A NEW APPROACH TO SETTING THE FUTURE TRANSPORT AGENDA

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June 1998

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Foreword

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Contents

Abstract vii

I. Setting the Context 1
   A. Transport Policy 1
   B. Role for the Bank 2
   C. The Philippine Policy Framework 3
   D. The Philippine Transport Sector 3
   E. Future Transport Policy 5

II. The Study Approach 5
    A. The Institutional Role for PTSS 5
    B. Experience from the Metro Manila Capital
       Investment Folio 6

III. Funding the Sector 8
    A. Public Funding 8
    B. The Funding Solution 8

IV. Attracting the Private Sector 10

V. Improving the Government Process 12

VI. Transport Strategy 14
    A. Roads 15
    B. Rail 16
    C. Maritime (Ports, Navigation, and Shipping) 17
    D. Aviation (Airports, Air Navigation, and Air Services) 18
    E. Multimodal Transport 21

VII. Projects and Priorities: The Study Approach 21

VIII. Investment Program 24

IX. Conclusions 25

References 26
Abstract

The 1990s pose radical new challenges for the governance of Asia's developing countries and the transport policies they pursue. The Philippine Transport Strategy Study (PTSS) is an innovative approach to addressing this new complex of issues in a rigorous and practical way. The result provides the foundation for dialogue between the Bank and other public and private sector interests and the Government of the Philippines; and assists the Government in the transition to "The New World" that faces all Asia's major developing countries. The focus of this paper is on the institutional and policy aspects of the approach, the methodology, and the broad conclusions that result—rather than on detail and projects (which the Final Report provides*).

PTSS was commissioned to develop the Transport Agenda for the next 6-year Medium Term Philippine Development Plan (1999-2004), and to identify the role of the private sector in implementing the Agenda. It included the main transport modes: roads, rail, maritime, aviation, and intermodal linkages. The study was carried out within the National Economic and Development Authority, and reported to the government Inter-Agency Technical Committee for Transport Planning.

*The Final Report contains the following Volumes: Executive Report (Volume 1) and Main Volumes 2-4.
I. Setting the Context

A. Transport Policy

Experience demonstrates the importance of transport policy. Transport is central to delivering prosperity and the quality of life most countries aspire to. This is because the impacts of transport policy are pervasive: on economic performance (and therefore incomes); on the shape and structure of human settlements through its impact upon physical development and economic structures; on the distribution of income (and therefore the balance of winners and losers, and on poverty); and on the environment (and hence on the quality and enjoyment of life).

Transport policy can therefore become a catalyst to creating synergy in public policy, delivering a wide range of benefits—or in its failure create bottlenecks and frustrate the best prepared plans. Transport policy is central to the sustainable development that forward-thinking leaders increasingly recognize as essential. Yet a review of the performance of the sector in the Bank’s developing member countries shows that all is not well, and that this potential is rarely being realized. It is concluded that this shortfall in performance is substantially a failure of the traditional system of government-led planning, implementation, and regulation. This is manifest by ineffectiveness and underinvestment, and by the failure to effectively tackle the scale and diversity of problems that face the sector. At root this is firstly an institutional problem, and secondly a failure of transport policy; yet many believe that the solution lies in more government funding and more projects.

The 1990s pose new challenges for transport policy. Two are fundamental: it is increasingly recognized that policy must be sustainable—planning must be for the long-term, as well as for tomorrow and the day after. And markets must increasingly set the transport agenda of tomorrow to meet the diverse and changing needs of consumers and producers, partly as a result of global competition, and because of limitations on future public funding. “New challenges” need to be met too: the need to develop intermodal transport chains, tackle rapidly increasing urban transport problems, address the predicted large increases in motorization, reduce the large and increasing toll of traffic-related deaths and injuries, and address the profound concerns associated with increasing air pollution.

How do we “meet the needs of the present without compromising the ability of future generations to meet their own needs”? The World Bank (1996) published its conclusions after a substantive review of policy, and this provides the foundation which the Philippine Transport Strategy Study (PTSS) built on. There are three strands to the answer: Economic sustainability: this recognizes that economic growth is a valid objective of society. This must go hand-in-hand with social sustainability: wherein the problems of poverty and protection of the disadvantaged are central to the sustainability agenda, and environmental sustainability: wherein congestion, pollution, sprawling development, and the exhaustion of resources all threaten a sustainable future.

Competition is the key to promoting efficiency in the sector, and economic sustainability requires the creation of competitive markets (either competition in the market or for the market). This is a central task of government and poses critical problems for a

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1This is the definition commonly adopted from Our Common Future (World Commission on Environment and Development 1987).
government not experienced in the skills of “light” regulation, or in how to regulate in the public interest. When “the prices are right” scarce resources will increasingly be allocated efficiently, cost recovery will improve, and the sector will become increasingly attractive to the private sector. In short, the imperative of a sustainable transport policy goes hand-in-hand with the funding imperatives for the transport sector.

The global change to “a New World” provides the driving force behind the new transport strategy. Its characteristics are summarized in Table 1:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>“Old World”</th>
<th>“New World”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy objectives</td>
<td>Promoting economic growth</td>
<td>Promoting economic growth</td>
</tr>
<tr>
<td></td>
<td>Reducing poverty</td>
<td>Reducing poverty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Protecting the environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improving the status of women</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supporting human development</td>
</tr>
<tr>
<td>Planning timeframe</td>
<td>Short/medium term</td>
<td>Long term</td>
</tr>
<tr>
<td>Driving forces</td>
<td>Public sector management/funding</td>
<td>Private sector skills/resources and public sector policy making, regulation,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>facilitation and procurement</td>
</tr>
<tr>
<td>Forms of intervention</td>
<td>Investment in projects</td>
<td>Capacity building/institutional restructuring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Policy reform to create competitive markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investment in projects</td>
</tr>
</tbody>
</table>

This future will need to be very different from the past, and will require a new transport policy agenda. These global changes may be expected to take 10 to 15 years to complete, once embarked upon, and are likely to be irreversible. It is concluded that a new mind-set is needed to face this future, and that living in the past is not an option, and would not achieve national goals.

B. Role for the Bank

The Bank is in the process of developing a transport policy, and has developed the basis for this. In economic terms, the Bank’s transport portfolio is, with the energy sector, the highest performing sector in the Bank. The case for maintaining a high level of activity in the sector in part results from this widely observed fact, and in part results from requests for sector assistance. The Bank’s core role is to lead policy dialogue and provide capacity building and policy and investment support for implementation. There is widespread recognition of the importance of “additionality” and little doubt that the Bank’s influence needs to be, and can be, much more than the total of its investment portfolio. This requires a strategy for operations with the private sector and cooperation with other international financial institutions.
Given that resources available to the Bank will always be at a premium, the challenge is to maximize the effectiveness of their use. This requires focus—implying sectorwide study—followed by targeted interventions when and where the institutional environment allows them to be effective. The Philippine Transport Strategy Study is such an example of front-end sector study, providing the basis for future assistance, targeted to the core requirements.

