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Traffic Infrastructure
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TRAFFIC INFRASTRUCTURE AND ECONOMICS DEVELOPMENT IN THE REPUBLIC OF CROATIA

ABSTRACT

Traffic infrastructure makes an integral part of the traffic and economic system in each country. The traffic policy makers have a task, that their policy must be based on scientific developments and synchronised activity of all economic system segments.

KEY WORDS

traffic, infrastructure, economic, policy, development, system.

1. INTRODUCTION

Traffic infrastructure facilities have an important place in the corporate economic system. Their disproportional development trend provides an element of lacking coherence in the traffic and economic system.

The consequences thereof are reflected in increased transport costs, and powerfully hindered application of new techniques and technologies in passenger and freight transport. This has gradually resulted in closing of the economic system within a narrow scope of activities. The result of this process is reflected in the impossible joining of wider integration trends, whose principal idea refers to free movement of people and goods, and circulation of information and capital.

The message to any investment policy refers to the needed introduction of a synchronised development of traffic infrastructure facilities in meeting the needs of economic system by application of scientific methods.

If this economic pattern is regarded as marginal we obtain the total amount of unsuccessful and costly non-industrial investment projects. Their erosive action appears in the post-investment period and manifests itself in burdening the newly created value by payment of due credits, not being the product of rational investment activity in a given past period. This shows that the funds for repayment could not be drawn from the investment effects but from the system of redistribution of profit inside the economic flows.

2. TRAFFIC INFRASTRUCTURE FACILITIES - FACTOR OF DEVELOPMENT OF THE ECONOMIC SYSTEM

Traffic is a fundamental integration element in the process of reproduction in the sphere of production (of goods and services), exchange, distribution and consumption.

For the purposes of proper and rational outlining of a uniform traffic system, it shall be extremely necessary to stop and consider a major element of adequate proceeding of traffic: traffic infrastructure facilities. Traffic infrastructure represents a focal point in the complex of reciprocal development of all traffic industries inside the traffic system.

By gradual transformation of social and production relationships and forces, the meaning of traffic infrastructure facilities assumes and is increasingly placed within the complex of the entire social and economic system.

Nowadays, no co-ordinated economic development and evaluation of economic and production potentials are possible unless granted a congruous development of traffic infrastructure.

The development of traffic infrastructure facilities exerts a broad spectrum of impacts upon the economic system and a number of authors¹ have considered this phenomenon on the example of impacts of traffic infrastructure upon the economic development by means of models.

Indicative is that a large number of models correlating the two phenomena in the economic system exhibit numerous limitations, so that their application is reduced to a rather modest scale.

One "attitude departs from some aspects of space economy and tends to form a model that would by means of symbols show the role of transport supply in the process of regional economic development, while another attitude finds its point of departure in tacit admitting the fragmentary aspect of the economic theory and respective inoperativeness of the model(s)

leading to inductive research of the subject mechanism by means of retrospective statistic research."²

The theory of location³ also finds its place in the research of impacts of the traffic infrastructure upon the development of all segments of the economic system. The author's viewpoints are based upon "the expanding of transport costs to a more inclusive term of external economy or recent methodology innovations for establishing an optimum location."⁴

The value of discussing the transport infrastructure impact on the development of the economic system is responsible for the inception of a number of models trying to resolve a quantitative influence of the traffic infrastructure upon the regional development". Best known is the NECT Project (North-East Corridor Transportation Project). The essence of the model is to enable evaluation of individual investment strategies in the sphere of traffic infrastructure with reference to repercussions for the level and spatial distribution of population density, employment, land use, land costs and revenue. Division of the model into 3 smaller constituent parts has avoided extensive computation for 30 different sectors of business and 130 geographical zones:

- 1 ECON Model
- 2 IRIO Model and
- 3 INTRA Model 5.

