

## NEW APPROACHES BY HIGHWAY AGENCIES IN DEALING WITH ROAD USERS

The context in which society develops has changed. The principles of democracy and human rights, in addition to the explosive development of communications, have encouraged citizens' desire for involvement in many areas which formerly had been the preserve of the State. This is also reflected in the attitudes of public utility customers, who are no longer prepared to accept mediocre service from the bodies responsible; on the contrary, they are increasingly putting pressure on those bodies, demanding better service in return for the charges they pay.

Road agencies are no exception. They can no longer maintain their traditional isolation from the public and from users in areas such as decision-making or accountability for results achieved. Furthermore, it is no longer enough to provide road networks; these must be managed in such a way as to ensure improved levels of service, acceptable to users who are more and more demanding. This is why conventional styles of highway management have become unsatisfactory and new approaches are developing. There is a gradual increase in **openness to the interests and views of users, who are increasingly considered as partners and participants in management**. There are numerous examples in various countries, including those of Latin America, of this significant change; it is likely to cause a major transformation in the way in which public highways are managed.

The innovations are recent, many of them still at the embryonic stage. A wide variety of concrete measures have been proposed or tried out. It is not yet possible to predict the size or scope of these changes, or which of them will ultimately become normal practice, but the changes have begun. The purpose of this article is to outline the principal changes which are being observed and the new outlook for road users. For additional information, contact Alberto Bull: Email [abull@eclac.cl](mailto:abull@eclac.cl)

### PUBLIC ROAD USERS AND STAKEHOLDERS

There is a wide variety of users of public highways. Those who travel in vehicles on roads and streets, as is the case for motorists and passenger and goods carriers, are direct users. Those who send or receive loads and pay transport costs (farmers, miners, industrialists and tradesmen) are

indirect users. Both groups benefit from the existence of the road network, which enables them to travel as needed for their economic, educational, social, cultural or recreational activities all of which help to promote growth in any country. Users suffer the consequences of defects in the roads, particularly those having to do with their capacity and their condition, and such defects are reflected in increased operational costs, journey times, merchandise losses and accidents.

Other sectors of society, in addition to the users, have interests related to roads and traffic. These include: residents who live in the vicinity of roads and are subjected to motor noises and emissions; consumers who suffer from higher prices because of inadequate road infrastructure; those responsible for dealing with traffic accidents; ecologists, who try to protect the environment; road associations, which advocate an improved road system; vehicle dealers; and many others. Although the legitimate interests of these groups often conflict with each other and with those of users, they all deserve consideration, the object being to act truly in accordance with the public interest.

Who can fail to identify with one or more of the above categories? They add up to a tremendous number of persons and organizations; but they do not form an amorphous or apathetic mass, and they are entitled to good service.

### A CUSTOMER-SERVICE APPROACH

The task of road agencies is a large-scale one, consisting of the provision and maintenance of roads and streets for the population as a whole. Nonetheless, users represent a high priority in the work of road agencies. It should not be forgotten that users finance the road network through their taxes or through specific payments for road use and are entitled to good service. Modern road agencies must adopt a **customer-service approach** both to the country as a whole and to users, who are the ones affected, for better or worse, by its actions and omissions.

It should be borne in mind that faults in the design and coverage of the road network lead to accessibility problems, higher transport costs, increased road accidents, and other serious drawbacks for individual and collective well-being. Also, various calculations have suggested that a road network in poor condition leads to unnecessary costs in vehicle operation and road repair which could have been avoided, amounting to an annual cost of between 1% and 3% of gross domestic product.<sup>(1)</sup> That figure may be doubled if journey times and increased accidents, as well as the loss of goods and their non-delivery to market, are taken into account. In other words, the amount lost owing to insufficient road maintenance may be close to that of the growth of the economy, hindering development considerably. Road agencies must therefore endeavour to ensure that roads are sufficient in number and quality, and in good condition; and they must try to achieve this at a reasonable cost, as a suitable means of promoting general well-being and providing the best possible service to society.

A **customer-service approach entails a new institutional culture** in which people work very differently, not merely fulfilling in a technically correct way the objectives set out in narrow institutional fields; on the contrary, the goals and achievements of the entity should be considered with the users in mind, and every single official must adopt a position of openness towards them. This does not necessarily mean doing all the users want, but officials must be aware that they are working for the users, which means taking their views into account and undertaking various practical duties which are discussed in this article. The modern business approach known as **total quality management** and has customer or user satisfaction as one of its main paradigms. The concept can be applied fully to the work of road agencies, since the functioning of the entity is oriented towards

the needs and interests of the public receiving the service. Those operating roads under concession have been pioneers in that regard; they consider the people who use their roads not as mere users, but as genuine customers whom they have to attract and serve.