C. The Philippine Policy Framework

The catalytic role of the new Transport Agenda in moving to the "New World" is progressively being understood. A number of countries have preceded the Philippines, and hard lessons have been learned. PTSS applied these lessons in devising the new Transport Agenda for the Philippines. The starting point is to understand the existing framework of government policy.

After almost a generation of stagnation and underperformance, the Philippines has emerged in the mid-1990s with a stable democracy, sound macroeconomic policies, and strong growth. This is the result of a proactive policy by the Ramos administration. Broad policy is both coherent and clear: government will be proactive in achieving defined national development goals. Deregulation, decentralization, devolution, democratization, and privatization are the central thrusts of policy; and re-engineering of the government bureaucracy is recognized as necessary to achieve this. A new Medium-Term Philippine Development Framework Plan is to be produced in 1998, and PTSS is to provide the transport component of this.

D. The Philippine Transport Sector

The Philippines is an archipelago, and all modes of transport exist. The highways, maritime, and aviation sectors are all important, rail less so at present. The study considered it was essential to start from a position of realism. Nine factors identify the dimensions of this, and point to the challenges that had to be faced:

(i) Politics intruded extensively in the sector—too Intrusively. The result was that just about every place in the Philippines had been designated a development priority, and little attention was paid to economic efficiency.

(ii) The institutions of government had become ill-suited to the task ahead—change was needed.

(iii) There was inadequate funding to meet the sector's needs.

(iv) The private sector was, incorrectly, seen as the (easy) answer to this funding problem.

(v) There was no transport policy and strategy owned by government².

²During the late 1970s and early 1980s a massive National Transport Planning Project was undertaken with World Bank funding assistance. Since that time little or no monitoring and updating of the strategy has been undertaken.
(vi) There was inadequate understanding of the potential of transport strategy.

(vii) Attention focused on projects, not institutions or policies—which had now become more important.

(viii) There were few prepared "good" projects that were implementable.

(ix) Many projects were simply unrealistic and unaffordable.

The problems in each sector were identified. Existing problems were extensive and multidimensional, and are summarized in Table 2.

<table>
<thead>
<tr>
<th>Problem in attracting private finance for infrastructure</th>
<th>Roads</th>
<th>Rail</th>
<th>Maritime</th>
<th>Aviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(some success in Metro Manila)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(no success to date outside Metro Manila)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(very limited success)</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(some limited success)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In combination these issues pointed to the scale and underlying nature of the transport problem in the Philippines. This was a deep-rooted, substantial failure of sector institutions and of transport policy. These might have been appropriate in the past, but they were not in tomorrow’s "New World". The core technical problem was not (as was widely thought) simply a matter of deciding which projects should be implemented. Indeed transport capacity was not the main technical problem at all, but rather maintaining the existing assets.

The study prepared forecasts to gauge the scale of the future transport problem, assuming that the economy continues to perform well, which is widely considered realistic. The forecasts demonstrate that traffic will grow quickly:
<table>
<thead>
<tr>
<th>Mode</th>
<th>Traffic Growth, 1995-2005 (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td></td>
</tr>
<tr>
<td>Interurban</td>
<td>50</td>
</tr>
<tr>
<td>Surrounding urban areas</td>
<td>100</td>
</tr>
<tr>
<td>In urban areas</td>
<td>150</td>
</tr>
<tr>
<td>Sea traffic</td>
<td></td>
</tr>
<tr>
<td>International cargo</td>
<td>200</td>
</tr>
<tr>
<td>Domestic cargo</td>
<td>125</td>
</tr>
<tr>
<td>Domestic passengers</td>
<td>170</td>
</tr>
<tr>
<td>Air traffic</td>
<td></td>
</tr>
<tr>
<td>Domestic passengers</td>
<td>90</td>
</tr>
<tr>
<td>International passengers</td>
<td>120</td>
</tr>
</tbody>
</table>

Typically, traffic demand is expected to double in 10 years. Given the scale of existing problems, effective action is clearly essential if transport is not to become a serious constraint to future economic performance.

E. Future Transport Policy

Historically the Philippines transport sector has been strongly regulated and investment has been government-led, but increasingly this has changed. Today there has been some deregulation, privatization, and the recognition that the private sector must be attracted to assist funding and operating the needed infrastructure. Some of these policies have had important benefits, for example, the emergence of a new breed of marine fast-craft that have cut journey times between the islands, and the deregulation of the airline industry.

Looking ahead, economic growth is the prime national goal, from which it follows that economics and cost-effectiveness should be the major criteria in setting the new policy agenda. How will economic efficiency be achieved? The central role for government in the future will be to create competitive transport markets, in which the private sector will operate transport services. When this is done (and when adverse impacts on third parties are charged for) transport prices will be economically efficient, and the sector will become increasingly self-financing and secure, i.e., less dependent on sometimes unreliable government funding. Government must also protect the disadvantaged and protect the environment, and, while this simple prescription is difficult to implement, it is the essential starting point.

II. The Study Approach

A. The Institutional Role for PTSS

It was important to start by defining how PTSS could be most useful. Should it define a blueprint? It was firmly concluded not, if this meant defining in detail what each agency should do, where, and when. This was because experience in the Philippines demonstrated that agencies jealously guarded their autonomy, and such results would be ignored.
It was concluded that the study should determine a realistic (desirable, implementable, fundable) strategy that the main government agencies would sign up to. This should set the priorities for action; identify the necessary institutional reforms; recommend future policy; recommend priority investments in the road, rail, maritime, and aviation sectors; and determine how the private sector should be involved in implementation.

B. Experience from the Metro Manila Capital Investment Folio

The study approach was strongly based upon the experience gained in a major Urban Management Technical Assistance undertaken by Halcrow Fox and Associates for the Metro Manila Commission in the early 1980s (Metro Manila Commission 1992, 1994). This study, the Metro Manila Capital Investment Folio (CIF) focused upon establishing a new system of planning and delivering a realistic multisector investment strategy to support the future development of Metro Manila. While PTSS was concerned with the transport sector and the whole country, the CIF addressed all sectors in one city, in many ways a more difficult challenge. The problems in each case are different, but many aspects of the required approach were similar.

The CIF had established a new planning process, based upon an annual cycle of activities, and focused upon interagency dialogue and consensus. The technical approach developed was fully transparent and instrumental in developing a broad consensus behind what should happen (and what should not happen). The CIF demonstrated that what was effective was a technical approach that developed the required output and a study process that was consensus-forming, thereby maximizing the implementation prospects.

