

# Development of a Strategic Management Process: A Case Study of the Pennsylvania Department of Transportation

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## ABSTRACT

There is a paucity of literature concerning strategic planning in the public sector. The purpose of this paper is to fill this gap with a case study of the Pennsylvania Department of Transportation (PennDOT). Strategic management in PennDOT evolved as a result of top management's determination to establish priorities and set direction for the agency. A broad organizational-level perspective was pursued; program and project-level planning were decentralized. A strategic management committee and seven substantive subcommittees have been established to set direction and manage change. This committee structure has been the focal point for the strategic management process in general and more specifically for organizational direction setting. PennDOT has applied strategic management in several ways. A concept of business groups has evolved as a new way of thinking about the agency. Major objectives for 1983-1986 have been defined that are the basis for overall department accountability and direction. Strategies to achieve them have been systematically formulated. Four-year district business plans tied to the major objectives have been initiated as a means for management and program planning at the district level. The strategic management process has been fused with the annual budget process for the development of the 1985-1986 budget. In the near future, additional activities and functions such as management development and training, information systems, and internal resource allocations will receive increased strategic attention. Efforts will be undertaken to make the process more useful throughout the department. A key challenge is to preserve this process in a political environment.

The purpose of this paper is to present a case study of how a strategic management process has been conceived and nurtured in the Pennsylvania Department of Transportation (PennDOT). It is also intended to show why a strategic management framework makes sense for a state department of transportation.

A necessary introductory aspect to this paper is to briefly clarify the terms "strategic planning" and "strategic management." The two processes are very closely related. Strategic planning is the foundation of strategic management (1, pp.4,5). Strategic planning provides perceptive analysis; it provides the framework for addressing change. It focuses on establishing priorities for resource allocation. It provides an understanding of the future impacts that may result from current decisions. Strategic planning is the major process in the conduct of strategic management.

Strategic management is more encompassing. It takes its advice from the planning function. Then it goes on to make strategic decisions concerning the timing and context for deploying capital, technical, and human resources (2, p.3-2). Although planning is dedicated to insight, strategic management emphasizes control. Strategic management shapes the corporate culture. Its objective is the effective management of change (2). In PennDOT, strategic planning is seen as a generic function of management.

To date, strategic planning and management have been largely associated with the private sector. Yet, their application in the public sector offers an opportunity to substantially improve public planning and managerial effectiveness (3, p.20). Strate-

gic planning is increasingly being applied in public transportation agencies with a fair amount of perceived success (4).

A recent article by Michael Meyer in Transportation Quarterly described several examples of strategic planning efforts in public sector transportation agencies in the United States and Canada (4). Meyer points out that the need for this type of planning can be just as great in the public sector. The environment of the public sector is clearly as dynamic as that of the private sector (4).

An appropriate starting point for discussing strategic management in PennDOT is with the organization's mission. PennDOT's legislatively prescribed mission is to provide safe and efficient transportation facilities and services at the lowest reasonable cost. Coupled with the mission are the goals and objectives of the administration. The Governor of Pennsylvania has identified economic development and community conservation as primary goals to be pursued by the commonwealth's agencies. The most salient and strategic focal point then is to determine how to tailor PennDOT's programs in pursuit of these missions and goals. Although the missions and goals are straightforwardly simple, the challenge is to effectively meet them given the size and diversity of PennDOT's responsibilities and operations. These include the maintenance, operation, and improvement of the state's system of 44,000 mi of highways and 26,000 bridges; the operation of four state airport facilities; and the provision of technical and financial assistance to support local mass transit, rail freight service, local airport devel-

opment, and maintenance of locally owned roadways. The department's total revenues for FY 1984-1985 will equal about \$2.0 billion--a big business by any measure.

In order to navigate this large organization toward its mission and goals, there must be a forward-looking management system that is both proactive and adaptive to environmental change. Although many believe that public management is completely constrained because of legislative dictates, the experience in Pennsylvania has shown that top management can make a substantial difference in how resources are deployed and in the organization's degree of success. A strategic management process has been established in PennDOT to set direction and manage change--and it is making a difference.

The method for this case study is part of the actual evolution of the strategic management process. With the understanding at the outset that the process was unconventional given the history of the organization, a chronology of the process in the form of various documents has been maintained. In a fortuitous way, that detailed chronology serves as the primary resource for the writing of this paper. The case study is an objective review and reflection of this chronology or history of events.

