TRAFFIC – THE MAIN OBSTACLE TO TRANSPORT

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WE KNOW WHAT TO DO, BUT WE HAVEN'T GOT THE MONEY?

The writer of the article in the daily paper Népszabadság on 2^{nd} February 2000 reviewing the problems of the road network in Central Eastern Europe² gave his piece the subtitle *"The question's not what to do, but the wherewithal to do it"* – an appealing and at first glance scarcely disputable statement. Indeed this is what the journalist's potential interviewees, the decision makers in transport, try to make us believe.

But is this statement true? It is inasmuch as with more money we could build more roads. But it is not at all clear that *building more roads would in fact relieve our traffic problems*. Furthermore, it is also questionable *what share developing motorways and transit routes* should receive from the funds available for road construction, and *where transits routes should cross the country* is another debated issue.

In this paper it is argued that exactly the opposite of the above quotation is true: *the main question is what we should do and not the wherewithal to do it!* It is certainly true that today we do not spend enough on developing the transport network,

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² Zoltán Szalai: Kelet-Közép-Európa – úttalan utak. A kérdés nem az, hogy mit kellene tenni, hanem, hogy miből. [Central Eastern Europe – off the beaten track. The question's not what to do, but the wherewithal to do it.] Népszabadság, 2 February 2000, p. 6.

but the current concepts of transport development are so poorly thought through that they are incapable of clearly proving even this.

TWO CONFLICTING ARGUMENTS

In the mentality appertaining to the basic agenda for transport there are two markedly different arguments that can be quite distinctively separated from each other.

Supply-increasing transport development

The first approach can be best typified as *supply-increasing* transport development. This type of argument, in a seemingly very modern way, relies heavily on *needs* and *service*. According to this, transport is a service sector, a technical service, and its task is to satisfy on the level of current technology the needs of society regarding mobility. Behind this argument – most frequently in a hidden form – lies the philosophy that *mobility* (and here this means the *motorised* mobility technology permits!) is a basic human right that may not be restricted, thus society has an obligation to assert this right even by public funds.

Transport planning which clearly sees the provision of the continuous and uninterrupted flow of different *boxes* as its aim is built on this starting point. Accordingly, it regards clearing the route of this flow of all obstacles as its perpetual task. If this goal is accepted as an indisputable truth, then, of course, it is true that *"the question's not what to do, but the wherewithal to do it"*. Recognising the obstacles to the flow is an activity that can be more or less automated, and in this logic any place where there are bottlenecks or delays, or even where traffic is only slow-moving, becomes a point for potential intervention. Does a feed road slow the main column of traffic? A separate lane needs to be built. Does traffic stop frequently at a crossroads? A two-level junction is required for undisturbed crossing. Is there congestion on the busiest roads? Wider, multi-laned roads are needed. Do pedestrians endanger(!) and slow vehicles impede continuous flow? Separate roads should be built. Anything in the way must go: houses demolished, trees felled, and hills moved or burrowed through. It is all perfectly clear. "The question's not what to do, but the wherewithal to do it."

In this approach smooth flow is given such a central role that the aim of getting from here to there is placed in parenthesis beside it. Facilities serve to guarantee movement and the instant someone actually arrives somewhere, there is trouble. *There is no parking, unloading or waiting. The bus stop causes an obstruction, the tram stop gets in the way, there is no entry. Just one thing is important – keep going, keep going.*

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In this system it is apparently very easy to express professionally how the transport network should be developed. The network's *bottlenecks* have to be identified and intervention should be concentrated on these places. By this process locations causing the greatest disturbance to traffic appear one after another, and it is always possible to improve local conditions to aid movement. Thus this seems a wise method. It concentrates on the most pressing problems, and it is economical as intervention is directed at making improvements where they are most effective and are just sufficient to eradicate the bottleneck at the location in question. The measures sell well socially and politically, as public resources are being devoted to solving problems that are obvious to everyone.

But is it really like that? Could there be another answer to transport problems?