It was found that nearly everything that happened was in reality suboptimal (the Philippines reflects normal experience in developing, and many developed, countries). Thus the planning process was often poor, so were implementation and maintenance. Moreover, it was difficult to forecast many years ahead because of economic uncertainties and the prevalence of natural disasters. The lesson that has been learned in the Philippines was that the technical challenge should not be sophisticated project optimization, but rather achievement of a robust strategy, which was fundable, implementable, and demonstrably beneficial. To achieve this, project evaluation (a major feature of the CIF) was required to identify three broadly separate classes of projects: the unambiguously "good", which should be implemented, consistent with a lower estimate of available funding; the unambiguously "bad", which should not be implemented; and others, roughly prioritized—which should be implemented as funds allow. It was concluded that for PTSS, as in the CIF, this alone would be a major step forward.

Figure 1 shows the core of the CIF technical approach.

The CIF approach comprised a development strategy, which sets out objectives clearly (providing the basis of the evaluation method); an estimate of available public sector funding, defined as a “budget envelope”; and the projects and programs of the agencies. Only those projects already subject to feasibility study (i.e., for which the necessary information existed), were considered for the immediate CIF program. A family of scenarios was developed, and each project evaluated against each scenario to identify the main uncertainties.

This evaluation involved reviewing and adapting the results of existing feasibility studies to demonstrate the performance of each project under the consistent set of assumptions adopted for the study: economic and demographic assumptions, assumptions about
shadow pricing, assumptions about committed projects, etc. This process combined available analytical tools with professional judgment, with the objective of “roughly prioritizing” the projects and programs. Where necessary, existing analytical methods and cost assumptions were modified to ensure the results were plausible and consistent.

The CIF evaluation methodology was a development of the methodology applied by the National Economic Development Authority (NEDA) for all large infrastructure projects. Its key features were:

(i) It started from defined projects (mostly already identified, but supplemented by the study team) and from government’s policy objectives.

(ii) It recognized the different levels of commitment associated with different projects and evaluated only those that are subject to influence.

(iii) It built in practical and affordability constraints, the latter as a budget envelope.

(iv) It focused on the robustness/flexibility of projects in the face of an uncertain future, and the uncertainties surrounding the importance that should be given to different evaluation criteria.

(v) It produced a Core Investment Program of projects justified under low assumptions of affordability, and identified those additional projects that would be justified should higher levels of funding be realized.

It was the intention to apply this method to PTSS. But we will see that this was only partly possible: because compared with Metro Manila in the early 1980s, there were in the mid-1990s few prepared projects in the national transport sector that could be evaluated. This again pointed to the core problem: that of the sector institutions.
III. Funding the Sector

A. Public Funding

Worldwide, demands for increased public spending are being resisted by taxpayers, even as demands for spending in the social sectors increase. The simple fact of life is that public funding increases in the transport sector will not be large. This is as true in the Philippines as elsewhere. PTSS estimated that approximately US$8 billion (at 1995 prices) was likely to be available for the (nonurban) transport sector during the next 6-Year Plan period (1999-2004) or about US$1.3 billion per year. This encompasses the main transport networks (excluding local facilities); the whole (nonurban) Philippines; all subsectors (roads, rail, maritime, and aviation); and both investment and subsidies. It was recognized from the outset that this was not a large amount, when compared to the cost of some individual projects under consideration. A “budget envelope” was developed that depended upon the performance of the Philippine economy, and resulted in US$8-12 million being available from public funds, under differing assumptions.

PTSS sought to answer two questions: First, where will the remainder of the required funding come from? Second, how best to allocate the scarce public funds? The division of expenditure between subsectors should evidently not just depend on past trends, but be based on priorities established by analysis, recognizing the level of commitments and the potential for private sector involvement in funding.

B. The Funding Solution

Apart from more borrowing—which was not considered a sustainable option—there was only one additional funding source, namely the users of the transport system, through the tolls and tariffs they pay. This is the core message of the future transport policy: users must increasingly pay for the services they use, thereby funding the growing needs of the sector. The private sector can usually provide service more efficiently, and more responsively than government; where the private sector also funds needed infrastructure, the funding is usually considered “additional” to public funding (e.g., Build-Operate-Transfer or BOT projects). But in this case, it is still users who pay, through tolls and tariffs.

If transport projects were “profitable”, funds for investment in transport could be considerable, because there would be large additional funds from the private sector. But this is not the case: very few transport projects are profitable: a few bridges, tunnels, very few expressways, and only a very small number of railways in the world. The reason is known: many projects produce large benefits for other transport users (who do not use them) and they cannot be expected to be profitable based only on user tolls and tariffs. But the consequence is of the first importance: only exceptionally will major transport infrastructure projects be “profitable”. All others—the vast majority—will require the government to contribute to funding (either directly, through the provision of investment subsidies, or indirectly, by providing guarantees).

There is a second problem: it has proved very difficult, just about everywhere, to implement BOT projects. Table 3 summarizes the implementation success in Asia (Allport 1997).
Approximately 100 major highway and rail projects are currently operational or under active development in Asia. Of these over 60 are in cities, and most in the capital city. This urban concentration is to be expected; it is where major traffic is concentrated, upon which financial returns depend. The remainder are in the densest interurban corridors, very often those radiating from the capital city.

Five years ago, a similar survey was conducted (Allport 1992). At that time the level of BOT activity was smaller. So, progress is happening, but much more slowly than expected. Some planned projects have been cancelled, and many more have been delayed. It remains the case that BOT projects are substantially the exception. Despite huge efforts by many people, implementation has proved highly problematic.

This will change slowly, but—taken with the poor prospects for profitability—it should lead to considerable caution in assuming that private sector participation will produce rapid progress, or be “the funding solution”, for neither is likely. BOT projects are very important because of their size: typically they cost US$0.5-2.0 billion, which should be contrasted with the best estimate for public sector expenditure in the Philippine nonurban transport sector of US$1.3 billion per annum. But most BOT projects are in and near cities, and a balanced national strategy requires public investment elsewhere. In short, private sector BOT projects do not provide an “easy answer” to the national transport funding problem.

Figure 2 illustrates how the large increase in sector funding must come about in the Philippines. The modest increase in government funding must be boosted by rapid increases in funding from user charges, including the progressive development of BOT projects.

We subsequently conclude that the maritime and aviation subsectors should move toward being self-financing, while large-scale expenditure on interurban rail projects cannot yet be justified. Public funding should increasingly focus on the roads subsector—where charging users directly by tolls, etc. is not generally practicable, but where there may still be a need to increase user charges, e.g., by raising taxation on fuel.
IV. Attracting the Private Sector

The answer to the question why is it necessary to attract the private sector is of course partly to secure funding. The central reason is that, given reasonably competitive transport markets, the private sector will be efficient and responsive to changing patterns of demand, something that governments are ill-equipped to do. This is the core of the PTSS strategy, the lynch pin upon which a sustainable policy must be built. How is this most difficult objective to be achieved?

