

PUBLIC BUDGETING AND FIN. MNGMT., 8(4), 578-596 WINTER 1997

## STRATEGIC CAPITAL BUDGETING AND PLANNING: PROSPECTS AT THE COUNTY LEVEL

Arie Halachmi and Alex Sekwat\*

**ABSTRACT.** This article explores the potential for integrated capital budgeting and strategic planning processes in county governments. Using a theoretical framework and analysis of data gathered by means of mail survey, the authors concluded that some degree of integration exists, but not an absolute one in a small proportion of counties. The inferences were drawn from analysis and tests of association of the use of three capital budgeting tools: a capital budget, a capital improvement program, and a periodic inspection program. The effectiveness of such a unified capital budgeting-strategic planning process in counties from a normative perspective must be verified by future research.

### INTRODUCTION

Following the 1994 elections there are continuous calls for Washington to leave more decisions to the discretion of states. In state legislatures the mood is to delegate more decisions to the local level where citizens believe they get the most for their tax dollars. States resent unfunded federal mandates and would like to have a greater say over the allocation of monies received from Washington. The same seems to be

---

\* *Arie Halachmi, Ph.D., and Alex Sekwat, Ph.D., are Professor and Assistant Professor, respectively, Institute of Government, Tennessee State University. Dr. Halachmi's research and teaching interests are in public management and productivity, strategic management and performance measurement, and policy evaluation. Dr. Sekwat's current teaching and research interests are in the area of public budgeting and finance.*

Copyright © 1997 by PrAcademics Press

true at the local level. The new emphasis on government accountability supports the emerging political wisdom that taxing and spending decisions ought to be made by the same policy makers at all levels of government. Yet, the transfer of decision-making power down the ladder of government is a mixed blessing. On the one hand, the new empowerment has the promise of giving public officials more control over their fiscal destiny. However, on the other hand, local officials are finding out that the option of exercising these new powers is not without a cost. Now, more than ever, local administrators are faced with the need to be responsive, to do more with the resources they have while foregoing the old routine of raising new revenues to finance new initiatives. They are expected to reinvent government in order to come up with new ways for handling conflicting demands for the use of scarce financial resources. As administrators, local officials must run a tight ship. As policy makers they "have to decide whether to extend infrastructure to a rapidly developing area, to rehabilitate infrastructure in older established neighborhoods or to upgrade information technologies to be more efficient and effective in the delivery of its services" (Halachmi & Gianakis, 1996: 1). The choices are often difficult, but for political prudence, the scale is often tipped against financing of capital improvement programs.

In light of the tough choices public officials must make concerning allocation of scarce resources for funding capital improvement programs, this paper examines certain issues concerning the prospects of integrated capital budgeting and the strategic planning process in county governments. The premise is that officials at the county level can do a better job as administrators and as policy makers in the allocation of scarce resources by adopting some form of a strategic management approach. Theoretical analysis suggests that concept of strategic management can provide an integrative framework where policy makers can anticipate and create the future and devise guidelines for reaching better decisions (Buchholz, 1992; Roby & Sales, 1994). Thus, this article starts with the premise that current practices of capital budgeting may already approximate the strategic planning process in certain counties. For instance, in theory, a county that has developed a strategic plan for long term infrastructure development and financing is more likely to implement the plan through its capital budget and capital improvement program (CIP). The CIP is a "timetable that specifies the projects selected

for improvement and construction; the target dates for every phase of the project; the estimated costs; and the methods of financing...it embodies a government's [county's] capital priorities and choices and fiscal priorities... therefore directly influences the preparation of a capital budget" (Axelrod, 1995: 109). As a multi-year plan, the CIP (average about five years) covers the financial plans of counties in relation to repair and replacement of existing capital facilities as well as development of new facilities. Thus, a county with a capital budget is likely to have a CIP, since by definition the capital budget represents the first year of a CIP. A capital budget and a CIP, when correctly executed, are important capital financial and planning tools (Moak & Hillhouse, 1975). Similarly, the CIP and the capital budget embodies the periodic inspection program (PIP) which local governments use intermittently as a means to assess the physical condition of their infrastructure facilities. Based on such a framework where, at least theoretically, there are linkages among the capital improvement program, the capital budget, and the periodic inspection program, the study contends that the extent to which county governments utilize these three tools integratively should approximate their level of strategic capital budgeting and planning. The appropriate use of the capital budget typically requires detail planning and closer integration of financial and physical planning processes.

