



Adapting Transport Institutions to Romania's Transition Needs

A \$120 million loan to help Romania reform its transport institutions successfully supported the upgrading of Romania's national highways, commercialized and privatized road maintenance, and substantially improved road financing and resource allocation. A highly professional agency was empowered to implement the project, showing that much red tape can be avoided when an effective and autonomous agency is put directly in charge of project implementation. This project demonstrates that difficult institutional reforms—in this case, creating a Road Fund, corporatizing maintenance agencies, and contracting out maintenance activities—can be carried out in a short period of time with strong and visionary political leadership and competent staff.

Shifting from Railways to Highways

As a centrally planned economy, Romania was heavily rail-oriented. Passengers and freight were generally transported on a large (11,000 kilometers) rail network, partly because of a regulation requiring that all shipments further than 50 kilometers go by rail. Maritime transport became more important in the 1980s, but road traffic, after growing rapidly in the 1970s, stagnated in the 1980s, suppressed by physical constraints and regulation. Road density in Romania was the lowest among all Central European countries, and little was budgeted for maintaining the country's 73,000 kilometers of roads. Investments in the transport sector were

skewed toward very large projects, whether or not they were economically feasible. As a result, funds for replacing and modernizing equipment were scarce, existing infrastructure and equipment were obsolete, and few services were available. By 1990, investments in the sector had come to a virtual halt.

With Romania's shift toward a market economy in 1990, the Ministry of Transport and Public Works was split into two separate ministries. The newly created Ministry of Transport was entrusted with policymaking and regulatory functions, and the highway, railway, and port agencies became autonomous agencies reporting to (but not managed by) the



ministry. The railway remained an important long-distance passenger carrier, but demand for the freight rail system, which had been the backbone of transport under the planned economy, declined dramatically after the government abolished the regulation that all longer shipments go by rail. The market shifted from transport-intensive heavy industries (such as steel, cement, and petrochemicals) to light industries (such as textiles and agrobusiness), which moved largely on the highways. Private car traffic exploded in the 1990s, despite a sharp decline in per capita GDP and a fivefold increase (to roughly 5 million) in the number of people living below the poverty line. The country's rapid motorization brought a significant increase in congestion, accidents, vehicle overloading, and vehicle-induced air pollution. Heavy road traffic strained the road network, whose capacity grew little in the 1990s.

One of the Bank's first loans after the transition was for a project to help Romania reform its transport institutions. The project was cofinanced by the European Bank for Reconstruction and Development and the European Investment Bank. The project's objectives were to make the country's road system more economically efficient, to strengthen the private sector's (and reduce the state's) role in transport, and to introduce competition in public works. In its performance assessment report, the Operations Evaluations Department (OED) rated the project highly satisfactory.

Strong Leadership

The Romania Transport Project focused on three kinds of activities: upgrading the physical road network, modernizing and commercializing road maintenance, and improving road financing and resource allocation. In all three, the Bank was partnered by Romania's new Ministry of Transport. Strong project leadership was assumed by the country's newly created autonomous highway agency, the National Administration of Roads (NAR), which was responsible for highway construction, maintenance, and administration. The Romanian Automobile Registrar (RAR) was responsible for setting up and monitoring standards for vehicle safety and environmental emissions. The autonomously managed new Road Fund, established in 1995, continued the collection of supplementary gasoline taxes and vehicle registration and capacity fees that would give the highway relative financial autonomy.

Upgrading the Road Network

Road improvement hit a snag initially because Romania's transport agencies had no experience with Bank projects and the only local engineering consultants were a government-owned public works engineering company. Engineering design problems surfaced in assessments of road conditions, and estimates of traffic levels failed to account for rapid changes in road traffic.

Romania was inexperienced in planning and executing road works while keeping traffic going on increasingly congested roads. The result was the costly blocking of traffic, variation orders during construction that increased costs, and greater-than-expected deterioration in roads, further increasing costs because roads had to be rehabilitated rather than strengthened, as planned.

Still, the project financed rehabilitation of 924 kilometers of roads and strengthening of another 1,650 kilometers. (Romania's secondary or local roads were left for the follow-on project.) Project components included upgrading border-crossing posts, improving safety through better marking and signaling on 5,000 kilometers of roads, and providing technical assistance for training and studies on maintenance.

The vehicle inspection equipment for Romania's Auto Registrar allowed that agency to operate 40 fully mechanized vehicle inspection (safety and air pollution) lines and to guide and monitor performance of private inspection facilities. Romania's inspection capacity is now closely aligned with European Union standards, although its inspection stations are under-equipped, have poorly trained personnel, and serve the dual purposes of demonstrating equipment and transferring operating knowledge. Vehicle weighing scales were procured as expected, but not systematically operated. After a pilot effort and a public information campaign, axle control equipment was delivered and installed. Penalties for overloading were low; substantially stronger political and police engagement will be needed to seriously enforce axle controls.