This is a radical political choice, requiring a radical change of culture—and therefore time—to bring about. Only when this is achieved will private sector funding follow. Figure 3 summarizes the strategy for attracting the private sector.

The objective (to the right of the figure) is to provide improved services to passengers and freight operators that are available and reliable, that offer choice, and that are competitively priced. Political will is the essential starting point. This is strong in the Philippines, and provides the important springboard. Then, institutional restructuring is essential, since the private sector will only be attracted when a level playing field is established (the same body cannot be both regulator and operator, and the public and private sector must operate on the same basis). Next, the right regulatory and pricing policies are needed to create competitive markets. Market access must be guaranteed, monopoly practices controlled, and safety standards enforced and, where tariffs are low or are supported by cross subsidy, tariffs must be increased and cross subsidies eliminated, forcing government to make the political choice as to whether subsidies should be made available. These actions all send the right signals to private entrepreneurs. The result will be that they increasingly participate in constructing, operating and, finally, funding transport projects. Private sector funding is only one consequence of attracting private sector participation, something which requires all the above.
The lessons of experience are that success in implementing BOT projects in the public interest requires:

(i) government to set a consistent policy, and identify the projects it will support (the private sector cannot implement projects without a framework of strong government);

(ii) government to prepare projects, and face up to the realities behind most projects: the need for public funding, land to be acquired, tariffs to be acceptable, and environmental consequences of new infrastructure to be acceptable; and

(iii) concessions to be bid transparently under international competitive bidding to secure the benefits of private sector involvement.

Current policy in the Philippines is evolving, and needs to evolve further, if the private sector is to contribute fully in creating the infrastructure of tomorrow that is in the public interest. The present problem with private sector participation is that (despite strenuous efforts) too little is being achieved, and what is being achieved is nowhere near as effective as it should be. The core problem is that many contracts are currently awarded on a basis that is both uncompetitive and fails to transfer sufficient risks to the private sector. There are few serious feasibility studies for such projects, and it is not obvious that the existing process operates in the public interest.

Change is needed, based upon the following principles:

(i) the government must set policy and determine strategy;
(ii) it must confirm that privately financed projects conform to its stated policy and strategy;

(iii) projects must be the subject of rigorous feasibility study, which should identify the risks;

(iv) "solicited" bidding should be the preferred mode for the majority of transport infrastructure projects;

(v) the bidding procedures for "unsolicited" projects, where they are allowed, should be strengthened to ensure that government accepts no unnecessary risks, and that the time allowed for matching bids is adequate for their preparation;

(vi) risks should be allocated between government and the private sector on the basis of which party is in the best position to control, or insure against them; and

(vii) government should establish that the terms of a bid result in value for money and protection of the public interest.

V. Improving the Government Process

Existing institutions are nowhere near as effective as they could be. Government has no clear transport policy or strategy, too few projects have been prepared for implementation, little effective monitoring of sector performance takes place, consultants are used ineffectively, the results of major studies often ignored, and there is little linkage between the planning process and what is implemented.

These symptoms are evidence of profound problems. "More of the same" cannot be a tenable strategy for the future, under any circumstances. There must be greater clarity in government transport agencies, concentrating their resources on what they can only do. This requirement is to:

(i) Determine development policy and strategy. Government must define the major development priorities to provide the basis for targeting public resources. If every region, province, and town is a priority—not so far from the existing situation—the result is the same as no place being a priority, and there is no basis for allocating resources.

(ii) Identify the core infrastructure projects to act as the catalyst for promoting its development strategy.

(iii) Create the framework for private sector participation. In particular, determine a clear policy for participation; establish the necessary regulatory framework (economic, technical, and legal); and prepare implementable, fundable projects.
(iv) Re-engineer the government bureaucracy to perform in the new market-led environment. This requires efficiency and responsiveness to local markets and needs and new skills.

A new institutional model has been introduced in many countries, and is a sound basis for effective action. It has been adapted to the situation in the Philippines, where it is illustrated in Figure 4. This new institutional model involves transforming the public sector to the role of:

(i) Policy/Strategy Maker in which government determines policy and strategy.

(ii) Regulator to create competitive markets. (An economic regulator ensures market access and guards against abuse of monopoly behavior, while a technical regulator determines common technical standards—where these are required—and ensures that safety standards are enforced.)

(iii) Facilitator of increased private sector activity, ensuring that the institutional, policy and legal framework is right.

**FIGURE 4**
Institutional Changes
(iv) Purchaser of those services from the private sector that are socially or economically desirable, but not profitable.

This institutional model results in transport services being provided by private operators who compete (in the market or for the market); regulation separated from, and independent of, operations; explicit subsidies, if any, channelled to operators through the economic regulator; and government agencies in the sector restructured along the following lines:

(i) some government functions are privatized;

(ii) some agencies are corporatized, providing management autonomy and financial transparency; and

(iii) operations are decentralized to the local level, wherever possible.

VI. Transport Strategy

The study concludes, perhaps surprisingly, that there are no real alternative strategies, but rather variants within one obvious strategy. The reasoning starts from the recognition that there are no clear regional priorities (there is a political imperative for regional balance), and that the only modes that could in principle serve the most pressing transport needs are roads and railways. Yet even here there are no major strategic options.

A good road system is a social and developmental necessity, but experience demonstrates that railways can only be justified when there is sufficient traffic (there will almost always be a road offering door-to-door service, while a railway must compete for traffic with the buses and trucks using the road, and is usually unable to offer such service). New railways can be justified in only three situations: Mass Rapid Transit systems carrying large passenger flows in large, congested cities; the transportation of heavy freight and passenger traffic in dense interurban corridors that include several large cities; and the transportation of very large volumes of bulk cargo, e.g., between mines, sea ports, and major processing centers. Moreover new railways are nearly always megaprojects that are unaffordable given public funding constraints. Of course, proponents often insist that such projects can be funded by the private sector, but this is not so. Very few railways in the world are truly profitable, and most new rail projects would incur very high public costs and be very risky investments.

The PTSS strategy therefore concentrates where it must: on the road system, which serves the great majority of passengers and freight transport in the Philippines. Railway projects are evaluated on their merit, and then in the context of the available public funding. Projects in the maritime and aviation sectors are important too, and these are evaluated on a similar basis.