All these models are excessively burdened with unnecessary questions and questions without answers, as for instance; what should the model be like if reflecting the economic repercussions of each and every part of the traffic infrastructure in one section of time. And there is a series of similar questions posed! It is indispensable to witness considerable efforts of scientists and researchers in this area in order to establish a model to yield synchronised indexes."⁶

This brings us to the fact that the importance of interdependent aspect of traffic infrastructure and activities as result of its existence may prove incalculable, however measurable.

Its results are apparent at all stages of economic life, from planning and building up to the start-up of traffic infrastructure facilities.

The prime mover of traffic infrastructure refers to the element of any economic activity manifesting itself in the range of exclusively traffic-related benefits of positive action in the sphere of living standard of the community, elaboration of new economic programs or invigorating the economic activities that had not existed in the region. Despite some positive effects, it does not hurt to reiterate a number of negative effects, originating from the very existence of traffic infrastructure as seen in visual deterioration and environmental problems, getting increasingly alarming. This is caused by the exhaust emissions of motor vehicles using traffic infrastructure facilities. Therefore, when

discussing the process of rationalising the construction of traffic infrastructure facilities, all segments must be synthesised with positive and negative effects. Failure to observe some of the facts at stake can introduce lasting negative effects, which by their erosive action can annul the positive ones and considerably reduce them in the process of life of traffic infrastructure.

All this is rather important in the pre-investment phase, when one must keep in mind the net effects of rationalisation of the investment into e.g. building traffic infrastructure facilities, since these facilities provide the initial element of economic development, powerfully dispersing its influence upon all social/economic activities.

This brings us to the fact that it is indispensable to rationalise the process of construction of traffic infrastructure so that it would yield net benefits of its existence.

Based upon the presented situation, it can freely be stated that building the transport infrastructure facilities is a required and responsible job and not just an assessment enumeration of known post-investment effects that can only be anticipated. This leads us to the process of evaluation of these and investment project to act in a synchronised manner as subsystem of traffic and wider economy system.

3. INVESTMENT FOR TRAFFIC INFRASTRUCTURE IN THE SERVICE OF CO-ORDINATED ECONOMIC SYSTEM DEVELOPMENT

Investment for the traffic infrastructure facilities, by its all-inclusive character possesses the properties that can be defined as the process of looking for optimum solutions. This means that by taking account of a series of established methodology procedures, the variants of investment project are determined, being subject to final verification prior to the commencement of construction. Firstly, this refers to the level of transport cost, possibility of application of modern transport techniques and technology in passenger and freight transport, and transport of information, other aspects of supply in telecommunications system (telematic services), evaluation of geo-traffic and geo-political characteristics of Croatia, construction of traffic infrastructure for comprehensive realisation of the Adriatic Orientation of the national and rational transport aspect(s) on the territory of the Republic of Croatia.

Missing long-term traffic policy and policy of construction of traffic infrastructure, not even possessing the principal elements of realising potential have

caused accumulation of a large number of unresolved relationships in the system of management of all transport aspects. This has resulted in marked lagging behind the modern trends of our entire traffic system and individual visual transport aspects.

It is obvious that our traffic system is lagging behind, as a result of non-complex, inadequate and non-principled traffic policy in the Republic of Croatia.

Traffic and traffic infrastructure stay and turn into a determinant of optimisation of nation's transport system and better utilisation of traffic-aspect and geographical location of the country as a specific factor of invigorated development of Croatia.

The causes should also be found in inadequate measures for implementing of the policy of construction and maintenance of traffic infrastructure, the policy, which was outlined in social documents in an indecisive manner, so that consequently it could not be carried out. The segments that could be selected from such a fragmentary traffic policy exhibited all features of a readymade approach being changed too often, and accommodated to different influences and trends of the moment, that eventually received no professional or expert evaluation i.e. verification. Additionally, the overall context of this pseudo-traffic policy was not outlined in synchronisation with the outer segment of the economic policy. This further reveals that it was partly hypertrophied and partly neglected as a result of erroneous appraisals and highly institutionalised estimates and evaluations of plans and programs of construction and maintenance of the traffic infrastructure facilities.