Commercializing Road Maintenance

Until 1992, all road maintenance in Romania was done by force account. The project successfully supported the commercialization and privatization of road maintenance. The highway agency corporatized maintenance, meaning that periodic maintenance operations were no longer directly executed by the agency. Corporatizing maintenance allowed the agency, by 1988, to contract out to the agency's eight regional maintenance units 87 percent of all periodic road maintenance, 79 percent of periodic bridge maintenance, and 23 percent of routine road and bridge maintenance. Despite a two-year delay, these numbers equaled or surpassed the ambitious targets set for 1996. (Achieving project targets was hardest for bridges, which are unattractive work sites in regions where bad weather stops work for long periods.) The regional units—which also sold services to local public works departments—lacked enough equipment and managerial (especially financial) expertise, were overstaffed, and operated inefficiently. But by shifting functions and personnel to the regional corporations, NAR became a leaner organization, reducing its staff from 15,000 in 1995 to 8,800 in 1998.

The project was also instrumental in helping modernize, privatize, and improve the efficiency of the construction industry, which started the decade with a million state employees and is now roughly 90 percent private—a remarkable success rate, considering that fewer than half of all state enterprises had been privatized by 1997 in sectors slated for privatization. But development of the construction industry did not come easily. At first, foreign contractors won most of the bids. When the large state-owned construction companies from the socialist era were first privatized and broken up into smaller firms, the smaller firms had difficulty mobilizing the large-scale equipment needed for heavy civil works. Also, contract size tended to be large for local contractors' capacity. They may be better able to compete on large public works projects if they merge, are offered smaller contracts, or are offered incentives for joint ventures. Joint ventures—which worked in Hungary—facilitate the transfer of know-how and can strengthen local companies. Making bank credit more accessible to small firms would help, as would reducing excessive regulation (such as requirements for equipment and certification) that opens the door to corruption.

Improving Road Financing and Resource Allocation

Road financing and resource allocation also improved substantially. The government exceeded the project's requirement to improve the system of road user charges. In 1995, with the strong support of the central economic agencies, it created a Road Fund, initially fed by supplementary taxes on gasoline, diesel fuel, and initial vehicle registration, complemented later by annual fees on vehicle capacity. In 1997 this fund collected US\$250 million, financing over 90 percent of road expenditures, which freed budgetary resources for other purposes. Project-financed training helped the road agency strengthen capabilities for conducting economic analysis, which became compulsory for all investments exceeding \$6 million. Such analysis will be increasingly necessary as Romania sorts out priorities, especially when trade-offs between national and international roads arise. Such trade-offs are likely to intensify as trade flow patterns and demands on the transport system change.

Romania has been more successful than other countries that have launched Road Funds, partly because effective work by senior technical personnel was done under the leadership of the Ministry of Transport's highest political authorities, and partly because the Road Fund was supported by the Ministry of Finance, which didn't happen in other countries. The Ministry of Finance supported the Road Fund because it relieved budgetary pressures and because it viewed the highway agency as making rational investments.

Preparing for Railway Restructuring

Prior to this project, the government had launched a study on railway restructuring that was likely to significantly affect the railway's strategic direction and investments. Under this project railway equipment was procured and put into service, which improved train operations. And to pave the way for restructuring, the national railway company was unbundled into five autonomous companies: infrastructure, asset management, freight, passengers, and accounting and finance.

Substantial Achievements

Engineering weaknesses led to delays and cost overruns on individual road subprojects, mainly because additional works were required in difficult mountainous areas, and the length of road works was 17 percent less than expected. But the project met or exceeded difficult institutional objectives and the physical components were completed ahead of schedule, with satisfactory quality and high economic returns. The loan (for US\$120 million equivalent) was fully disbursed ahead of schedule, and by project closing all components had been completed, although cost overruns had to be met by funding from a follow-on road project. Romania's transport system is significantly more efficient and well organized than it was at project's start, and substantial progress has been made commercializing road maintenance and entrusting it to private companies. Progress was made contracting out services, developing a private construction industry, creating a Road Fund and getting it off to a good start, and beginning the systematic application of economic analysis. And the railway system's new corporate structure is innovative for the region.

On this basis, OED rated the project highly satisfactory for outcome, likely to be sustainable, and with a solid impact on institutional development. The Bank's failure to foresee problems with the quality of engineering and the mixed signals it sent to the government about the Road Fund preclude giving the Bank the highest mark, which it would otherwise have deserved.

Lessons Learned

Among lessons learned from the performance audit, the first three are especially important:

- Difficult institutional reforms—such as creating a Road Fund, corporatizing maintenance agencies, and contracting out maintenance activities—can be carried out in a short period when they are led by strong and visionary political leaders, are supported by central government authorities, and are designed and implemented by a well-qualified team.
- Much red tape can be avoided when an effective and autonomous agency is put directly in charge of project implementation.

- Cofinanciers can more effectively coordinate efforts when they do so starting with project preparation and when they jointly schedule missions.
- When revenues from Road Funds supplement existing taxes and are invested efficiently, finance officials are likely to support earmarked, off-budget funding of road expenditures and a legal framework that makes it difficult to raid Fund resources for other purposes. The Fund may have trouble collecting revenues if its enforcement authority is weak and it may need coaching and other assistance from tax authorities.
- As the level of highway investment increases, rigorous economic analysis will be needed to sort out investment priorities between national and international traffic—conflicts about these priorities are easier to avoid in the early stages of road modernization.
- New equipment for railways and highways may improve performance and quality but may only partially reduce total operating costs. Full cost reductions can be achieved only by reducing redundant personnel as more efficient equipment is put into service, by taking the old equipment off the books (thus eliminating unnecessary stock and maintenance costs), and by providing efficient financial management.

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Précis 207 Adapting Transport Institutions to Romania's Transition Needs