Given an understanding of the key issues, the strategic priorities become obvious (Table 4):

Institutional change is the number one requirement in every subsector. Then, regulatory reform is necessary to increase economic efficiency, and to attract private sector funds to the sector. Increased tariffs and independent economic and technical regulation are key features. There is little need for new infrastructure—because there is a large road network,
### TABLE 4
The Strategic Priorities

<table>
<thead>
<tr>
<th>Sector</th>
<th>New Infrastructure Required</th>
<th>Rehabilitation and Upgrading of Existing Infrastructure</th>
<th>Policy Reform (regulatory, pricing)</th>
<th>Institutional Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓✓✓</td>
</tr>
<tr>
<td></td>
<td>(few locations)</td>
<td>(road fund)</td>
<td></td>
<td>(DPWH)</td>
</tr>
<tr>
<td>Rail</td>
<td>No</td>
<td>✓</td>
<td>✓✓✓</td>
<td>✓✓✓</td>
</tr>
<tr>
<td></td>
<td>(very limited)</td>
<td>(franchising of services)</td>
<td></td>
<td>(PNR)</td>
</tr>
<tr>
<td>Maritime</td>
<td>No</td>
<td>✓</td>
<td>✓✓✓</td>
<td>✓✓✓</td>
</tr>
<tr>
<td></td>
<td>(very limited)</td>
<td>(tariffs)</td>
<td></td>
<td>(PPA)</td>
</tr>
<tr>
<td>Aviation</td>
<td>✓</td>
<td>✓</td>
<td>✓✓✓</td>
<td>✓✓✓</td>
</tr>
<tr>
<td></td>
<td>(few locations)</td>
<td>(tariffs)</td>
<td></td>
<td>(ATO)</td>
</tr>
</tbody>
</table>

Notes: ✓ low priority  
✓✓ medium priority  
✓✓✓ high priority  
ATO Air Transportation Office  
DPWH Department of Public Works and Highways  
PNR Philippine National Railways  
PFA Philippine Ports Authority

An extensive railway that is underused, and probably too many ports and airports. Instead, the primary need is to maintain, rehabilitate, and upgrade the infrastructure that exists. Here there is much room for improvement, particularly in the crucial roads sector.

**A. Roads**

The core problem is institutional, in that the Department of Public Highways (DPWH) is not sufficiently proactive in maintaining and developing the national road network. PTSS is but the latest in a long list of studies to reach the same conclusion. The symptoms of this problem are many: there is no strategy for the sector with priorities for what to do, how, where, and when; there is a patchy picture of maintenance, some good but much that is not good; planning is substantially ineffective; design and construction are often poor; with lengthy construction times that reduce estimates of economic viability, and questionable performance of some contractors; and there are still large areas with network deficiencies.

The causes are understood. First and foremost, politics intrude very extensively in the sector—far too extensively. This has almost completely subverted the planning and implementation process. The road investment and maintenance budgets are approved annually by Congress, and are under constant uncertainty. In addition, funding is spread far too thinly, leading to patchy and insufficient project implementation. As a result, DPWH has found it increasingly difficult to develop and implement a clear, coherent strategy, and to deliver what it is mandated to deliver. Moreover, funds for national roads are allocated by DPWH to regions according to a “block allocation” formula—a system that does not meet actual engineering needs or stated physical policy objectives.
PTSS focused on the national road network, with the objective of ensuring that this is maintained and upgraded to an acceptable standard; this is considered central to transport strategy. The institutional basis of the recommendations are twofold, first establishing an autonomous National Road and Bridges Agency responsible for maintaining and developing the national network. This would have clear objectives, exercise substantial management autonomy, and be financially independent and transparent. Second, establishing a Road Maintenance Fund from earmarked transport taxes. Experience suggests this will reduce political interference and increase the likelihood that the required maintenance expenditure is spent, particularly when the beneficiaries are involved in allocating funds between priorities.

PTSS recommended that strategic expenditure priorities are formally adopted for the roads sector (Table 5). These priorities result from experience and study by PTSS and others of the Philippine road network. The first priority for investment should self-evidently be maintenance of the existing assets. This would be followed by rehabilitation, then improvements, as funds allow. New roads would be last, with development roads receiving priority over other “missing links” in the main road network.

### TABLE 5
Strategic Priorities for the Roads Sector

<table>
<thead>
<tr>
<th>Priority</th>
<th>Category</th>
<th>Description</th>
<th>Recommended Scale of Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Maintenance</td>
<td>Routine, periodic</td>
<td>Substantial</td>
</tr>
<tr>
<td>2</td>
<td>Rehabilitation</td>
<td>Reconstruction of the road structure</td>
<td>Substantial</td>
</tr>
<tr>
<td>3</td>
<td>Improvement</td>
<td>Upgrading pavement design/bridges for heavier traffic</td>
<td>Substantial (most of the network)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Road widening/realignment and junction improvements to increase capacity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bypasses to avoid traffic bottlenecks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Safety improvements</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Development (penetrator) roads</td>
<td>New roads to stimulate development (agriculture, mining, tourism)</td>
<td>Small/very small</td>
</tr>
<tr>
<td>5</td>
<td>Missing links</td>
<td>New roads; priority to port/airport access roads</td>
<td>Small/very small</td>
</tr>
</tbody>
</table>

**B. Rail**

The Philippine National Railways (PNR) has a long record of decline. Repeated investments have failed to deliver service, and government recognizes that the time has come to face difficult questions. Part of the problem has been the failure of successive governments to recognize the realities about the role of railways, and part has been mismanagement by PNR.

It was considered very likely that railways should have a long-term strategic role in the Metro Manila region (say within 100 kms of Manila), because of increasing—and
largely insoluble—road congestion. Further south it was considered unlikely that the marginal benefits of retaining operations would justify the very large extra costs; but the political imperative of keeping the line open is clear, and therefore taken as a constraint. North of Manila there are no rail operations, but a new company, NorthRail, is vigorously pursuing the first phase of a line that will connect Metro Manila with the former US Air Force base at Clark, which is being marketed for industrial development and a new international airport. This line is considered likely to be beneficial, whatever assumptions are made about the future role of Clark as an international airport.

The rail problem in the Philippines derives from an expectation that just cannot be delivered: rail is variously termed the backbone and core of the Philippines transport system. In Metro Manila it should indeed have a strategic role, but elsewhere this is unlikely. The reason is straightforward, because nowhere in the Philippines is the requirement fulfilled that is necessary to rationally justify such projects. There is no high-density corridor including a number of large cities and/or other facilities, which generate large traffic volumes, part of which the railway captures. The Pan Philippine Highway is the closest such corridor, but this has only one large city/attractor (Metro Manila), and the railway is paralleled by a good road along which buses and trucks deliver good service. Cost is another major problem for rail projects. Six of the rail projects proposed for implementation each have estimated costs of over US$1 billion. Experience suggests that most if not all such costs would need to be borne by government. Contrast this with the best estimate availability of public funds: about US$1.3 billion for the whole transport sector in the Philippines each year. However desirable (and this is questioned) such projects are simply not affordable.