Bottlenecks always develop where there *is* already a road, where there *is* already traffic. Congestion can occur on the approaches to the Chain Bridge, but it never occurs where there is no bridge across the Danube. The effective management of bottlenecks is very important from an *operational* viewpoint, and is, for example, decisive for the daily traffic controller of Budapest's public transport company. Transport network development, however, is a different kettle of fish. *Alleviating bottlenecks can only extend and strengthen existing structures, while it is not at all sure that there is any means of solving the problem within the structure in question.* But, if a problem is impossible to solve within the existing transport network's structure, then the structure should be changed or abandoned – rather than strengthened.

The structure of the transport network makes us think like the driver in the fast lane: we're whizzing along, but how can we get off from here? Perhaps we've already missed our exit? How can we turn round if we're going in the wrong direction?

And more and more signs show that is exactly what is happening: we are going in the wrong direction.

Demand-reducing transport strategy

The other approach to what needs to be done in transport proposes moderating demand. The logic of this is perhaps best shown through the example of energy saving. For a long time it was obvious from statistics that the richer a country the more energy it uses. It appeared that energy consumption (indeed all forms of consumption) could also be regarded as an indicator of development. Then, in the early seventies, with the report of the Club of Rome ("The Limits to Growth", 1972) and even more from the effects of the first oil price explosion a year later, the thought that the future cannot be founded on the constant expansion of the use of resources on a finite planet suddenly acquired validity.

Worries related to energy saving were rather pressing and had a lasting impact: in this sector it was realised that it was not ever increasing energy (kWh) consumption that was needed, but that there is a need for various services (heat, light, movement), and energy is merely the means to achieve them. Bearing prospects for the future in mind, it had to be acknowledged that not only was the use of more energy not the yardstick of development but it was precisely the contrary: countries or producers that produced the same services from *less* energy can be considered more developed.

It would be an exaggeration to say that radical changes have taken place in the practice of energy saving in either the industrialised countries or in Hungary over the last twenty years, but it is indisputable that this recognition has left an impression in the mentality of the sector. Endeavours to save energy and reduce its use have become an unavoidable basis for different energy policies and strategic aims.

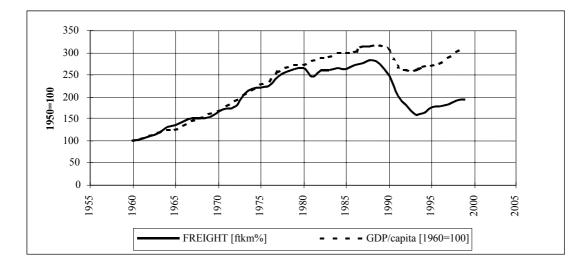
This acknowledgement is essentially valid for transport as well. In this field, too, in certain countries the parallel progress of GDP and transport performance was constantly experienced. It seemed that it was some sort of eternal interdependence: growing traffic was nothing other than the yardstick of growing development.

The idea that the growth in traffic, and in particular automobile traffic, flies in the face of and defeats the reasons why people travel there first became obvious in the core areas of cities, in popular resort areas and in densely built-up residential belts. A two-way process began. On the one hand some destinations (urban dwellings, shops, catering establishments, jobs) started to move from the polluted, noisy centres and resettled in places where they can be easily reached by car. This process is nothing other than the adaptation of the traditional town to the car, urban sprawl, suburbanisation. Its consequence is the devaluation of streets, alienation from public areas and the resettlement of the functions of the street in concentrated shopping centres.

A little later it was realised that the functions of traditional city centres, and resort and residential areas could nevertheless be preserved and resurrected provided that the whole of the city did *not* allow itself to be subjugated to the reign of transport, but an intelligent order should be restored among objectives and assets. It became clear that the quality of life, homeliness and welfare is a multifaceted phenomenon comprised of multifarious factors. In this the quality of transport is an important factor, but only one among many.