## PUBLIC ACCOUNTING FOR RESULTS AND ACHIEVEMENT

One way of providing service to users is to set up public information mechanisms relating to the activities and achievements of road agencies. This means leaving behind the traditional practice, which was only a formality, of simply accounting for the way in which the funds received had been spent, without any explicit connection with the productivity of the expenditure or with the results achieved. In future, the agencies must account broadly for the substantive and goal-oriented aspects of their tasks.

### EXAMPLES OF PUBLIC INFORMATION

**Transit New Zealand**, the national road agency of New Zealand, publishes the following every year:

- A report on its activities;
- The value of the road network;
- Performance indicators including the number of kilometres which have been paved, resurfaced, and routinely maintained, together with the cost per kilometre; quarterly bulletins are also published.

The **National Roads Board** of Zambia produces:

- Monthly press releases;
- Weekly radio broadcasts in English and seven local languages;
- Quarterly results statement;
- Annual balance-sheet.

Management quality will be judged according to various performance indicators. Experimental indicators have been created in a number of countries, in the hope that time will tell which of them can really help to achieve the objectives pursued and, more importantly, that they will be clear to the general public. Some of the types of indicators are:

- **service quality indicators:** these can include the condition of the roads, which in turn can be assessed, for example, by the quality of road maintenance works completed recently, by measuring roughness<sup>(2)</sup> and the degree of friction between tyres and the road surface, or by classifying roads using categories generally called "good", "fair" and "poor". In the institutional field, they can involve measuring average reaction times in dealing with various needs such as pothole repair or emergency services, as well as the time generally taken to accomplish tasks such as awarding contracts or making payments to third parties.
- **effectiveness indicators:** It is highly useful to calculate periodically the value of the road network, which is generally worth billions of dollars, in order to monitor its evolution. Records can also be kept of the rate of fulfilment of the investment plan, the number of kilometres of

roads maintained per year, accident statistics, and other related figures.

- **efficiency indicators:** In this area, records are kept of trends in percentage increases in the value of contracts, administrative costs as a proportion of the total sums invested, the rate of return on investments, maintenance costs per kilometre, etc.

What is really important here is that not only the authorities, but also the **users and the general public should generally be aware of the results achieved**. Certainly, a road agency which is subject to public scrutiny based on objective indicators will achieve perceptible performance improvements, and any deterioration will be considered unacceptable. This will also bring about improvements in the quality of the work done on the roads.

### USER PARTICIPATION IN ZAMBIA

The involvement of users in road maintenance is considered a key element in the strategy of the National Roads Board of Zambia. Users are given ample information as well as opportunities to take part in the management of road maintenance. The Board administers the Road Maintenance Fund, funded by road maintenance charges paid by users; the most significant of these charges is included in fuel prices.

An important early step in gaining the support of users was the publication in the press of a supplement regarding the creation of the Board. This was followed by monthly press releases in the form of advertisements, reporting on road maintenance carried out and the Board's activities. Another public-information initiative on similar lines is the production of a weekly radio broadcast on Zambian National Radio in English and seven local languages, financed not by the Board but by interested sponsors. As a result, road maintenance has become a matter of public debate, to such an extent that comments continually appear in the media.

The users not only receive information; they are also given opportunities for involvement in the management of road maintenance. The programme for the maintenance of the country's roads, financed by the Road Maintenance Fund, is submitted to the competent road agencies by provincial coordinating committees in which the users take part. In the case of the maintenance of secondary, local and urban roads, managed by local authorities and financed by the Fund, municipal councils are excellent forums for user participation, where local road maintenance programmes are discussed, priorities are agreed upon, bidding procedures are defined, and decisions are made regarding the awarding of contracts. The elected councillors are responsible for supervising the contracts on behalf of the users.

### LEVELS OF ROAD QUALITY OR CONDITION

Another measure having enormous potential is **to publicly establish standards of quality or condition to which roads are to be built, improved or maintained**. An example would be to undertake a public commitment that, on a particular road, potholes will be repaired within 24 hours, the roughness index will never exceed a certain level, and that parameters for the condition of the road will be respected, with the road agency being responsible for taking preventive measures so that this commitment is fulfilled.