The solution to the PNR problem is necessarily institutional. A PNR privatization study was completed in 1993. This recommended that an operating lease was the best overall strategy. Since the study was completed little has been achieved in implementing its conclusions. The principle underlying many privatization initiatives is to separate the operating franchises that run the train services from the infrastructure authority that owns, maintains, and upgrades the fixed infrastructure. While railway operations are franchised to the private sector, it is usual for the infrastructure authority to remain in public ownership. PTSS concluded that what is now required is to prepare a privatization strategy and develop this into a practical implementation plan.

While not an urban study, PTSS was necessarily involved with the whole rail system. There was considerable concern at the threat to the rail network at its center, in Manila. This derived from the parlous state of PNR and various BOT projects that threatened to devalue the right-of-way. It was recommended that government determine its rail strategy at the heart of the network, Metro Manila, and safeguard future provision for rail.

C. Maritime (Ports, Navigation, and Shipping)

In recent years shipping has improved, particularly through the introduction of fast craft offering premium service at premium tariffs. It was concluded that the main requirement now is for deregulation, which has so far been successful, to be completed.

But the ports sector has in part lost its way and faces problems: here the Philippine Ports Authority (PPA) is depending on the private sector for port expansion, but little is happening—and for good reason. The PPA both regulates the sector—keeping tariffs far too low—and operates ports thus competing unfairly with the private sector. Not surprisingly
the private sector is less than enthusiastic about either participation or investment. Moreover, PPA is under no financial pressure to change, because it receives large incomes from the private ports and is commercially sound; but these cross subsidies hide the underlying poor financial performance of the sector. They should be made more transparent, if not eliminated completely.

Because tariffs are low, valuable domestic berth space is used ineffectively: to layover ships (i.e., valuable berthing is used as a parking lot) as well as for loading and unloading. As a result, the underlying requirement for extra berthing is not known. In this respect, the maritime sector differs from others, since it is difficult to know what the requirement for new port capacity is at the present time. The answer is to base (increased) tariffs on the cost of providing the services. This is necessary to put the sector on a sustainable financial footing, to reveal what the real requirement is for investment in new berths, and to attract the private sector to invest.

The private sector should have a major role in this sector, but first PPA’s regulatory powers must be removed. Only when the private sector can compete on a level playing field, and when higher tariffs (and tariffs that are not distorted) allow port operations to be profitable, will the private sector be sufficiently attracted. The main requirement is to restructure/reallocate the existing functions of PPA, and to change (increase) tariffs. PPA should be financially accountable, should set national port priorities, and should prepare priority projects for implementation. It should decentralize its activities, and its regulatory functions should be vested in an independent ports regulator who should allow port tariffs to be changed, i.e., removing distortions and increasing tariffs so that users face the full costs of the services provided. After a period of transition, PPA should cease to operate (manage) ports; this should be done by the private sector.

There is a particular problem in the Greater Capital Region (GCR, about 100 kms radius around Manila). This is by far the dominant source of (and market for) cargo traffic, and will remain so. At present, activity is concentrated in Manila, where the landside operations of the port are severely hampered by Manila’s traffic congestion, to which they contribute. Looking to the medium term (by about 2005), additional capacity is likely to be required (outside the existing port). There are several options, and a review of Ports Strategy for the GCR is recommended.

Few countries are better suited to roll-on roll-off (ro-ro) transport than the Philippines. A major study by the Japan International Cooperation Agency (1992) had identified a program of improvements, but this has remained largely unimplemented for institutional reasons. It was recommended that the priority components should be implemented without further delay, thereby materially improving multimodal transport in the country.

D. Aviation (Airports, Air Navigation, and Air Services)

While it is early, and while Philippine Air Lines (PAL) is still very much the monopoly supplier, the recent deregulation of airlines in the Philippines has been judged a success thus far. The main requirement for the future is to ensure that effective regulation of operations remains, to avoid monopoly abuses.

By contrast, the overall conclusion was that the airports infrastructure in the Philippines leaves much to be desired. In fact, for the first time in many years, much is about to happen. In Manila, construction of a new domestic terminal is ongoing and a new
international terminal is committed and about to start construction. Outside Manila, major airport investment is scheduled under ADB, OECF, and probable Korean funding.

Air passengers and freight operators should pay the full cost of air services (in the majority of cases there is little rationale for subsidizing what are relatively affluent users). Yet today they do not; indeed, apart from the major international airports, charges for the use of airport facilities are negligible. Three issues now face the sector. The first is structural and concerns the long-term development and funding of the sector, the second concerns the airport strategy for the Greater Capital Region, and the third concerns standards and the classification of airports.

(i) Institutions

The corporatization of the Air Transportation Office (ATO), committed under an ongoing Bank loan, is necessary. This will provide it with substantial management and financial autonomy, and require commercial discipline and financial transparency in its operations. When implemented, its regulatory powers should be removed, and an independent Airports Regulator created. Tariffs should then be progressively changed: removing distortions and allowing increases so that users face the full cost of the services provided. ATO should manage airports and air navigation services, identify and prepare priority projects for implementation, and in due course (when the tariff reforms have taken place) market airports to the private sector. ATO should in due course reduce its role in operating airports, as the private sector becomes more involved. To achieve this it should operate efficiently, and be responsive to market needs by decentralizing commercial decision making to individual airports (or groups of airports).

(ii) Airport Strategy for the Greater Capital Region

Self-evidently, it is necessary for Metro Manila to be served by a convenient airport. Asia is expected to develop as western societies have, in that business will become increasingly air transport-intensive; and an inconvenient or congested airport will increasingly be an unacceptable competitive handicap. There is no immediate capacity problem, because the two terminals under construction and committed will improve passenger capacity at the existing airport. Also, while this is sometimes difficult to get to—access is very poor and urgently needs improving—it is geographically in the right place, close to the economic center of gravity of the conurbation.

But air traffic growth is rapid, and before too long a major problem will present itself. By about 2010, the ultimate capacity of the existing airport will probably be reached. Then it seems inescapable that either a second airport will be needed—with traffic shared with the existing airport—or (possibly) that all traffic will transfer and the existing airport can be redeveloped. Where should extra airport capacity be provided? This is a matter of great strategic importance, both because it will have major developmental and environmental implications for the surrounding area, and because of the cost. No analysis has been carried out to determine the future strategy, and this needs to be remedied quickly, because the lead time for new airports is long. PTSS therefore recommends an Airport Strategy Study for Metro Manila.
It has been suggested that Clark should perform this role. Certainly Clark will have a role as an important airport for Central Luzon. Whether it can perform the central role of a future airport for the Greater Capital Region will depend on positive answers to the following questions:

- At 100 kms from Manila, Clark would be one of the most remote airports in the world serving a major city. Can this problem of distance be overcome? This is partly a matter of fact (how accessible it will be to the economic center of gravity of the region) and partly of perception (will passengers, air freight shippers, and the airlines be prepared to use it?)