It had to be learnt that transport cannot be described by a few indicators – travelling time and speed. While the flow-centred approach to transport almost exclusively seeks to improve conditions during movement (for the most part, as it could be seen, by excluding the flow from its environment, thus eradicating factors impeding transport), in urban areas the quality of *departure* and *arrival*, connection with the life of the town and blending into the environment are equally critical. In towns the only traffic that is justifiable is that which is integral to the life there: traffic that can be isolated from towns must be eliminated as it has no business to be there.

Traffic within towns has a long history within the scope of this approach. Fortunately, in towns in Hungary there is a series of realised examples, from general inner city speed limits to the development of pedestrian precincts, and from traffic-free town centre zones to the separation of lanes for public transport. Despite this, in Budapest and the provincial cities there is a constant need to fight in order to prevent regression. From time to time plans emerge to drive a national main road through residential streets or a resort area, usually referring to old concepts, economy or urgent need. While the importance of protecting town centres in the narrow sense from traffic has more or less won general acceptance, respect for outer lying residential and resort areas, and other assets is by no means this clear. Progress in conscious efforts to reduce traffic is very slow, and influencing the demand side is far from being generally accepted as a principle in transport planning.

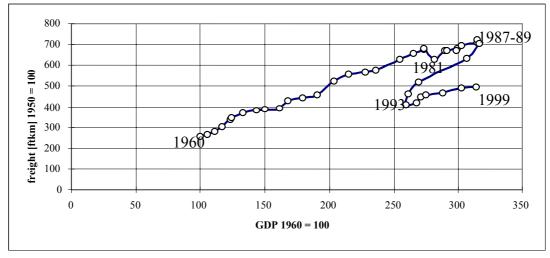


Traffic growth trends

Source: KSH Statisztikai évkönyvek és Közlekedési adatok 1987-1996 Infrafüzetek 25 KHVM [Central Statistical Office Statistical Yearbooks and Transport Figures 1987-1996 Infra booklets 25 Ministry of Transport, Communications and Water Management]

Figure 1. Freight performance and GDP trends in Hungary (1960 = 100)

In the countries of Central and Eastern Europe, including Hungary, a steady increase in freight performance was noticeable until the end of the eighties (*Figure 1*). At the start of the nineties a significant fall typified both freight and GDP. In Hungary freight performance had already fallen back once in 1980. Afterwards freight continued to grow, but it lagged behind the growth path of GDP. Following the changes of 1987-89, however, by 1993 GDP and freight dropped to their 1979 and 1968 level respectively. Growth began again in 1993 and since then it has visibly followed a parallel course as before, but the demand for transport is significantly smaller. This can also be seen in *Figure 2* where the trend of freight plotted against GDP is shown. International as well as domestic data needs to be presented in order to explain the phenomena.

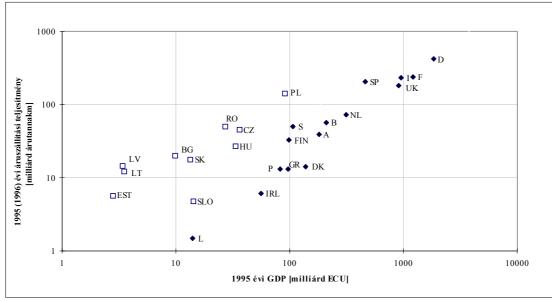


Source: KSH Statisztikai évkönyvek és Közlekedési adatok 1987-1996 Infrafüzetek 25 KHVM [Central Statistical Office Statistical Yearbooks and Transport Figures 1987-1996 Infra booklets 25 Ministry of Transport, Communications and Water Management]

Figure 2. The relation of freight performance to GDP in Hungary

Apart from considerations of trends over time, important lessons can be drawn from a comparison of the trends in industrialised and state socialist countries in examining GDP and transport performances (*Figure 3*). The production of a unit of GDP is coupled to far higher freight performance (and energy consumption) in Central and Eastern European countries than in market economy countries. This means that countries with a centrally planned economy only managed to create the same amount of values as in a similarly rich market economy with much greater movement of goods. In view of this, it is probable that at least a significant part of the fall in transport performances between 1989-93 can be attributed to the change of regime (and the changes in market and proprietorial relations), that is there was a switch-over to another type of path regarding quality of transport. This change, however, will not be reversed; an upswing in industrial production will prompt growth in shipping in Hungary, but along the lower path that the Hungarian economy came to after the change of regime. Indeed, as the difference in transport quality between the Western and Eastern halves of Europe was easily distinguishable even in the mid-

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nineties, it may be suspected that this process of transformation has not yet been entirely completed.