### **Proposition**

The premise of the study is that county governments which concurrently utilize long-term capital facilities planning tools including the capital budget, the capital improvement program, and the periodic inspection program as mechanisms for planning, organizing, controlling, recording, managing, assessing, and generating reliable information about the nature and conditions of their capital facilities, are in fact engaged in a strategic capital budgeting and planning process. To test this proposition we used data gathered by means of survey research covering certain aspects of capital budgeting practices in county governments. The survey encompassed county governments across the United States and solicited information about various aspects of capital budgeting practices including specific information about whether or not each surveyed county: (1) uses a capital budget to record, schedule, track and control the allocation of

capital investment or expenditures, (2) uses a capital improvement program to plan, select, and finance capital expenditures over a period of five to six years, (3) uses a periodic inspection program to monitor, assess, and generate reliable information about the physical condition of capital facilities within each jurisdiction. The study contends that with the advent of information technology (e.g., the use of data warehouses and groupware) it has become much easier to consolidate elements of the three capital budgeting tools (capital budget, CIP, and PIP) into some form of strategic capital budgeting and planning or make the integration process more attractive. A full account of the research methodology is presented after the review of related literature.

### **Triggering Events**

Intuitively, the integration of capital budgeting with the strategic planning process makes sense and has great promise. If done right, capital budgeting may provide local administrators with the instrument they need for strategic management (Halachmi & Boydston, 1991). It is easy to see how the integration of the two concepts may provide a better perspective for the difficult choices public officials must make in capital budgeting decision-making. An integrated capital budgeting process can be a powerful tool for several reasons including the following:

1. It forces elected officials to cultivate and to articulate a vision for the future of their communities. It helps them develop better understanding of the options they have by making them examine the short and long-term implications of past and pending commitments on the allocation of resources. In other words, to integrate capital budgeting and the strategic planning process, local officials may need to assess each item in the capital budget, capital improvement program, and periodic inspection program.
2. The capital budget, capital improvement program, and periodic inspection program enable local officials to communicate to internal and external constituencies their priorities and the corresponding decisions about the nature and type of capital projects appropriate for funding during a specific fiscal year and for several years thereafter, as well as the physical condition of their capital facilities. Typically

the documents that describe and support a proposed capital budget(s) contain description, analysis and justification for expenditure items earmarked for financing capital facilities. These include roads, airports, public buildings, waste disposal plants, utilities, computer systems, etc. Such presentations invite internal and external scrutiny before resources are committed. The agreed-upon budget document becomes a means for legitimizing subsequent actions of local managers when implementing capital programs and an instrument for coordinating related activities among subunits internally and other public and private players externally.

Moreover, strategic planning can enhance and improve the quality of capital budgeting by forcing budget analysts to refer to contextual and qualitative data which go beyond existing practices. As noted by Nutt and Backoff (1992) strategic planning is part of the effort public organizations must make in order to adjust to changing conditions. According to these authors (1992: 9f), the need for strategic change may be triggered by a variety of events. As can be seen from Table 1, events triggering strategic change in counties may include one or a combination of several of the following events.

As illustrated in Table 1, the emergence of such events can, in one way or another, introduce changes that can trigger counties to make the necessary adjustment to changing fiscal, demographic, economic, and political conditions. Moreover, the work that has been done in the last ten years in the area of strategic planning in general and its application to the public sector in particular, can provide public managers with an instrumental framework for studying their environment and how their agencies can fit in it. Such learning can help managers develop a better understanding of their constraints and opportunities as well as the strengths and weaknesses of their organizations. However, before we argue that counties develop and merge strategic planning with their capital budgeting process, some preliminary questions must be addressed. First, do current practices in capital budgeting omit important elements of strategic analysis? Second, is it possible and desirable to merge strategic planning and capital budgeting in order to have a unified process? Since the former question was addressed in an earlier paper (Halachmi and Gianakis, 1996), this study will explore the second question.