- By any standards it would be a megaproject, probably at least as complex as any ever carried out in the Philippines. The airport itself will be complex, but the challenge will be in funding and implementing the expressway and express-rail links that would underpin it. These would need to penetrate and cross the very heart of Metro Manila, and would take a minimum of six years to put in place. Is there the strong and consistent sense of purpose in government to implement such a vast project effectively? And are the risks acceptable?

- Following on from this, the cost will be very substantial: likely in the order of US$2.5 billion for the transport links alone. The vast majority of this would in our judgment need to be funded by government. This represents one third of the estimated public expenditure budget for the whole transport sector for the whole country over 6 years. Is this level of public funding feasible?

No one has yet suggested answers to these questions—something that is now urgently needed. It was recommended that Clark should be a major option, considered alongside others, in the recommended study to determine future strategy.

(iii) Standards and Airport Classification

The driving forces for investment in airport upgrading, and in moving to new airports outside Manila, come from three sources:

- International Civil Aviation Organization (ICAO) standards and recommended practices: The Philippines has adopted ICAO standards with only minor variations, and is a signatory of the Chicago Convention, but there is a problem in that compliance with the standards is far from uniform. Part of the problem is that the standards cover a range of factors, some safety-related (and important) and some affecting operational reliability (and less so). PTSS recommends that the Philippines should prepare its own airport development standards. Some should be mandatory and apply to safety; some should be desirable and apply to reliability of operation. The standards should then be enforced by an independent regulator.
• **PAL's desire to land larger aircraft.** PAL argues that improvements are necessary to enable it to land its larger aircraft. At a high load factor, large aircraft may lead to economies for the airlines, and given competition, to passenger benefits. But do the benefits justify the costs of airport upgrading? It seems unlikely in many cases that this is so—indeed it is not clear that passengers (as opposed to airlines) have benefited from larger aircraft, where they have been introduced. This argument should be analyzed before its conclusions are accepted.

• **The desire to designate more airports as international.** PTSS recommends a new functional classification of airports, based on the type of service provided, the scale of the communities served, and the type and size of aircraft to be accommodated. At present this would comprise just three international airports (Manila, Cebu, Davao), followed by principal airports and community airports. The number of international airports should be determined solely by traffic demand, i.e., they should only be provided where significant international traffic can be justified commercially.

E. Multimodal Transport

There is in practice very little modal choice in the Philippines transport system. While there may be modal alternatives, the choice is seldom real. The most common form of multimodal transport involves using successive modes on a single journey (usually road access to a port or airport), or using multimodal routes.

Given the Philippines’ topography, and the potential of fast-craft (for passengers) and ro-ro ferries (on which buses and trucks drive on and off), multimodal corridors should be much further developed than they are. They require government to target road and ro-ro investment to create the multimodal chains—something that is readily achieved at low cost. PTSS recommended a Road-Sea Multimodal network. This is low-cost and requires the coordination of roads and ports investment. It will bring about major improvements rapidly.

VII. Projects and Priorities: The Study Approach

Determining project priorities depends on projects being identified and subjected to a form of evaluation. The ideal would be for each agency to have a comprehensive list of projects; that these would have been subject to a standard process of prefeasibility and/or feasibility study; that standard evaluation procedures would have been used by different agencies; and that evaluations would have been based upon realistic policy assumptions. In the Metro Manila CIF much of this ideal existed—at least it was possible to develop a meaningful evaluation of the projects that were being prepared. But this was not the case with PTSS.

Indeed, the reality was very different. Where there was a list of projects it was very often a huge list (the whole national network in the case of roads). Very few projects had been subject to purposeful feasibility study, and for many there was no information about cost or demand. Where there had been a feasibility study, rarely were the results used to determine what should be implemented; the evaluations were sometimes flawed with little
consistency in approach, and economic considerations were often hugely outweighed by subjective criteria. Sometimes the policy assumptions were not realistic, and the projects had not been developed in the context of likely available funding. In short, there were very few projects whose evaluations could be reviewed. The implications for the Plan period were clear: the absence of a pipeline of prepared projects is a critical constraint on what can be implemented.

PTSS sought to maximize the value of what existed in each subsector, supplementing this where possible, so that broad priorities could be established. Projects that were not committed were subject to screening and then evaluation. Projects were required to be consistent with the sector strategies. The approach was economics-led, recognizing government’s threshold economic discount rate of 15 percent. But where projects had a major non-economic impact, for example, a severe environmental impact, or where the project was located in a disadvantaged area, this was identified. Given estimates of available public funding it was then possible to determine the content and shape of the future investment program.

The evaluation necessarily had to vary with the available information, and a different approach was adopted in each subsector, as follows:

(i) **Roads**

Projects were subdivided between 71 individual projects, many of which were being considered for foreign assistance; and the remainder of the national road network, which was divided into sections and considered for maintenance, rehabilitation, or improvement. The 71 projects were reviewed and individual recommendations made (their nature varied widely). The remainder of the network was subjected to economic analysis, using existing data and standard unit costs, and rough priorities were set. These provided a reasonable basis for identifying the desirable content of the future roads program.

(ii) **Rail**

The projects associated with the existing PNR Main Line South depended on the recommended institutional changes. When these take place, it is likely that franchises should be let for passenger operations. Future projects must await the response that develops for the railway. There are other rail projects, but none that is conceivably affordable and has been subject to sound feasibility study. Until this is done, no rail projects can be considered for the program.

(iii) **Maritime**

Projects were screened, usually using the study estimates of the expected growth in traffic. The core problem of assessing capacity expansion requirements when recommended tariffs are much higher runs through all the evaluations. Projects were classified as:

- **Priority 1**—priority established in existing feasibility studies
- **Priority 2**—strong traffic potential and the project is prima facie desirable, but further work is necessary to confirm future berth occupancy and capacity expansion options
Ports to be included in the review of ports strategy for the Greater Capital Region (these could be Priority 1 or 2).
Others—where the traffic potential is not proved, and/or the cost is high.

(iv) Aviation

Projects were screened on the basis of the present value of the project investment cost per departing passenger (among other factors). Projects with a high environmental impact were identified separately. One problem with evaluation in this sector concerns safety-related projects, because the benefits are not readily quantifiable; another is the often confused use of standards (often unrelated to safety), to justify expenditure without analysis. The results were classified as:

Priority 1—projects with generally low cost per departing passenger, and safety-related projects.
Priority 2—projects with generally medium cost per departing passenger.
Others

Details of the evaluations are presented in the study reports. The main results are summarized in Table 6.