Source: EU Transport in Figures - Statistical pocketbook 1998 DG VII Eurostat

Figure 3. The relation between freight performance and GDP in 15 EU and 10 Central and Eastern European countries. The production of a unit of GDP is coupled to far higher freight performance in Central and Eastern European countries.

This approach is further complicated, however, by the fact that in Hungary – and in Central and Eastern Europe in general – transport has been *pressurised from two sides* over the last decade. Partly as a consequence of the change of regime, to the extent described a level of consumption approaching that of Western market economies, where the transport performance demand was lower per unit of GDP produced than in the Eastern European countries, was noticeable. The challenge, however, did not end there. Western countries are realising now that continuous growth in transport performances cannot be sustained indefinitely, and transport strategies in progress endeavour to change established trends, for example by bringing the role of railways to the fore and promoting public transport. Making the change in practice, however, is still ahead of them.

In Hungary, while the transformation to market economy has already shocked the transport sector, the expectations of forward-looking, sustainable transport also have to be confronted. In selecting domestic objectives, this long-term viewpoint must be given its due weight, as the transport structure that we develop today will determine our possibilities for several decades to come.

INVESTMENTS TO INCREASE TRAFFIC

Although signs of the second approach to transport are appearing in long-term concepts currently under preparation (this will be returned to later), in practice the aims of large investments almost exclusively follow supply-increasing transport considerations. In the following a few debates over recent transport projects are examined from this perspective.

Embankment freeway

"Danube freeway to clear the jams". This was the title of I. S.'s article in Népszabadság's Budapest supplement on 6th October 1998. One of the characteristics of the investment which is a textbook example of supply intervention is that it apparently did not even arise from a transport issue. This is one of the capital's most important environmental protection projects – says the argument – as now it will be possible to solve the capital's untreated sewage pouring into the Danube. According to this, sewage from the areas lying to the south of the Aranyhegy stream to the north of Buda should first be channelled to the pumping station in Kelenföld in South Buda, and from there pumped to the central water cleansing plant on Csepel Island. To do so, a main collecting sewer needs to be built right across the Buda side of the city from Óbuda to Kelenföld – and most practically along the course of the Danube embankment wall. And if there are already construction works going on there, we could kill two birds with one stone and turn the road running along the lower Buda embankment into a two-lane road in each direction, thus improving traffic conditions for the whole of Buda.

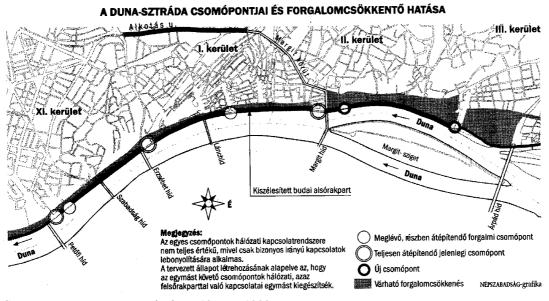
Let us stay with solving the sewerage issue for a moment. This proposes that the modern, environment-friendly solution is to collect half of Buda's sewerage in one place and lead it to a central treatment point.

Incidentally, sewerage from Buda pours into former living water, such as the Ördögárok stream which, today covered, serves as a sewer, taking sewerage from the Buda hills into the Danube at the abutment of Erzsébet Bridge. If we delve into history a little, it becomes obvious that the issue should be tackled a great deal earlier, before sewerage is allowed to get into the Aranyhegy, the Ördögárok and the Kőér streams. It does not seem at all modern if instead sewerage and rainwater are together led for kilometres across the city.