#### EVOLUTION OF STRATEGIC MANAGEMENT IN PennDOT

Strategic management evolved as a result of the current administration's efforts to set priorities, establish direction and effective operations, and, above all else, provide a transportation system capable of meeting the needs of Pennsylvania's economy and citizenry.

#### Reordering Priorities

At the outset of the current administration (1979), attention was focused on regaining management control over the department's maintenance operations, fiscal and electronic data processing systems, and fragmented program functions. Foremost among these was the commitment to make the department a "maintenance-first" organization. This priority was tantamount to survival. The new management team quickly made the dollar and program changes needed to put the maintenance program on track. Beginning with basic roadway and bridge maintenance activities, the philosophy eventually spread throughout all aspects of managing the business of the department. Today, maintaining computer systems and paying close attention to the most important resource of all--people--are seen as essential to accomplishing everything that the department undertakes. Simply put, the philosophy is one of maintaining those things that are important.

Another change was to adopt a pay-as-you-go policy for highway construction--no highway bonds have been floated since 1979. Other priorities receiving attention were the maximization of federal funds and the attainment of predictable state revenue. In addition, the computer systems function became a ubiquitous element in the department's drive for increased productivity and improved service delivery.

The department's fragmented programs were integrated into a logical and controllable programming process in which selecting projects on the basis of merit and sound financing was emphasized. Top management set its attention doggedly toward priority setting within a systems framework, and fiscal responsibility. A Program Management Committee was created during 1980 with a staff-level Program Development and Management Center within the Office of

Planning to support it. This new approach was successful--top management's policies and priorities became reflected in the Transportation Program's development. The program's financing was placed on a realistic and responsible pay-as-you-go basis. The Program Management Committee became the bellwether of the strategic organizational approach of targeting resources to key areas of department responsibility.

#### Need for Organizational-Level Planning

With the immediate problem of management control over maintenance, finance, and transportation improvement programming resolved, the department's top management was in a better position to step back and assess how the planning function should further evolve. What emerged was a fundamental decision that top management planning should focus on the broad organizational-level perspective of agency policy and direction setting. It followed that traditional program and project-level planning should become a more decentralized responsibility of program and project managers. This would narrow the gap between planning and implementation. Establishing this change became a formidable challenge. A major change reflecting this new orientation was the restructuring of the Advanced Planning Bureau into a Bureau of Strategic Planning. This change refocused staff activity toward assisting in the development of a strategic managerial decision-making process within the agency. In other words, the Central Office planning function began to tilt toward organizational-level planning, whereas program and project planning shifted more heavily to the program managers, especially in the field.

#### Management Conference as a Direction-Setting Tool

An important step in the evolution of the strategic management approach was a 2-day conference held for 50 of the department's top managers in April 1982. In a setting away from the distraction of daily duties, the attendees discussed the theme Challenges and Choices for the Future. Managers were requested to identify the crosscutting issues that constrained their ability to act and the opportunities and problems that would likely face the department over the next 5 years. The content of this conference was preserved for use by top management as the basis for a policy initiatives document. Looking back on the participative nature and the insightful output generated by this initial management conference, it could be said that it was a key stepping stone toward the strategic management process. Because of its success, the management conference approach has been further utilized as a key activity for facilitating departmental direction setting.

The policy initiatives document was valuable because it provided an indication of those policy issues important enough to be considered as candidates for organizational objectives. The policy initiatives also brought to light a new way of viewing PennDOT's organization--the business group. This is, the policy initiatives appeared to be more manageable if they were dealt with in categories broadly reflective of the major areas of the department's operations. A concept of four business groups emerged in top management's thinking. (The business groups are further discussed in a later section.) Once there was a firm handle on the policy initiatives of importance, attention turned to designing an appropriate organizational-level structure for direction setting.

### Strategic Management Process and Strategic Management Committee

The eventual strategic management structure took a broad approach: It absorbed the existing Program Management Committee and went well beyond transportation programming to provide strategy development in areas such as data processing, federal and state legislation, and management development and training.

A Strategic Management Committee (SMC) was created during the latter part of 1982. The SMC is made up of the department's six top managers--the Secretary as chairman and the five Deputy Secretaries as members. The creation of the SMC reflects a top-level commitment to make the process work. Further evidence of this commitment is the frequency of SMC meetings. The committee meets monthly, which is no small feat for the six top people in an organization of 13,000. The SMC draws staff support from the Director for Strategic Planning. Because of the broad top management orientation of the strategic process, the PennDOT experience has found that full-time staff support requirements need not be extensive.