**TABLE 1**  
**Examples of Events Triggering Strategic Planning**

Event	Example
New incorporation	Migration of population may lead to creation of a new county or new cities and townships within an existing county
New legislation (state)	Changing the chartering of local authorities from a state act to home rule
New legislation (federal)	Federal mandates or opportunities to mobilize federal resources with/without a change in inter-governmental relations, e.g. changes in revenue sharing and block grants during the Nixon years
Need to expand the tax base	Development of industrial parks and enterprise zones
Expansion or introduction of new programs or services	Replacement of a landfill with recycling and co-production of power and steam
Election of new officials or change of leadership	Education of new members about the context of past decisions and existing commitments
Legal mandates to plan	Hospitals need to have a five-year plan before securing state permission to expand
Integration and coordination with other governmental units	Synchronization of many public health functions with activities of adjacent counties, state entities, agencies or other local jurisdictions is a common practice today
Pressure to decentralize or impact of current trends	Respond to demands for privatization or contracting out or improve information technology architecture

## THEORETICAL BACKGROUND

The capital budgeting and planning process is an important element of decision-making at the local level. It helps local officials define the specific capital financing and strategic needs of their community. The capital budget also serves as a tool for managing financial resources; Robinson (1991: 66) characterizes it as the "linchpin of financial management for local governments." For Robinson, the CIP links planning and budgeting, and, through the former, relates the latter to the jurisdiction's comprehensive land-use plan. She suggests that "if a community has developed a strategic plan, it will likely be implemented through the capital improvement plan" (Robinson, 1991: 67). When strategic management is done right one of the likely results is a seamless integration of the strategic planning process with the organization's management of its various resources. This, in turn, ensures that all resource allocation decisions serve to enhance the pursuit of strategic goals (Koteen, 1989). In the private sector, the boundary line between strategic management and capital investment planning tends to blur (Clark, 1989). This is because all of the resource allocation decisions of the firm are directed to maximize the bottom line. The process of planning for long-term survival, through retention or expansion of market share and/or return on investment on equity, dovetails into the process of managing the firm's resources. The manager who makes the programmatic decisions also makes the decisions about the allocation of resources. The bottom line profit orientation of the private firm functions as a centripetal force in the organization, which serves to integrate the organization's planning and budgeting systems.

Unfortunately, public management is most like business management at the operating level and less like it at the strategic level (Bozeman & Straussman, 1990). Governments separate programmatic decisions from financial ones. Decisions about what a government or one of its subunits is going to do and how it is going to do it are often separated from decisions about how and where to get necessary resources. These last decisions are the domain of the budget office and are viewed as part of fiscal policy. Unlike their counterparts in the private sector, public managers do not get involved in crafting the plan for mobilizing the necessary resources beyond the development of a proposed budget.

Program directors who frame proposals for a facility may not become involved in studying the relative merits and costs of a user fee, taxes, or borrowing to fund the facility. Thus, some public administrators may not develop a realistic perspective nor an accurate understanding of the context and the conditions under which their organization operates. The political context of government could make strategic planning attractive to public administrators. Strategic planning can be seen as a method for "transcending" the political process (Swanstrom, 1987). However, the attempt to couple resource allocation decisions with strategic planning can complicate decision-making significantly through the introduction of other sources of potential conflicts by various stakeholders. Nevertheless, the potential effectiveness of capital budgeting as an instrument of strategic management can make the effort to integrate it with strategic planning worthwhile.

For local authorities, the attempt to integrate strategic planning and capital budgeting may be an acid test for the possibility of developing an organization-wide strategic management capacity. As pointed out in an earlier paper, the operating budget provides the public administrator with a less effective tool for monitoring and influencing the implementation of the strategic plan (Halachmi & Boydston, 1991). However, as will be pointed out below, capital budgets may be different. If the capital budgeting process cannot be effectively integrated -- the component that Steiss (1989) *equated* with strategic planning on the local level -- the prospects for system-wide strategic management would appear to be dim. Before dealing with the question whether capital budgeting should be integrated with the strategic planning and management process, we must address two other questions. First, can the logic and the analytical methods of capital budgeting undermine the integrity of the strategic planning process? Second, given the intricate nature and the complexity of both capital budgeting and strategic planning, can the two processes be merged? The answer to the first question is no. The logic and methods of the two are likely to be consistent. If anything, the relationship between the logic and the methods of strategic planning, capital budgeting and the development of the CIP can be described as complementary or synergistic. The answer to the second question is not so simple or obvious. In theory there is no reason why the two can not be combined. However, under real conditions the answer might be different. The



reason is that maintaining the necessary organizational capacity, and finding the right individuals, i.e., those with the talent, skills and experience, may prove to be a difficult order for most government entities. It seems that the issue is not whether the two should be integrated but whether they can be integrated. The difference between the two questions is that the first inquires about the normative value of such integration, i.e., its desirability, and the second probes the practical aspect, i.e., its feasibility? Obviously, the answer to the second question is likely to be agency-specific and may change with time.