The standards should be determined using techniques of economic analysis to ensure the lowest cost for the country's economy, taking account of both maintenance and vehicle operating costs.

Improving the condition of the roads involves higher maintenance costs, but this should be offset against the benefits perceived by a greater number of users. This would of course lead to the establishment of higher and stricter standards for main roads.

For roads which are in good condition and structurally sound, such standards can be established and fulfilled without great difficulty. In fact, it is hard to see why this should not be normal practice for all new and recently-rehabilitated roads.

One immediate consequence of the publication of standards to be met for certain roads is that users would be aware of what can be achieved in terms of road quality, a situation which is currently almost non-existent. In addition, the impact on road agencies would be considerable; faced with the need to fulfil their commitments, they would have to change their priorities, their work programmes, and perhaps even their internal organization.

### **ADDITIONAL SERVICES TO USERS**

In addition to the actual road infrastructure, travellers can also be provided with other services such as toilets, telephones, ambulances, mechanical assistance, and catering. Although these have to be paid for, their availability helps to solve problems which can be serious; they can even save lives. Another possibility is to provide information at the roadside, in the media, or by producing pamphlets on the condition of the roads, preferred itineraries, traffic problems, etc.

Usually, these services are available on roads operated under concession. Surprisingly, they are also provided on some non-concession roads in Colombia where their provision is part of performance specified in maintenance contracts.

### **OPINIONS OF ROAD USERS**

So far, we have described activities which are of interest to road users but in which they can have an entirely passive role. It is, however, possible to go further by paying attention to the users' views, treating them as the consumers of a service. Although it is true that creating opportunities for regular contacts with users may be perceived as an interference or inconvenience, this fear should be set aside; users have much to contribute, since they have the opportunity to inspect the roads every day.

#### **OPENING UP TO ROAD USERS IN COLOMBIA**

The policy of the INV (National Highways Agency) in Colombia is to maintain close contact with users and to be open to their views. This is reflected in its activities, which include the following:

- A website (<http://www.invias.gov.co>), updated weekly, which provides information on the condition of roads, road works under way, openings of new roads and other matters of public interest. Visitors are encouraged to express their views by e-mail, particularly regarding controversial actions of the INV;
  - Two toll-free telephone numbers for information and complaints;
  - Regional offices for service to road users;
  - A weekly radio programme;
  - A monthly information bulletin;
  - Appointment of highway administrators, each having primary responsibility for about 150 kilometres of roads.
- This initiative has brought the highways administration closer to the public;

- Opinion surveys among road users;
- Services for road users (sanitation, telephones, ambulances and tow trucks), provided under three performance specified experimental road maintenance contracts assessed according to indicators of road condition or levels of service;
- Concern for road safety, including a special programme to reduce accidents.

One easy option is to have a toll-free telephone number and open offices where people can make comments and complaints; these services are usually provided only for roads operated under concession, where they are generally obligatory. Another modern option is to maintain a website such as those operated by INV (National Highways Agency) in Colombia and by CAPUFE (Federal Roads and Bridges Agency) in Mexico. Users' interest and objectivity would be encouraged if a declaration has been made of the acceptable road condition parameters. Obviously, there would have to be staff responsible for following up and responding to comments received from users.

Opinion surveys are a more sophisticated option, enabling the views of users to be ascertained regarding the quality, condition and cleanliness of roads; road signs and traffic fluidity; requirements for additional services; users' perception of the accident rate; and other similar aspects which may help to determine future actions. Such surveys are carried out regularly in New Zealand and other developed countries, and are also being introduced by INV in Colombia and on concession roads in Argentina.

### USER PARTICIPATION IN MANAGEMENT

The decision-making process is another area in which users can participate. One formal possibility is to create **users' advisory committees**, made up of representatives of the various users' organizations; other road-related interest groups can also be included. These committees would be the organized voice of the sector. They would discuss all the important aspects of road maintenance before their formal approval by the competent authorities, covering works projects, the annual budget, minimum road maintenance standards to be laid down, and the results achieved. In countries such as New Zealand and Zambia, users have ample opportunities to take part in discussions of investment plans at the regional and national levels.

A bolder step would be to include users in the boards of directors of road agencies and give them

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