The SMC has responsibility for the forwarding or evolution of the PennDOT strategic management process. The objectives of the strategic management process are to

- Facilitate determination of the major objectives of the organization and, in turn,
- Determine the policies and strategies that govern the acquisition, use, and disposition of resources to achieve identified objectives.

Specific elements and aims of the process are to

- Review and define the department's mission or missions,
- Improve understanding of the department's internal strengths and weaknesses and of the external environment in which it operates,
- Set annual performance goals and define program objectives,
- Determine alternative strategies for best utilizing resources available to the organization (consistent with defined objectives) and estimate time and resource requirements, and
- Allocate all resources available to the department.

These objectives and elements are implicit in the following description of the strategic management process.

The process (Figure 1) is a simple and yet unifying framework that provides overall direction for the complex programs and services that the department delivers. The process has as its foundation the mission of the department. Analyses are performed of internal and external factors affecting the department, for example, environmental scanning to promote understanding of the department's external operating environment and its internal strengths and weaknesses. The activities of the Legislative Review Committees are a good example of environmental scanning in the context of monitoring how legislative activities affect department programs and operations. In a more proactive vein, these two committees not only respond to legislative developments, they also try to shape them. In doing so, the strategic loop is closed; the environment has been scanned and strategies, reactive and proactive, are pursued.

The next step--determination of major objectives--is probably the most important in terms of

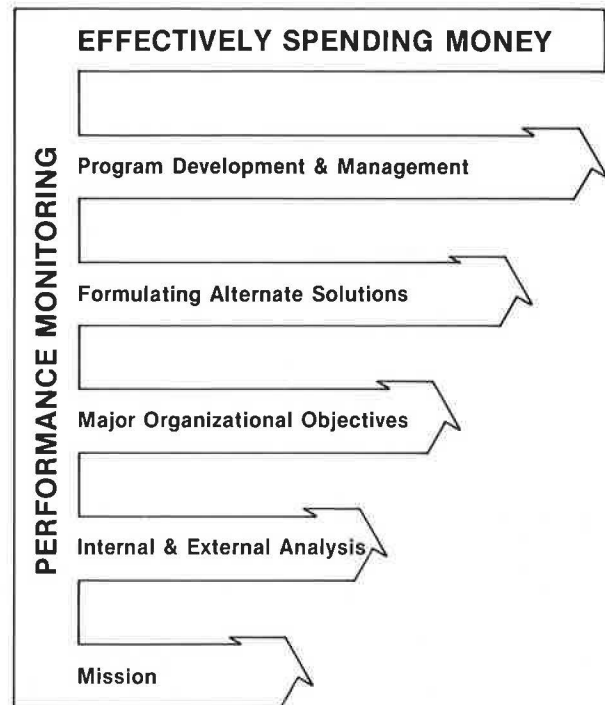


FIGURE 1 Strategic management process.

organizational direction setting. Most significantly, the major objectives provide the broadest basis for organizational accountability; they serve as a "report card" for the entire organization and represent where the department wants to be within a specific time frame. Over time, attention is turning to building increased levels of organizational commitment among employees in order to have them rally for the accomplishment of these major objectives. Once the major objectives have been established, alternative solutions or strategies are formulated for their accomplishment within the respective management committee forums. It is in these forums that ideas, alternatives, and strategies are carefully considered and preferred courses of action emerge. In the process a lot of healthy communication occurs between individuals who may not normally have the chance to interact on a regular basis.

Upon concurrence by the SMC, the selected strategies move into the program development and management stage. The ultimate purpose of this process is to effectively spend the limited dollars available. It is important to note that performance monitoring crosscuts the entire process. Deviation from the department's mission or major objectives or both can easily and unintentionally occur at any stage of the process unless there is continuous feedback to top management. This feedback takes the form of macro-performance reporting geared to the information needs of top management.

Although the SMC has overall charge of the process, it is assisted by various subcommittees with substantive roles. Together they constitute the PennDOT planning and decision forums (Figure 2). The SMC is responsible for the planning and utilization of all human, financial, technological, and contractual resources available to the department. It provides overall direction for initiatives, programs, and agency operations. It also allocates all resources available to the department.