For operating officials, the CIP establishes a clear mutual frame of reference about the direction in which the organization is going. Unlike the operational budget that may change from one fiscal year to the next, or even more quickly, a capital budget conveys a more permanent sense of priorities and direction. Though the funding of a capital budget is done through annual appropriations, their approval often amounts to the passing of a multi-year budget. According to Axelrod (1995) governments use multi-year budgeting to change the direction of budget priorities, to help stabilize the priorities of programs and projects, to control expenditures, to discourage piecemeal decisions, and to lighten the budgetary workload. A capital budget can help program managers develop a better understanding of the opportunities and the constraints on future action. With the adding of a new office building or the introduction of a new information technology system to the CIP, a practicing manager could tell that the odds of seeing an affirmative action on a request to build another building or to purchase another system shortly thereafter are low. From a strategic management point of view, the important thing is that all managers at all levels are likely to get a similar message about the future of any such requests. At the same time it may encourage individual managers to search, independently of each other, for ways to exploit the new opportunities that result from the said improvement. Any success in this regard amounts to an improvement on the rate of return on the involved investment. Knowing that the organization is going to have a new capital capacity may encourage managers to look for opportunities to take advantage of that capacity possibly by initiating new or different programs or work processes. Here too, the logic of the "garbage can" model of decision-making illustrates how possible solutions can start floating in search of problems. These initiatives by managers may prevent

inertia from settling in. This setting, in turn, can diminish the risk of overlooking an emerging threat, a likely event when inertia sets in.

Strategic management is designed to cut across departmental lines and functional areas in pursuit of the strategic plan. The development of a capital budget may also cut across such lines and areas with results that are very different from the ones usually obtained from the fragmentation that prevails in the operating process. It is not uncommon for staff and line units to organize their individual operations on the basis of a narrow, provincial view of the public's needs; this serves as an enormous centrifugal force in the local government organization. The needs of central staff units such as finance, personnel, electronic data processing, and purchasing are often ignored in the work plans of the individual operating departments. Managers develop work-plans for their respective units without worrying about the budgetary implications for other line and staff units. Resolving such problems is assumed to be the domain of the budget department or the top manager. One of the most important benefits of the strategic planning process is the learning benefit (Halachmi, 1996). Participants in the strategic planning process gain a shared insight into the strengths and weakness of the agency, the constraints they must face and the opportunities they may be able to exploit. Developing such a shared frame of reference by itself can improve performance and empower employees. Minimizing the role and participation of employees and, as appropriate, representatives of important stakeholder groups from outside the organization can thus be dysfunctional. The organization may lose other important advantages that result from broad and direct participation in the strategic planning process as we discussed above. At the same time the use of outside expertise that does not follow the tenets of Action Research and Training (Halachmi, 1986) may increase the odds of overlooking or missing important clues about future developments within or outside the organization.

## METHODOLOGY

The data for the study came from a self-administered survey instrument directed to finance officers in 400 counties across the United States in the spring and summer of 1993. The questionnaire was pre-tested prior to the administration of the final survey. Analysis of the pre-

tests results did not show any pattern of response bias or missing data. The 400 counties selected for the survey were drawn from a target population of 2,346 counties across the United States with populations of 10,000 or greater which have "functioning" governments. Counties with populations under 10,000 and all counties in the states of Connecticut and Rhode Island which have no functional county governments were excluded from the target population and therefore the sample frame. Like smaller cities, counties with populations under 10,000 lack the capacity to carry out unified capital budgeting and strategic planning processes (Forrester, 1993; Office of Technology Assessment, 1990). Larger counties, on the other hand, own, manage, and finance greater capital and human resources.

