

# Effects of Accounting and Budgeting on Infrastructure Capital Allocation

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**Abstract:** During the decline of public funding over the past three decades, infrastructure modernization has become increasingly dependent upon new strategies for managing the asset collection. These strategies place a renewed emphasis upon condition assessment, alternative financing, and project delivery methods. Evaluation of these strategies and their impacts on public infrastructure operating and capital budgets presents a significant opportunity for engineers and planners seeking to optimize the capital allocation process. Accounting and budgeting data are the most tangible of decision factors considered by decision-makers. As such, this data plays a critical role in how decision-makers address the key components of the capital allocation process. These key components include condition assessment, planning, financing, and acquisition. Beginning with a review of accounting and budgeting definitions, this paper describes the role of financial information among these components. Case studies of infrastructure development and recent applications of a decision support system that assists engineers and planners with the analysis and comparison of infrastructure production strategies provide the basis for characterizing the effects of accounting and budgeting on capital allocation. Findings at the local government level suggest that the common usage of cash-basis accounting and line-item budgeting and the lack of cost accounting do not adequately support decision-makers in effectively executing the capital allocation process. However, recent changes in local government financial reporting standards and applications of activity-based costing methods seek to improve accounting and budgeting practices for public managers and outside interests involved in capital investment decisions.