This then means that it "struggled" between currently dispensed decisions of political and bureaucratic institutions being peculiar to the agreement economy and quasi-theoreticians as full partners in the provision of such economic and traffic policy.

The results should have been the congruence of the development of traffic infrastructure in the economic system, while instead long-term negative repercussions were effected with differing intensity of impact upon the overall social and economic development of Croatia.

The repercussions of inadequate system-related decisions and solutions as result of the agreement economy can be identified in the following key elements of importance for the development of the economic system: inadequate use of the comparative advantages of natural geographical location of Croatia, engineering and technology-aspect obsolescence of the traffic system and traffic infrastructure facilities, unsatisfactory and rational technological organisation of transport, constant presence of disproportion of the line of development and structure of the transport capacities as compared to the needs of the economic sys-

tem, disproportion in the development of traffic infrastructure and transport capacities and disproportion in the development of transport, reloading and warehousing capacities, high transport costs for the industry, and their tendency of getting higher, inadequately stable system of management, particularly in the region of expansion of productive forces in transport, and poor regional co-ordination on the provision of traffic linkage inside the country. All this will face considerable additional difficulties for reasons of known wartime damage and devastation of traffic infrastructure facilities.

Any investment channel into traffic infrastructure facilities and transport industry must be of harmonised function in order for it to become the prerequisite of rational functioning of the traffic and economic system.

Unless this becomes part of the mosaic of a homogeneous traffic policy, there are no grounds for expecting a co-ordinated development of the traffic and economic system in the future.

The comprehensive structure of research work reiterates the import of approach to the investment needed for traffic infrastructure that should be principally based upon the already elaborated notions and ideas in science in order to avoid tragic consequences of bad economic decisions.¹⁰

The mentioned composition of infrastructure investment activity is by no means insignificant; it calls for all the elements needed in the establishing of a rational investment policy. We should bear in mind all former interdisciplinary concepts from the area of implementing traffic policy and traffic infrastructure policy over a longer period, optimisation of investments into traffic infrastructure facilities, ancillary measures for realisation of the established traffic policy to be realistically feasible, and additionally, the realistic aspect of respective schedules to be suited to the type of traffic infrastructure facilities being dealt with. Such an approach shall render the policy of construction of traffic infrastructure facilities feasible. This in turn means elimination of the past declarativeness in the process of completion of construction of traffic infrastructure facilities in the Republic of Croatia.

4. CONCLUSION

Establishing investment activities as needed for the traffic infrastructure facilities is a complex task of any economic system. This complexity originates from the fact that traffic infrastructure facilities are one of the principal elements of functioning of the traffic system and co-ordinated development of the economic system. Discordant proceeding of investment activity needed for traffic infrastructure appears not only as an element of co-ordinated development of the econ-

omy system but also as a determinant of hindered functioning of the traffic system in the process of re-producing, having fundamental development and integration interaction with the former. This refers to the incontestable argument of needed synchronised activities in the application of scientific methods to be based upon the economic principles, in the process of outlining the speed and respective traffic infrastructure facilities.

SAŽETAK

PROMETNA INFRASTRUKTURA I EKONOMSKI RAZVOJ U REPUBLICI HRVATSKOJ

Prometna infrastruktura integralni je dio prometnog i gospodarskog sustava svake zemlje. Pred kreatore investicijske politike u vezi s objektima prometne infrastrukture to postavlja zadaću da se ona mora temeljiti na znanstvenim spoznajama i sinkroniziranom djelovanju svih segmenata gospodarskog života.

U radu se obrađuju razvojne sposobnosti objekata prometne infrastrukture u funkciji gospodarskog razvoja. Naglasak je na investicijskoj aktivnosti, čije će se odluke temeljiti na gospodarskim kriterijima, odnosno na intenzivnijem značenju znanstvenih metoda i primjeni znanstveno utvrđivanih i verificiranih metoda za ovu vrstu investicijske aktivnosti.

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