **own and lease** during this current fiscal year?

   Total park acreage_____

4. How many **geographically separate facilities** of the following types does your agency **own and operate** during the current fiscal year? (Please write the total number in each blank next to the facility. If different types of facilities are co-located, still treat them as separate for the purposes of this inventory.)

   a. Indoor swimming pools/aquatic centers (how many)_____
   b. Outdoor swimming pools/aquatic centers (how many)_____
   c. Senior citizen centers (how many)_____
   d. Community centers without gyms (how many)_____
   e. Community centers with gyms (how many)_____
   f. Indoor ice skating or hockey rinks (how many)_____
   g. Outdoor ice skating or hockey rinks (how many)_____
   h. Nature centers (how many)_____
   i. Museums (how many)_____
   j. Softball or baseball fields (how many)_____
   k. Nine hole golf courses (how many)_____
   l. Eighteen hole golf courses (how many)_____
   m. Zoos (how many)_____
   n. Playgrounds (how many)_____
   o. Tennis courts (how many)_____
   p. Miles of pathways or bikeways (in total miles)_____
   q. Fitness centers (how many)_____

5. Which of the following **youth athletic programs** does your agency operate during the current fiscal year? (Check the appropriate programs that your agency operates. Total numbers of programs are not needed)

    a. Boys youth basketball leagues (___)
    b. Girls youth basketball leagues (___)
    c. Boys youth baseball leagues (___)
    d. Girls youth softball leagues (___)
    e. Boys youth soccer leagues (___)
    f. Girls youth soccer leagues (___)
    g. Youth swim teams (___)
    h. Other (Please indicate the type[s].) _____

6. Which of the following **adult athletic programs** does your agency operate during the current fiscal year? (Check the appropriate programs that your agency operates. Total numbers of programs are not needed)

    a. Adult men's basketball leagues (___)
    b. Adult men's volleyball leagues (___)
    c. Adult women's volleyball leagues (___)
    d. Adult coed volleyball leagues (___)
    e. Adult men's softball leagues (___)
    f. Adult women's softball leagues (___)
    g. Adult coed softball leagues (___)
    h. Adult men soccer leagues (___)
    i. Coed soccer leagues (___)

7. Which of the following **instructional and recreational programs** does your agency operate during the current fiscal year? (Check the appropriate programs that your agency operates. Total numbers of programs are not needed)

    a. Preschool daycare or preschool half day programs (__)
    b. Summer youth day camp programs (__)
    c. Youth or adult swim lessons (__)
    d. Youth or adult gymnastics lessons (__)
    e. Youth or adult martial arts programs (any type) (__)
    f. Youth or adult dance lesson programs (__)
    g. Youth or adult dance fitness programs (__)
    h. Fourth of July celebrations or festivals (__)
    i. Other celebrations or festivals (__)
    j. Instructional or recreational boating (__)
    k. Instructional or recreational fishing (__)

8. How much **autonomy** do you believe you and your board have in **establishing user fees**? (Please check one)

    a. No autonomy (a higher authority makes that decision with no input from you) (___)
    b. Low autonomy (a higher authority makes that decision but you have input) (___)
    c. Moderate autonomy (you write the budget but it is often changed by a higher authority) (___)
    d. High autonomy (you write the budget but it rarely is changed by a higher authority) (___)
    e. Complete autonomy (you write the budget and there is no higher authority) (___)

9. What is your best estimate of the **percentage of your total operating budget** that is generated from user fees? (including revenues from golf courses, water parks or any facility generating fee revenues)

    Percentage of total operating budget generated from fees_____%

10. **Not** including capital improvement expenditures, what is your best estimate of the budgeted **total expenditures** for your agency for the current fiscal year?

    Total operating expenditures_____

11. How much **autonomy** do you believe you and your board have in **determining total operating expenditures**? (Please check one)

    a. No autonomy (a higher authority makes that decision with no input from you) (___)
    b. Low autonomy (a higher authority makes that decision but you have input) (___)
    c. Moderate autonomy (you write the budget but it is often changed by a higher authority) (___)
    d. High autonomy (you write the budget but it rarely is changed by a higher authority) (___)
    e. Complete autonomy (you write the budget and there is no higher authority) (___)

12. What is your best estimate of the budgeted total capital improvement expenditures for your agency during the current fiscal year?

    Total capital improvement expenditures_____

13. How much **autonomy** do you believe you and your board have in determining those capital expenditures? (Please check one)

    a. No autonomy (a higher authority makes that decision with no input from you) (____)
    b. Low autonomy (a higher authority makes that decision but you have input) (___)
    c. Moderate autonomy (you write the budget but it is often changed by a higher authority) (____)
    d. High autonomy (you write the budget but it rarely is changed by a higher authority) (____)
    e. Complete autonomy (you write the budget and there is no higher authority) (____)

14. What is the assessed valuation of your municipality, county or district?

    Assessed valuation _____

15. What is your agency's total tax rate (please fill in the blank if you have a tax rate for parks and recreation services. If you don't have a dedicated tax rate, please leave it blank).

    Total tax rate _____

16. In which state is your agency located?

    State _____

17. In what year was your agency founded?

    Year founded_____

18. How many total full time staff does your agency employ this current fiscal year?

    Total full-time staff_____

19. According to your best estimate, how many **total part time and seasonal staff** does your agency employ this current fiscal year?

    Total part-time and seasonal staff_____

20. Is your agency a special district, a department of a city or village, township or county, or school district? (Please circle one).

Department of City or Village Department of School District Department of Township

Department of County Special District (Park District) County Park District

21. How many years have you been employed in the parks and recreation field?

Total years in the field_____

22. In what type of position are you currently employed at your agency? (Circle one)

Department Head Recreation Director Park Director Supervisor

Other (Specify)_____

23. What level of professional training do you possess? (Check as many as apply)

1. Certified Leisure & Recreation Professional (____)
2. Associates Degree in Parks and Recreation or Leisure Studies (____)
3. Associates Degree in another field (____)
4. Bachelors in Parks and Recreation or Leisure Studies (____)
5. Bachelors Degree in another field (____)
6. Masters in Parks and Recreation or Leisure Studies (____)
7. Masters Degree in another field (____)
8. Beyond Masters Degree (____)
9. None of the Above (____)

24. What is your salary range? (Check one)

1. Under $25,000 (____)
2. $25,000-$34,999 (____)
3. $35,000-$49,999 (____)
4. $50,000-$69,999 (____)
5. $70,000-$89,999 (____)
6. Over $90,000 (____)

25. How satisfied are you in your current position? (circle one)

1	2	3	4	5
Dissatisfied	Somewhat Satisfied	Satisfied	Very Satisfied	Extremely Satisfied

26. As a parks and recreation professional, do you think your level of autonomy is directly related to your board's level of autonomy. (i.e., the more autonomy the board has, the more you have. Circle one)

Yes No

27. As a parks and recreation professional, do you believe that your own level of autonomy affects your level of job satisfaction? (Circle one)

Yes No

28. As a department of a city, village, school district, township or county, a way of improving our services would be to (Check as many as you would like)

___Provide my appointed board with more decision making authority

___Provide my department with a property tax rate only to be used for parks and recreation

___Allow my department to become a separate governmental unit such as a park district

___Other (Please specify)_____

29. Is there anything else about your current position that you would like to change? (Answer in the space below)

_____

_____

_____

_____

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