The subcommittees provide a resource for focusing on areas of key importance to the department's oper-

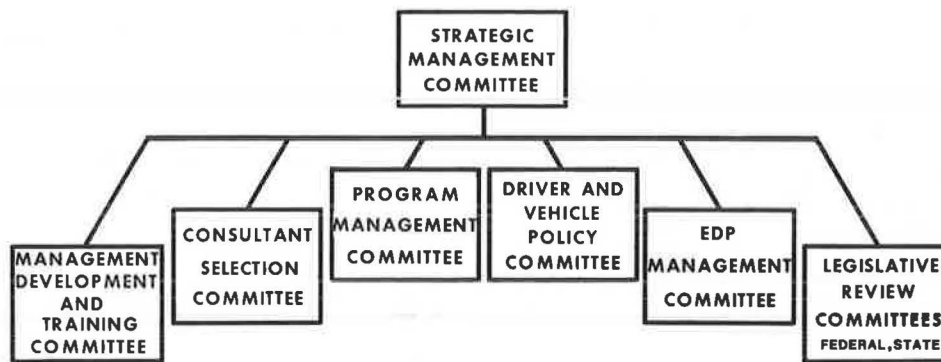


FIGURE 2 PennDOT planning and decision forums.

ations. The subcommittees and a brief description of their roles are as follows:

- Legislative Review Committees: Responsible for analyzing and developing information relative to federal and state legislation that may affect department objectives, programs, and funding.
- Consultant Selection Committee: Responsible for selecting consultants for all department purposes with the intent to obtain the best expertise at a reasonable cost to the commonwealth.
- Program Management Committee: Responsible for both long-range and annual program planning.
- Electronic Data Processing Management Committee: Responsible for both long-range and annual planning for the use and deployment of computer facilities and resources.
- Management Development and Training Committee: Responsible for the development and training of management employees. This includes the establishment of training and development objectives and the monitoring of the progress toward these objectives.
- Driver and Vehicle Policy Committee: Responsible for forming policy and establishing objectives in the areas of driver licensing, motor vehicle registration and titling, and highway safety. It is responsible for monitoring progress toward these policies and objectives.

These seven subcommittees are strategic in the truest sense of the word. Their role is to establish direction and overall guidance as opposed to management by committee. It is important to emphasize that the members of these committees hold specific upper management positions in the department. They are not expected to play their specific management role *per se* in their committee assignment. Rather they provide strategy and direction and assign management responsibility to ensure successful implementation.

It is important to point out how the SMC and subcommittee structure relates to the department's staff and management functions. The structure is not to be confused with the department's functional organizational chart. This is an important distinction in understanding PennDOT's strategic orientation. The committee structure shown in Figure 2 reflects the organization for strategic direction setting. In a three-dimensional sense, one could think of this strategic structure as being overlaid on the functional structure or organizational chart.

Some other important relationships should be mentioned. First, each committee includes representation from various functional areas of the department. Therefore, the composition of the committees does not resemble any particular bureau or office. Second, the output of the committees is simply direction and guidance for the seven various sub-

stantive areas; this direction then becomes the major input for the activities carried out by the agency's management and staff. In other words, the link between the strategic structure and the organizational structure is a link between direction and product.

The SMC and subcommittee structure represents the highest level of organizational decision making in the department. Its responsibility is truly direction setting and policy making. In general, this strategic management structure could be appropriate for other state transportation departments. The substantive roles of the committees should be tailored to suit the given organization. What should be maintained, in the authors' estimation, is the structure of a top-level strategic committee and a number of subcommittees. They are the core of any strategic management process.

Other organizations give credence to the structure advocated here. The Province of Ontario's Ministry of Transportation and Communication has engaged in strategic management for a number of years. The ministry's structure for conducting the process closely resembles that of PennDOT. There is a principal corporate committee--the Strategic Policy Committee (SPC)--which has overall responsibility for policy development and for establishing strategic directions (5, p.9). These strategic directions guide the various ministry programs for a 5-year period. The SPC is made up of the Minister, the Deputy Minister, and eight senior executives. There are also seven subcommittees of the SPC; they are responsible to the SPC for the effective management of the ministry's programs and the resources available to the ministry. Five of the subcommittees deal with the key program areas of the ministry, one focuses on resources management, and one handles operational issues. Each of the subcommittees is chaired by a senior executive.

