Transportation Effects in France

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This paper concentrates on 3 aspects of the relation between transportation and its environment in France: (a) means used to apportion the external losses and benefits of a transportation investment among the parties involved; (b) measures used to improve public transportation operations in major cities (an employer tax that rests on the premise that employers benefit from the existence of public transportation and should pay for it); and (c) the fact that transportation is a servant of other human activities. A strategic scheme is presented for relating regional planning to transportation.

The title of this paper is so broad that I must concentrate on a limited number of items. I will deal briefly with 3 aspects of the relation between transportation and its environment:

1. The way in which the external benefits and losses of a transportation investment are shared by the various parties involved;
2. A new system of funding urban public transport systems by taxing employers, thus making them share the responsibility of public investments and making them more conscious of the link between transportation and the location of their activities; and
3. A strategic scheme for relating regional planning to the planning of transportation systems through the concept of "moving needs."

SHARING OF TRANSPORT INVESTMENTS

If I were to limit any paper to answering the question, "What is being done in France to share the public benefit of transport investments?" it would be a short one. The answer is nothing—or almost nothing. In France no taxation is based on the value of capital, or on capital gains. Taxes are levied only on income or sales. So, the public benefit or loss of a transportation project results only in an increase or decrease of the land and building value, which is extremely difficult to measure.

There are some exceptions to the principle of "no tax on capital gains." Since 15 years ago, there has been a law taxing the gains on land and building values. The value increase may have occurred for various reasons and is computed by using a complicated system that takes into account factors such as the rate of inflation and property usage. In fact, this law has been rather inefficient and ineffective, resulting in frequent court action. Since judges are reluctant to fix the amount of this tax, almost everyone finds a way of avoiding it. Of course, it is applicable only in cases of sale, donation, or succession.

A new law for extending and improving taxation of capital gains is currently being
prepared. This would eventually lead the way to a general taxation on capital; however, the project has met with a lot of opposition, and its discussion has already been delayed in Parliament.

Another law in preparation that is meeting the same strong opposition is a land use law. It is the liberal answer to the socialist proposal for a municipalization of the cities' land. This project gives the municipalities a better control over the building rights, allowing them to transfer development rights to enforce their zoning projects. Its purpose is to eventually level off the price of land in urban areas, thus preventing speculation.

All French cities, large or small, must complete by January 1, 1977, a comprehensive scheme that includes a land use plan and a transportation scheme for the coming 10 to 20 years. These schemes have to be approved by the administration and are now becoming an important political issue. Large segments of the population are becoming aware of the importance of land use planning and of the transportation problems related to it.

For a number of years, the Administration policy has been to ask developers or building promoters to participate in the funding of the public facilities (roads, schools, community halls) needed by their projects (or to build the facilities themselves). It is usually part of the bargain with the municipality that grants the development rights. However, a number of promoters claim that this is an unfair practice.

A good example of the ambiguity of shared costs is the case of the suburban shopping centers that tend to locate along the superhighways. All they pay is the cost of the land and the building of special exits and access roads if needed. If built on an ordinary road, they may be asked to pay for the traffic lights at the crossing of their parking entrance. However, they can never be made to pay for the cost of the traffic jams generated by the in-and-out flows and for the other disamenities involved.

On the negative side, there are few instances of compensation for public "losses" generated by transportation investments. The only one I know of is a nuisance tax levied by airport authorities on airlines and allocated to people located in the noise zone of the airport. Some of this money is given to the public housing agencies having projects in these areas in order to soundproof their buildings. The highway department is testing antinoise screens in suburban residential areas; the results of the experience are still inconclusive.

There are no legal means of compensation for other disamenities suffered by the public, except, under the common law, for an actual and proven damage for which a suit can be filed against the administration. And still in this case, the "public utility" concept would be used by the administration to defend its actions.

Even among the different government agencies, the compensation concept for benefits and losses cannot be easily worked out because of the strict boundaries that separate their budgets. Take for instance a new highway built in front of a public hospital. Nothing can make the highway fund finance the soundproofing of the hospital, which is funded by the health department. But the real solution might be to have comprehensive interdepartmental planning, making sure that a superhighway is not constructed in front of a public hospital.

It proves once more the interrelation of transportation with every other activity concerned with the organization of space.

FUNDING URBAN TRANSPORT

Several measures were introduced by law in 1973 and 1974 to help improve the public transport operations in major cities.

In urban areas with a population of more than 100,000 a tax may be imposed by a decree of the city council on all employers, public or private, of more than 9 employees. This tax is based on the total amount of salaries paid during the same year; its rate may vary from 0.45 to 1.5 percent according to the decision of the city council. The basic idea under this new law is that employers benefit from the existence of a public transport system that moves one of their most valuable resources—people. They, therefore,
should have to pay for it. There are some distinct features in this new system:

1. Different neighboring cities may conglomerate in order to reach a population of 100,000 and may create an authority of any kind (or use an existing one) to manage the funds collected. This is a step toward comprehensive transportation authorities in metropolitan areas.

2. Some tax exemptions are possible for employers who provide their employees with either free collective transportation or housing in the immediate vicinity.

3. The spending of this tax fund is controlled and must be used in the following ways: compensation of income losses by the public transport authorities due to government-imposed reduced rates for workers, financing capital investments within the public transport system, and funding of improvements, revamping, or extension of public transport services.

This is supposed to allow for an ambitious public transport policy, which is one of the national priorities selected for the next Five-Year Plan. At an average rate of 1.0 percent, the tax would yield about $12.50 per inhabitant in 1975. This should be sufficient to allow the municipalities to prepare multiannual plans and to set up an efficient coordination between the different modes of transportation serving the city.