<table>
<thead>
<tr>
<th>TABLE 6</th>
<th>Summary Evaluation Results</th>
<th>(US$ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Committed</td>
<td>Priority 1</td>
</tr>
<tr>
<td>Roads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Roads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>.5</td>
<td>0</td>
</tr>
<tr>
<td>Rehabilitation</td>
<td>.75</td>
<td>0</td>
</tr>
<tr>
<td>Improvement</td>
<td>2.25</td>
<td>2.5</td>
</tr>
<tr>
<td>New roads</td>
<td>.25</td>
<td>.25</td>
</tr>
<tr>
<td>Subtotal</td>
<td>na</td>
<td>3.75</td>
</tr>
<tr>
<td>Rail</td>
<td>PNR operations</td>
<td>.25</td>
</tr>
<tr>
<td>Implementation of PNR Privatization Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td>.25</td>
<td>.25</td>
</tr>
<tr>
<td>Maritime</td>
<td>Specific ports</td>
<td>.25</td>
</tr>
<tr>
<td>Ro-ro program</td>
<td></td>
<td>.25</td>
</tr>
<tr>
<td>Safety-related</td>
<td></td>
<td>.25</td>
</tr>
<tr>
<td>GCR program</td>
<td></td>
<td>.25</td>
</tr>
<tr>
<td>Subtotal</td>
<td>.25</td>
<td>1.0</td>
</tr>
<tr>
<td>Aviation</td>
<td>Specific airports</td>
<td>.5</td>
</tr>
<tr>
<td>Safety-related</td>
<td></td>
<td>nil</td>
</tr>
<tr>
<td>Subtotal</td>
<td>.5</td>
<td>.25</td>
</tr>
<tr>
<td>Total</td>
<td>1.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>
VIII. Investment Program

The recommended investment program was largely dictated by five factors:

(i) The expected public sector budget envelope for (nonurban) transport

(ii) Commitments—projects that are ongoing, or are about to commence construction.

(iii) The lack of prepared projects meeting basic economic criteria—given project preparation lead times, this is a constraint on what can be implemented in the next Plan period.

(iv) The need for institutional and policy reform—this will take time before it can deliver a pipeline of good, funded projects and attract the private sector in transport infrastructure provision.

(v) The need to undertake strategy studies for ports and airports in the Greater Capital Region before deciding what projects should be implemented.

The public sector budget was estimated to be between ₱100 billion and ₱300 billion over the 6-year Plan period at 1995 prices, equivalent in 1996 prices to:

<table>
<thead>
<tr>
<th>Funding Scenario</th>
<th>Total Budget (US$ billion)</th>
<th>Budget per Year (US$ billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>4.4</td>
<td>0.7</td>
</tr>
<tr>
<td>Medium</td>
<td>8.6</td>
<td>1.4</td>
</tr>
<tr>
<td>High</td>
<td>13.0</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Note: US$1 = ₱26 in 1996.

Private sector funding is additional to this. This is much more likely to be forthcoming under the high economic growth scenario than under the low growth scenario.

PTSS expects that private sector funding will be small in the early years, until the institutional and policy reforms are in place. This will take several years—well into the next Plan period. Moreover, the main funding from BOT projects will be in and near Metro Manila (which is substantially excluded from PTSS); and such funds are more likely to be significant in the high growth scenario, and would be very small in the low growth scenario.

With this perspective, the main conclusions are:

(i) With high growth, the problem is not available funds. Public sector funding alone would be adequate to fund the total program (₱245 billion for the program, and ₱340 billion available). In this scenario significant additional private sector investment is also likely to be available. The problem is rather that there are not enough good projects in which to invest, and without such
projects the transport sector may quickly become a bottleneck to government's main policy goals. Changing this reality depends on implementing the institutional and policy recommendations, which are the core of the recommended strategy, so that for the subsequent Plan period this unfortunate situation does not recur.

(ii) With medium growth, public funds are nearly adequate for the whole investment requirement (P225 billion for a program of P245 billion). With some private sector financing the program should be affordable. This apparently satisfactory situation however masks the underlying problem: not enough good projects are being identified and prepared. If they were, the benefits of the available public funds would be much increased, and more private sector investment would be attracted too. In other words, the transport sector would get much closer to meeting the national imperatives than it realistically can at present.

(iii) With low growth, public funds are adequate for just three-quarters of the Priority 1 Program—P156 billion compared with the P115 billion available. Moreover, in this scenario little additional investment is expected from the private sector. This would clearly be a serious situation.

Under the medium growth scenario, assuming that all the Priority 1 and 2 projects are implemented, the sector allocation of funds is as follows:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads</td>
<td>70%</td>
</tr>
<tr>
<td>Rail</td>
<td>4%</td>
</tr>
<tr>
<td>Maritime</td>
<td>18%</td>
</tr>
<tr>
<td>Aviation</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

IX. Conclusions

This paper has been concerned with methodology applied to a complex area of public policy. It sought to analyze the transport sector in all its dimensions, and to provide strategic guidance that tackled the root causes of the identified problems. Many expected that the study's focus would be on projects; yet it was concluded that these almost totally miss the point. Instead it was found that the imperative is to implement institutional and policy reforms. These are expected to materially increase sector funding on a permanent basis; deliver a pipeline of good projects for implementation; and provide the foundation for a sustainable transport policy, which will meet government's clearly stated national aspirations.

From the recommendations, PTSS developed a Draft Transport Policy Statement, and recommended that it should be owned by government, so that for the first time government adopts a meaningful transport policy. Then, actions can be evaluated against that policy statement.
Government is currently developing an action program, which it will own, identifying the key actions and agency responsibilities for implementation. The Bank is preparing a Project Preparatory Technical Assistance for the Philippines that will assist government restructure its institutions, reform its key policies, and identify a loan to extend this assistance into the next development plan period.

In conclusion, it is interesting to consider whether and to what extent the approach developed in the Philippines may be transferable elsewhere. It is the authors’ experience that the underlying problems facing the Philippines exist in many developing countries, and it is our judgment that the key elements of the approach described here are indeed applicable. These are:

(i) understanding the feasible room for influence, given the institutional environment, and targeting the output to maximize influence
(ii) adopting an open, involved approach, with extensive consultation and liaison with counterpart staff at several levels, to generate common understanding and shared conclusions
(iii) identifying and tackling the underlying big issues openly
(iv) adopting a transparent and understandable technical methodology focused on developing a good robust strategy, to assist in generating understanding and consensus
(v) adopting a public sector budget envelope centrally in the methodology, to force funding realism
(vi) objectively reviewing international experience of private sector participation and funding, to reinforce this funding realism

In Indonesia a similar transport strategy study is to be undertaken under Bank loan funding. Of course the circumstances are different, but it is very likely that the approach outlined in this paper will again be appropriate. The authors would expect similar conclusions to be reached in very many cases.

References