#### PRODUCTS AND APPLICATIONS OF THE STRATEGIC MANAGEMENT PROCESS

One of the most important products, or perhaps a by-product, of the strategic management process is a new way of thinking about the organization.

#### Business-Group Concept

Through the evolution of the process, participants began to see that the department meets Pennsylvania's transportation needs through four primary product and service delivery groups with missions that are very distinct from each other:



\* Commonwealth Transportation Systems Group: The Commonwealth Transportation Systems Group provides transportation service in support of economic development and community conservation through those facilities owned and operated by the department (e.g., state-owned highways and bridges).

\* Driver and Vehicle Services Group: The Driver and Vehicle Services Group serves vehicle owners and operators through the licensing of drivers, the titling and registering of vehicles, and the administration of programs to improve highway safety.

\* Transportation Grants Management Group: The Transportation Grants Management Group influences others, such as local governments, in the delivery of transportation services by providing them with both financial and technical assistance.

\* Departmentwide Group: The Departmentwide Group provides services in overall support of all aspects of the department's operations.

The business-group concept came about as a natural outgrowth of the review of the department's missions. As pointed out earlier, this review is basic to the strategic management process. The department is viewed as a public service organization consisting of a set of discrete businesses, each with a mission tied to the larger overall department mission--to provide safe and efficient transportation facilities and services.

The business-group concept was developed for several reasons. The first was to provide a basis for managing discrete groups of transportation activities; that is, the Commonwealth Transportation Systems Group owns and operates roadways and thus fully controls key performance areas; by comparison, through the provision of transit technical and financial assistance, the Transportation Grants Management Group seeks to influence rather than control; finally, driver and vehicle activities require a greater customer service and quality control orientation because day-to-day contact with Pennsylvanians is the rule.

Second, the concept was developed to encourage managers to begin thinking in businesslike terms and to understand the bottom line or equivalent of profit for each business group; for example, increased efficiency and reduced overhead can translate into a greater level of on-the-road improvements. Lowering capital costs to transit authorities through provision of a statewide bus pool-purchase improves both operating efficiency and subsidy utilization. Reduction in the error rate of driver and vehicle transactions not only improves quality but also speeds delivery of service, enhancing customer satisfaction.

The third reason was to establish a structured basis for providing common services that crosscut each business group, that is, providing the strategic framework for developing and deploying electronic data processing resources; programming the varying manpower, plant, and equipment requirements unique to the respective businesses; and managing the administrative and fiscal aspects of each group's transactions.

In summary, the real advantage of the business-group way of thinking is that it brings order to a complex and often confusing array of activities. In turn, the ever-difficult area of performance monitoring becomes more manageable and meaningful. An understanding of the mission of each business group makes the entire process of performance monitoring far more meaningful and manageable.

#### Development of Major Objectives

The business-group framework has been utilized in defining major objectives for the department. These

multiyear objectives (1983-1986) represent a real milestone in the department's strategic management process. Setting objectives is the principal direction-setting activity in the process. There are 24 major objectives; each is categorized by business group. The major objectives were presented to Governor Thornburgh in June 1983 as the department's agenda through 1986. As previously noted, this makes them the focus of PennDOT accountability to the administration and to the citizens of Pennsylvania. Internally, accountability is assumed by the department's managers, who have the responsibility for achieving the major objectives.

It should be pointed out that the role of the management conference was significant in the development of these objectives. Their origin was in the policy initiatives that were articulated at the Challenges and Choices for the Future management conference. Once the policy initiatives were translated into the major objectives, another management conference was held as a first step in conveying these objectives to the department's managers. The theme of this conference was, appropriately, Setting the Course. This conference was a useful starting point for such important matters and issues as initiation of major objective strategy development, performance monitoring, and elaborating on a value system that top management hoped to see permeate the organization to bolster the achievement of the major objectives. More important, it was a first step in communicating the major objectives to the entire organization. Since this conference, strategies have been developed for each major objective. Major objective progress reports have been prepared and a slide presentation has been developed that clearly communicates the substance and the importance of the major objectives to all employees.