This scheme is quite new and it is still difficult to evaluate its success. Nevertheless, it has some limitations.

1. It is concerned primarily with commuter movement of the work force closely connected with the "production" requirements. What about the other intracity moving needs?

2. With strong opposition from the local businessmen, the city councils have been reluctant to fix high rates. The majority has stayed with the minimum figure; only Marseilles has voted for the maximum.

3. The financial needs of the public transport authorities are so great that the revenue of this tax does not appear to be able to solve all their problems. And as it cannot be used for reducing the operating deficit showed by almost every public transport system, it is usually looked on as a mere crutch and also as a real source of political conflict.

However, this system seems to open the way toward a better recognition of the fact that public transport is an external benefit to the activities served by it, and that in this respect it has to be supported in a collective way.

RELATING REGIONAL PLANNING TO TRANSPORTATION

My third point emphasizes the fact that transport is a servant of the other human activities, whether economic or noneconomic—an intelligent and a dynamic servant (and costly too!), but a servant.

Much has already been written on the "structuring" effects of transportation, and this is a productive line of research. But it should not be overlooked that moving needs are generated by facts and acts outside the transportation field. So alongside the research on the structuring effects, we have to develop another line concerned with the "structured" effects of transportation, that is, the way in which it is determined by the upstream activities. Of course, this is an interactive process, and the moving needs have to be accommodated by the possibilities of the transportation tools, existent or potential. If these tools, because of their technical and economic characteristics, cannot properly fill the needs, then the needs themselves have to be reconsidered and modified.

The moving needs are primarily shaped by the actual land use patterns, whether preplanned or anarchic. Thus, if we adopt a strategic approach, we may say that transportation is a maneuver that has to be designed to serve the socioeconomic objectives included in an accepted spatial organization. Those objectives themselves are dependent
on the chosen socioeconomic values of a society. Once the objectives are set up, we may well speak of a transportation strategy, consistent with them. This includes specific transportation objectives and transportation maneuvers: general design of the transportation system, investment, regulation of flows, training, and information of users and operators. In fact, these maneuvers are complementary and partially inter-changeable.

Every move in the field of transportation—building new roads, pricing, setting up speed limits, choice of rolling stock, radio traffic information—has a definite meaning with respect to organization of space and perhaps other strategies as well, such as public finance and employment. That is the reason why it is so difficult to design a transportation strategy—at a national, regional, or local level—if the commanding issues have not been clarified.

Reynoir and I (1) outlined a scheme to clarify this strategic approach for decision-making at the regional level (Figure 1). It is intended to be a mere methodological tool and is still too simple to reflect the complexity of the real problem. (The problem is even more complex when transportation facilities already exist, shaping the actual economic, human, and physical landscape.) The following are some of its features.

1. Transportation planning is voluntarily placed at a subordinated level, not to downgrade it, but to show that many analyses and decisions must be made before the design of a transportation system is considered. Moreover, any wrong move in the transportation field would jeopardize the success of higher ranking strategies.

2. Transportation planning and policy are the most important tools of regional planning; a space is not really shaped before adequate transportation is provided.

3. Transportation, however, is not the only maneuver to implement regional planning; horizontal links exist with tax policy, industrial policy, and other policies.

4. We must insist on the strategic indicator concept that has to be used at every stage of the process in order (a) to make the strategic objectives clear and measurable and (b) to permit control and evaluation both prior to the implementation of the maneuver (by some kind of simulation) and after the system has been put into operation.

5. We may show on this scheme the iterative process through which transportation models space by its specific action; this loop may be used in a simulation aimed at testing the consistency between regional planning objectives and transportation maneuvers.

Using this scheme as a guideline, our group has conducted a methodological research focusing on the development of conceptual and operational tools for (a) identifying the transportation needs generated by each function of space, (b) matching them with the technical and economic characteristics of the different transportation modes, taking into account the various decision makers, and (c) evaluating the consistency of transportation projects with the regional planning objectives. A first quick test of these tools has been made in the metropolitan area of Montbeliard-Belfort in the east of France.

This line of research is now being developed in various directions: socioeconomic functions of regional airlines and airports, multimodal demand for freight and passenger transport in the Rhone Valley for 1990, and socioeconomic aspects of the development of the passenger transportation system in the fast-growing metropolitan area of Marseilles.

CONCLUSION

One conclusion we cannot escape about the external effects of transportation projects and actions in France or elsewhere is that they are political issues, and this is what they should be in the noblest sense of the word. Their strategic impact is so far reaching that the most important goal of our research may well be to train technicians and decision makers to measure the exact significance of their actions and to enable them to say in an informed and responsible way: "That is exactly what we want."
Figure 1. Strategic scheme for transportation and regional planning.

VALUES

Social Values

National Priorities

National Transportation Strategy

NATION

REGION

National Priorities at the Regional Level

A priori Regional Objectives

INFORMATION SYSTEM

Assessment of Regional Strengths & Weaknesses

Analysis of the Regional Environment: Present and Future

OBJECTIVES

Regional Socio-economic Development Objectives (Revised)

Regional Development Strategy

STRATEGIC MANEUVERS

Space

Human Resources

Other Resources

Organization of Regional Space Regional Planning

Employment and Education Planning

Planning

SUB-STATEGIES

STRATEGIC PLANNING

Transportation System: Transportation Policy

Land Use Policy

Tax Policy

IMPLEMENTATION

Programming of Transportation Tools

Simulated Results

OPERATIONS

Transportation Operation Management

Actual Results

REFERENCE