Table 2 summarizes the sample selection procedure. A stratified random sampling design was employed in the selection of the sample frame. The target population group (2,346 counties) was stratified according to the four major geographic regions of the U.S. as defined by the Bureau of the Census, namely: Northeast, North Central, South, and West. Proportional random samples were drawn from each stratum using the same sampling ratio of 0.17 (400/2,346). This method is considered superior than simple random sampling since it ensures adequate

**TABLE 2**  
**Proportionate Stratified Random Sample by Region**

Strata	Population Size ( $N_j$ )*	Sample Size ( $n_j$ )**
Northeast	190	32 (8.0%)
North Central	754	129 (32.3%)
South	1,129	192 (48.0%)
West	273	47 (11.7%)
<b>TOTAL</b>	<b>2,346</b>	<b>400(100.0%)</b>

\* $N_j$  = Population of Counties in Region or Stratum.

\*\* $n_j$  = Sample drawn from each Stratum.

representation of the target population (Babbie, 1986; Caputo & Cole, 1977; Emory & Cooper, 1991; Fowler, 1988). Furthermore, stratified sampling procedures decrease many sample errors associated with simple random sampling methods (Babbie, 1986; Emory & Cooper, 1991; Henry, 1988). As Table 2 shows, counties (target population) in the U.S. are disproportionately distributed, with the South and the North Central regions accounting for 80% of the total, while the Northeast and the West constitute the remaining 20%. Table 3 shows a summary of the respondents' characteristics sub-grouped by geographic region. According to the results, although each region responded adequately, the response rate in the West (76.6%) was comparatively higher than in the other three regions. Overall, 214 usable questionnaires were completed and returned, constituting about 54% of the total return rate.

### ANALYSIS AND DISCUSSION OF RESULTS

To examine the level of integration between capital budgeting and strategic planning at the county level, the study analyzed the extent counties use the following three capital budgeting tools: a capital budget,

**TABLE 3**  
**A Profile of Response Rates By Region**

Region	Sample Size		Response Rate	
	$n_j^*$	(%)	$n_i^{**}$	(%)
Northeast	32	8.0	22	8.8
North Central	129	32.3	66	51.2
South	192	48.0	90	47.0
West	47	11.7	36	76.6
<b>Total</b>	400	100.0	214	
<b>Mean</b>				53.5

\* $n_j$  = Sample Size in each stratum (region).

\*\* $n_i$  = Response Rate in each stratum.

a capital improvement program, and a periodic inspection program. From a strategic standpoint, the adoption and the implementation of these tools allow public managers to assess the current and long-term status of their jurisdiction's capital facilities in terms of shifts in population, level of economic activity, sources or options of financing capital facilities (bonds, reserve funds, grants or expenditures of other governments), etc. Ideally, to coordinate and integrate such activities, some strategic analysis or environmental assessment of a jurisdiction's long-term capital facilities is necessary for better long-term matching of resources and capital facilities programs. Top level administrators play a key role in the development of a strategic capital budgeting planning approach or integrative use of the three capital budgeting tools.

As stated earlier, the study's key proposition is that the extent to which counties use the three capital budgeting tools collectively should indicate the level of integration between capital budgeting and strategic planning. In other words, counties that use all three tools have a greater potential to integrate their capital budgeting and strategic planning practices. The rationale is that an integrated approach allows counties to account for: how to generate and disburse their capital expenditures; where the funds come from; when a project should be completed; when repairs should take place; which facilities should be financed in the short and long term; when existing capital facilities should be maintained or replaced, etc. Furthermore, an integrated approach simplifies the assessment of the opportunities and the challenges jurisdictions routinely face in planning and managing their capital facilities needs in terms of their financial, political, legal, and technological environment. For instance, a capital budgeting tool such as the periodic inspection program permits public officials to plan systematically for maintenance or replacement of existing capital facilities or equipment. Because of its long-term orientation, the periodic inspection program can serve as a strategic planning tool. Thus, counties that use the periodic inspection program can plan in advance what appropriate courses of action to take to finance the maintenance, repair, or replacement of capital facilities.

