MAKING BETTER USE OF EXISTING RESOURCES

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INTRODUCTION

Current methods of planning, programming, prioritizing and procuring road works do not always make best use of the available financial resources. There are several ways of improving this. Planning and programming can be improved by developing an appropriate road management system, while priorities can be rigorously set on the basis of benefit/cost analysis, or multi-criteria analysis. However, much of the emphasis in recent years has been on: (i) increasing market discipline by exposing in-house work to competition from outsiders, or contracting work out to the private sector; (ii) improving procurement methods (i.e., the way in which work is procured from outside suppliers); and (iii) introducing rigorous internal auditing of road works.

IMPROVING MARKET DISCIPLINE

Most government organizations find it difficult to operate commercially within the traditional departmental structure. Management is less proactive, staff incentives rarely encourage optimum use of resources, and priorities are subject to political interference. To promote better use of resources, many countries have therefore attempted to apply some form of market discipline to the supply of road services. The three main ways of doing this is by:

(i) exposing in-house staff to competition from outside suppliers;
(ii) contracting out the supplier function to a state owned enterprise (i.e., a public sector contractor); or
(iii) contracting out the supply of road services to a private sector contractor.

These are not always exclusive options and many countries use (i) and (ii) as part of the transition towards full contracting out to the private sector.

Each of the above options improves operational efficiency and encourages better quality work. The costs of road works subjected to the above type of competition typically fall by 20 to 30 percent. In New South Wales, Australia, exposing in-house staff to competition from outsiders led to costs falling by about 25 percent, while full contracting out to the private sector caused costs to fall by 37 percent. Likewise, in-house costs in Sweden fell by about 25 percent after the routine and periodic maintenance carried out by their commercialised works unit was subjected to competitive bidding.

IMPROVING PROCUREMENT METHODS

Many countries have been experimenting with better ways of procuring road services from outside contractors. The main changes focus on: (i) increasing the length of the contracts; (ii) developing comprehensive contracts covering all the work which needs to be done to the road; (iii) applying the contracts to groups of roads, rather than single stretches of road; and (iv) moving towards performance based specifications.

Length of contract. First, the contracts cover a period of time, rather than a pre-specified set of activities. This encourages the contractor to purchase equipment and train staff. Typically,
routine maintenance contracts are for 2 years (+), combined routine and periodic maintenance are for 3-5 years (gravel) and 5-7 years (paved), while rehabilitate, operate and maintain contracts are for 7 years, with the term often used as a bid parameter within the limits of 7-15 years.

Scope of work. Second, the contracts cover all the work which needs to be done to the road during this (extended) period of time. Typically, on roads in good to fair condition (i.e., roads where no periodic maintenance is required), it covers routine maintenance only, while on other roads it covers routine and periodic maintenance, and may even include some initial rehabilitation work.

Coverage. Third, the contracts cover a group of roads. The roads often include all the roads within a designated area, or all the roads under the responsibility of a small municipality or district council. Typically, routine and periodic maintenance contracts cover 100-500 km of roads, while those covering rehabilitation cover 300-1,000 km of roads. This creates economies of scale and enables the contractor to set up an organization wholly dedicated to looking after this sub-network of roads.

Specifications. Fourth, the contracts are often let under performance (or end product) specifications, rather than procedural (or method) specifications. Under this arrangement, the road agency determines the required level of service required in terms of clearly defined functional or performance characteristics (e.g., roughness, rutting, surface friction, etc.). Among other things, such specifications reduce the amount of supervision required, since it is only necessary to test the performance of the facility, rather than each item contributing to that performance.

These contracts have turned out to be highly cost-effective in Latin America and Australia. Typically, the long term, area wide contracts reduce costs by up to 25 percent, while the performance specifications can reduce them by a further 25 percent. In Australia (the Transfield contract in New South Wales) costs came down to 48 percent of the road agency’s previous in-house costs.

**INTERNAL AUDITING**

A strong internal auditing function can have a major impact on efficiency. It systematically checks to make sure that the work has been properly planned and programmed, that work has been done and completed according to specification, that all funds have been handled according to the regulations, and that appropriate internal control procedures are in place and functioning. The internal audit normally covers four main activities: (i) a program audit; (ii) a works audit (normally referred to as a technical audit); (iii) an administrative (or procedural) audit; and (iv) a financial audit. These are summarized below:

**Program Audit.** It reviews – on a sample basis – the content of the (maintenance) program, how it was prepared, how the planned work relates to the overall road network (in terms of location, type of road, etc.) and the projected costs of the work.

**Works Audit.** A sample of completed work is inspected to compare planned work with actual out-turn (in terms of cost, timeliness, etc.), the quality of design and implementation (supervision) and the quality of completed work relative to the original specifications.
Administrative Audit. Again, on a sample basis, this looks at the procedures followed when identifying potential bidders, the conduct of the bidding process, the award of contracts and how the contracts were supervised.

Financial Audit. This is typically carried out in accordance with the International Accounting Standards established by the International Federation of Chartered Accountants. It checks a sample of financial transactions to see whether the services were delivered according to the financing agreement, whether adequate vouchers and journal entries were kept (i.e., whether there is a consistent “audit trail”), whether Special Accounts and other financing mechanisms were kept in accordance with the financing agreements, and whether suppliers and contractors were paid on time.