#### Formulation of Major Objective Strategies

An important application of the strategic management process has been the formulation of the strategies to accomplish the major objectives. This step is the interface between defining the objectives and program implementation. Strategy determination is a key step in the process, as pointed out earlier in the discussion of the objectives of the strategic management effort. The formulation of strategies relied on the strategic structure--the management leadership of the SMC and its subcommittees as forums for the setting of strategy. An example of this is the development of an electronic data processing (EDP) leading-edge plan under the direction and guidance of the EDP Management Committee. This strategic plan is in support of a major objective that aims to "maintain the EDP systems of the Department at the leading edge of this advancing technology." Moreover, a distinct EDP strategic planning process has been developed and instituted. The department strongly encourages this type of spin-off in a functional area. The key point is that through those committees, the strategic context of each objective is allowed to freely evolve, something that would not likely occur through a conventional organizational structure with all of its red tape. The important aspect to remember is that the committee framework has provided a structure for strategy development and that this same framework tracks strategy all the way through to program implementation.

#### Four-Year District Business Plans

The overall strategic management process, with its emphasis on placing program planning in the hands of

program managers, has led to the development of 4-year district business plans by each of the department's 11 engineering districts. District personnel began work on them in November 1983. The plans were individually presented to the SMC by each District Engineer in May 1984. The 4-year business planning process is a major initiative of the department, which is intended to assist the District Engineers in working toward the objectives of the department. Within the overall strategic management process, the district 4-year business plans represent the formulation of strategies--that is, strategies for meeting the major objectives in the roadway area. The plans encompass program, manpower, physical plant, and equipment and materials requirements associated with all district and county activities. This planning process will ensure that annual program-level elements are developed and implemented consistent with the department's major objectives and will support a businesslike approach to management at the district level. These plans are part of the overall strategic management effort. The district 4-year business planning process has proven successful and a new cycle of such planning has been initiated.

#### Integration of Strategic Management with the Budget Process

Finally, the most important application to date of the strategic management process has been its integration with the department's budget process. It has been pointed out in the literature that integration with other agency planning-related efforts, such as budgeting, is one of the most important characteristics of effective strategic planning (4). The strategic system is irrelevant if it is not integrated with the total management process of decision making and resource allocation.

For PennDOT this meant requiring managers to address the major objectives in their budget development for FY 1985-1986 by articulating the activities and dollar resources necessary for their accomplishment. Effective allocation of resources is one of the chief purposes of the strategic management effort; the department sees this as the primary end product of the process. Having the major objectives emphasized in the budget preparation process is consistent with this purpose. By this effort, the major objectives--the key directions--drive the budget request. In a budgetary sense, this application for the first time provided managers with a mission and framework to consider the relative importance of their programs and activities. From the top management viewpoint, the final resource allocations may be determined with respect to congruence with or divergence from the major objectives.

#### WHAT DOES THE FUTURE HOLD?

Looking to the future, there are several opportunities for further application of the strategic management process. And there are challenges to be faced as well.

#### Opportunities for Further Applications

There are several areas in which the strategic management process will be further applied in PennDOT. They include the following.

##### Emphasize Training

The SMC Management Development and Training Committee has already begun to consider key directions in

training. To gain some outside insights into this area, the committee includes the commonwealth's Director of Training and Development. They have actively sought input from the private sector. The department will continue to emphasize training at all levels of the organization, and training will become increasingly focused on those activities that have either a short-term or long-term payback. Evaluation will become an integral feedback loop for training management in order to ensure that training efforts are producing their intended results.

##### Optimize Allocation of Resources to Business Groups

The intent here is to increase the capability for developing optimal targeting of physical, human, and financial resources in a way that will develop and strengthen the overall organization. This will require strengthening management's analytical skills and the quality of information to support decisions.

##### Stay Close to Department's Customers

In broad terms, department managers must think in terms of a market approach; that is, greater attention will be given to recognizing the diversity across Pennsylvania, understanding the specialized needs of geographic service areas, and providing services accordingly.

##### Develop Greater Reliance on EDP Information Systems

The SMC will seek ways to expand the application of electronic data processing in order to increase productivity and to make an overall improvement in the information resource.

#### Institutionalizing Strategic Management

As an organization-wide policy-making and direction-setting activity, strategic management's policies and directions become operational at the program and project (service delivery) levels of the agency. To increase effectiveness, opportunities can be taken to make strategic management and planning more influential at all levels of the organization.

The role of management will include the development of the culture of the organization. Culture is expressed in the shared values that an organization holds; they represent the organization's beliefs and define what it stands for. They are expressions of its philosophy and spirit and are the basis for its policies and actions. Values set an organization's style of operation and therefore affect its performance by building unity and pride in the organization.