The summary of the survey results indicating the level of utilization of the three capital budgeting tools is provided in Table 4. Regarding the use of a capital budget, 86 (40%) of the total respondents (214) answered

**TABLE 4**  
**Capital Budgeting Tools as Indicators of Strategic Capital Budgeting and Planning**

Indicator	Yes	No
Use Capital Budget (N= 214)	40.0%	60.0%
Use CIP (N= 213)	49.5%	50.5%
Use PIP (N= 210)	60.4%	39.5%

affirmatively and the majority 129 (60%) counties said they did not have a capital budget or use a separate capital budget.<sup>(1)</sup>

Regarding the use of a CIP, nearly half of the surveyed counties (49.5%) reported adopting it, compared to only 40% of those with a capital budget. Among the three capital budgeting tools, the PIP is used by more (60.4%) counties compared to the CIP and the separate capital budget. The apparent higher utilization of the PIP as a budgeting and planning tool stems from its relative ease. Overall, the below average use of these tools (Table 4) suggests that relatively few counties engage in systematic analysis of their capital budgeting and planning practices. This generalization, however, does not reflect the degree of integration between capital budgeting and strategic planning among the responding counties that actually use the three tools. The next portion of the analysis attempts to determine the level of integration among the three capital budgeting tools by testing their level of association.

Table 5 summarizes the bivariate relationship between the use of a capital budget, capital improvement program, and periodic inspection program. Earlier in Table 4, the study revealed a variation in the use of these tools. To determine the level of integration of capital budgeting and strategic planning, the study expects to find an association between counties that use the three tools (capital budget, CIP, and PIP). If an association is established among all three tools, then the study's proposition that there is a possible integration in the strategic planning and



**TABLE 5**  
**Test of Association between CB, CIP, and PIP**

	With Capital Budget		Without Capital Budget	
	[Number]	[%]	[Number]	[%]
<b>Panel A. CIP Status</b>				
With CIP	68	79.1	38	29.7
Without CIP	18	20.9	90	70.3
N=214, Chi-Square=50.18, DF=1, Phi=0.484, p<0.05				
<b>Panel B. PIP Status</b>				
With PIP	59	71.1	68	53.5
Without PIP	24	28.9	59	46.5
N=210, Chi-Square=6.461, DF=1, Phi=0.175, p<0.05				
<b>Panel C. CIP and PIP</b>				
	With CIP		Without CIP	
	[N]	[%]	[N]	[%]
With PIP	76	74.5	51	47.7
Without PIP	26	25.5	56	52.3
N=209, Chi-square=15.786, DF=1, Phi=0.275, p<0.05				

the capital budgeting process among counties that use the three tools is confirmed. The following key questions pertain to testing the study's proposition.

***1. Is There a Relationship between the Use of a Capital Budget and a CIP?***

Panel A of Table 5 shows the results of a bivariate relationship between the use of a capital budget and a CIP. According to the results, 68 (79.1%) of the 86 counties with a separate capital budget also use a CIP, while the remaining 18 (20.9%) counties with a separate capital budget do not have a CIP. Moreover, the statistical test of association (using contingency tables) appear to confirm the existence of an association between the use of a capital budget and the status of a CIP.

The chi-square value of 50.18 ( $df=1$ ) at  $p\text{-value}<0.05$  alpha level support the expected positive statistical relationship. And the *phi*-value of 0.484 suggests a moderately strong association. In other words, by knowing the status of a CIP in a county, we can predict with some degree of certainty whether a particular county has a separate capital budget or not.

### ***2. Is the Use of a Capital Budget Related to the Use of a Periodic Inspection Program?***

As stated earlier, the study contends that a concurrent use of a PIP and a capital budget in a particular county is a further indication of that county's capacity to link strategic planning and capital budgeting. Panel B (Table 5) exhibits the relationship between the use of a capital budget and a periodic inspection program. As expected, the results indicate that county governments with a separate capital budget have a higher incidence of utilizing a periodic inspection program (71.1%) compared to counties without a separate capital budget and no periodic inspection program (28.9%). The test of association between the use of a capital budget and periodic inspection program suggests the existence of a relationship ( $\text{chi-square}=6.46$ ,  $df=1$ ,  $p\text{-value}<0.05$ , and  $\text{phi}=0.76$ ). Thus, according to these results, it appears that the use of a separate capital budget is an indicator of whether or not a county assesses the physical conditions of its capital facilities.

### ***3. Is There a Relationship between the Use of a CIP and PIP?***

Panel C of Table 5 shows a decomposition of the respondents' responses according to the use of a capital improvement program and a periodic inspection program. Again, as expected, counties with a capital improvement program are more likely to have a periodic inspection program (74.5%). Furthermore, a test of independence between these two variables reveals the existence of an association ( $\text{chi-square}=15.79$ ,  $df=1$ ,  $p\text{-value}<0.05$ ,  $\text{phi}=0.28$ ). Thus, a county that utilizes a PIP and a CIP has a strategic advantage of assessing the physical conditions of its infrastructure facilities and planning the financing for maintenance of those facilities.