The task of shaping organizational culture is a prime management responsibility. The Secretary sees his job as shaping the values of the organization. Values such as service, integrity, excellence, work ethic, and interest in people have been the key factors to many of the department's successes. Wider adoption of these values will help the department to achieve its major objectives. And, perhaps even more important, these values will become part of the institutional memory, effectuating a positive style of performance that will build pride among the employees as well as respect from those whom it serves. Values, if they are to be the cohesive and driving force that they can be, should be conveyed and evidenced at all levels of the department. Inculcating a set of desired values among the 13,000 employees of PennDOT is perhaps one of the greatest

and most challenging tasks before the department's top managers. Communicating values is by no means a guarantee of transmitting values. The rest of the equation is to abide by these values and, in doing so, to hope that they will be shared by a large number of employees.

Additional steps at institutionalizing the strategic management process will consist of the production of video presentations of the department's values and its major objectives. These presentations will be widely disseminated among managers and staff to create understanding and interest.

### Challenges

There are challenges to be faced in implementing strategic management in a public works agency as well as limitations because of the significant constraints of a public-sector environment. The process must remain relevant for dealing with organizational policy development and direction setting. How to maintain its vitality in a political environment that has relatively frequent changes of top management is a valid concern. Its acceptance by a new set of top leaders will depend on their view of the utility of the activity and the extent to which it has been built into the organizational memory and culture.

Top management can meet this challenge if the usefulness of the process is clearly shown throughout the department. This can be achieved by periodic reporting on what has been accomplished through the use of good vertical communication throughout all levels of management and staff. Moreover, enhanced participation in the process by lower echelons of management and staff should promote wider use of the process. Decentralized strategic planning, such as PennDOT's 4-year district business plans, exemplifies the value of diffusing this process.

### CONCLUSION

A case study has been presented of the development of a strategic management process in PennDOT and how the process evolved. Various products and applications of strategic management in the department were discussed. A look at the future and some expected opportunities for further application and increased effectiveness of the process at PennDOT were included.

The department's current top management took over in 1979. Recognizing not only that PennDOT's size and diversity of operations are great but also that important priorities then existing had to be re-ordered, top management set about establishing a businesslike management style. It was recognized that there was a need for a management process that is proactive--able to establish policy, set directions, and manage change.

Department top management has been active in implementing the strategic management process. The consideration of identified policy initiatives and study of department missions has led to the concept of four corporatelike business groups. This new way of viewing the organization encourages management to think in businesslike terms and to better concentrate on the four discrete groups of transportation activities provided by the department.

The determination of major objectives is a fundamental reason for the existence of strategic management in PennDOT. The SMC determined the department's 24 major objectives by mid-1983. Covering the period

1983-1986, the major objectives establish overall direction for the agency. They serve as a focus for department activity for the second 4 years of the current department administration. The major objective strategies serve as the mechanism whereby the policies, functions, and activities necessary to achieve the major objectives are determined. And they also provide a means whereby the SMC and its subcommittees can monitor progress being made toward the objectives. And the strategic management process has been linked to the budget process, facilitating the identification of the resources needed to make progress toward the major objectives.

The experience of PennDOT is that strategic management has been useful. It has permitted top management to establish direction for the agency. The structure of the SMC and its subcommittees has been set in place and is working. Top management has been setting the course for the department through the process of establishing objectives, determining strategies, and linking them with required resources.

Strategic management provides several opportunities that a state department of transportation should consider. It helps management in evaluating the mission of the organization--to study what the business of the agency is. Engaging in strategic management forces the establishment of objectives for the organization, that is, identifying where the agency would like to be. It facilitates consideration of the activities and resources required to best meet the identified objectives. This builds management skills and provides opportunity to consider the entire agency, its environment, and its operations.

The management structure to carry out the process need not be elaborate. A principal committee of top-level management and a number of subcommittees to provide direction and guidance in key areas of department operations has been a workable structure in PennDOT.

The participants will strive to make strategic management a continuously more beneficial and workable activity because of a belief that is best put by James F. Lyon (6): "Strategic management will increasingly gain acceptance as the best vehicle for improving large complex companies. Effective strategic management can pull together a diverse organization, communicate clear objectives and values, and achieve the creative integration of capital, technical and human resources."

Suffice it to say, this is the vehicle for PennDOT.

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