The analysis of the three questions suggests that already there is some degree of integration between the various tools related to capital budgeting and planning at the county level, but not an absolute one.

### CONCLUSION

The study's findings are to some degree consistent with the premise established earlier. The level of utilization of a capital budget, a CIP, and PIP indicates that the processes of unified capital budgeting and strategic planning are already underway but in a smaller proportion of county governments. The implication of the study's findings is that the move towards an integrated capital budgeting and strategic planning process may be attractive for county administrators for two reasons. First, it would amount to effecting of marginal savings by reducing duplication in the collection, analysis, and dissemination of data. And second, it would improve the efforts of administrators by fortifying strategic capital budgeting with analytical frameworks or tools that complement each other.

In sum, the prospect of having a unified capital budgeting-strategic planning process at the local level may prove to be a common reality in the near future. However, its effectiveness from a normative point must be verified by future research.

### NOTES

1. The terms "capital budget" and "separate capital budget" are used interchangeably in this paper. Furthermore, counties without a capital budget typically report their capital expenditures in either their annual operating budget, multi-year budget, or other related budget formats.

### REFERENCES

- Axelrod, D. (1995), *Budgeting for Modern Government*, New York: St. Martin's Press.
- Babbie, E. R. (1986), *The Practice of Social Research*, Belmont, CA: Wadsworth Publishing Company.

- Bozeman, B. and Straussman, J. D. (1990), *Public Management Strategies*, San Francisco: Jossey-Bass.
- Buchholz, R. A. (1992), *Business Environment and Public Policy: Implication for Management and Strategy*, Englewood Cliffs, NJ: Prentice Hall.
- Clark, J. J. (1989), *Capital Budgeting: Planning and Control of Capital Expenditures*, Englewood Cliffs, NJ: Prentice-Hall.
- Caputo, D. and Cole, R. L. (1977, May), "City Officials and Mail Questionnaires," *Political Methodology*, 4: 146-155.
- Emory, C. W. and Cooper, D. (1991), *Business Research Methods*, Homewood, IL: Richard D. Irwin, Inc.
- Fowler, F. J. (1988), *Survey Research Methods*, London, Newbury Park, New Delhi: Sage Publications.
- Forrester, J. P. (1993, Summer), "Municipal Capital Budgeting: An Examination," *Public Budgeting and Finance*, 13: 85-103.
- Halachmi, A. (1986), "Strategic Planning and Management? Not Necessarily," *Public Productivity Review*, 6: 35-50.
- Halachmi, A. and Boydston, R. B. (1991), "Strategic Management with Annual and Multi-Year Operating Budgets," *Public Budgeting and Financial Management*, 3: 293-316.
- Halachmi, A. and Gianakis, G. (1996), "Strategic Planning and Capital Budgeting: A Primer," in G. Miller (Ed.), *Managing Public Debt*, New York: Marcel Dekker, pp. 207-236.
- Henry, G. T. (1988), *Practical Sampling*, London: Sage Publications.
- Koteen, J. (1989), *Strategic Management in Public Management in Organizations*, New York: Praeger.
- Moak, L. L. and Hillhouse, A. M. (1975), *Concepts and Practices in Local Government Finance*, Chicago, IL: Municipal Finance Officers Association.
- Nutt, P. C. and Backoff, W. R. (1992), *Strategic Management of Public and Third Sector Organizations*, San Francisco: Jossey Bass.

- Robey, D. and Sales, C. A. (1994), *Designing Organizations*, Burr Ridge, IL: Irwin.
- Robinson, S. G. (1991), "Capital Planning and Budgeting," in J. E. Petersen and D. R. Strachota, (Eds.), *Local Government Finance: Concepts and Practices*, Washington, DC: International City/County Management Association, pp. 65-84.
- Steiss, A. W. (1989), *Strategic Management and Organization Decision Making*, Pacific Grove, CA: Brooks/Cole.
- Swanstrom, T. (1987). "The Limits Strategic Planning for Cities." *Journal of Urban Affairs*, **9**, 139-157.
- United States Office of Technology Assessment (1990), *Rebuilding the Foundations: State and Local Public Works Financing and Management, OTA-SET-447*, Washington, DC: U.S. Government Printing Office.