Referring to the main collecting sewer, however, has an important function: it removes the reason as a transport problem from a rationally negotiable context, and in fact sends the message that now there is a large development on the way, it is now possible to build a new road and there's *no time* for argument.

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Naturally there are reasons for the proposal: in Buda there is nowhere else a possibility to construct a north-south road, what there is needs to be relieved, and the embankment road would do just that. The biggest problem would be the junctions with the ends of the bridges. The first proposals simply argued that it was not necessary to link up with the ends of the bridges as the main aim is to connect North and South Buda. In other words, this meant that transit traffic between North and South Buda that had nothing to do with central Buda had to be led along the bank of the Danube. In the course of planning, the concept was modified and the two-lane road in each direction on the embankment was given several junctions. At the same time additions described as supplementary investments appeared in the plan: to alleviate traffic in Fő Street or on the upper embankment, and to create pedestrian facilities.



Source: Főmterv Rt. Népszabadság, 12 May 1999.

Figure 4. The Danube freeway and planned junctions

The phrase "secondary investment" itself betrays and well reflects the nature and approach of supply-increasing investments. While the main aims according to the reasoning are improving the quality of life, the environment and traffic conditions, nevertheless only an investment which increases traffic really counts as a basic investment and the measures embodying the real aims become "secondary investments" (we know these are usually left out when the money runs out).

How would this project change in a demand-reducing intervention? (We will not go into detail here, but as regards the main collecting sewer, a means of collecting the sewage at an earlier stage should be sought.)

Tram and bus connections (the no. 18 and the no. 84 respectively) between North and South Buda have in recent decades been closed, and today the only public transport link is the number 86 bus. In view of the obstacles to growth in road connections caused by terrain, public transport should rather be strengthened than weakened and in traffic conditions public transport should be favoured at the expense of individual transport. To improve transport by tram, bus and suburban railway, better solutions for points of interchange should be devised – not as supplementary but as main solutions – as well as relieving motor traffic along public transport lanes.

On the embankment itself – incidentally, in unison with the basic principle of city planning for Budapest³ – the aim should be to win back the bank of the Danube and not to be divorced from it. The Danube is Budapest's main drawing power and what is more the Castle District looking onto the river is a World Heritage site. In such a place the traffic on the embankment should not be increased to the scale of a motorway, but precisely the opposite. By reducing traffic and lowering the speed limit to thirty kilometres per hour, the embankment could be crossed on foot with safety, cyclists would become road users of equal status in the traffic (which would save the need to create separate cycleways), and motor traffic and car usage would be reduced and not increased.

M-NULL: essential where it's not essential?

Transport manuals unanimously agree that roads bypassing towns and villages are advantageous from the viewpoint of both the *life of the bypassed town* and *the traffic participants* who are no longer forced through the towns and villages.

For the capital, too, there are very good grounds for a route that allows traffic *not* destined for Budapest or its inner districts to bypass this sensitive area. But it should not be forgotten that national and international traffic *not* bound for Budapest is *forced* to use the M-NULL, the road leading along the boundary of the capital, which is also *the route local Budapest traffic has to use*. This transit traffic has no option but to use the busiest approach sections to Budapest together with local traffic up to the M-NULL, then, coming off the M-NULL, leave the area of the metropolis on a similarly congested section. In a national context it must be clearly seen that *al-though the M-NULL bypasses the streets of the capital, it continues to draw transit traffic into and force it through the conurbation of Budapest. Thus from the point-of-view of transit traffic it cannot be considered as a modern and in the long run satisfactory connection.*

Despite this, we cannot doubt the significance of the fact that today there is a road linking the M1, M7 and M5 motorways that allows the interchange of traffic between these frequented international directions and which now only requires a link to the

³ Budapest City Planning Concept. Material for agreement. Városkutatás Kft. August 1998

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M3 to form a network connecting all the motorways built hereto in Hungary. An obvious solution for linking the M3, which fortunately has come to the fore in the Budapest development concept as well, is to draw the M3 motorway south from the Gödöllő area towards the existing M-NULL bridge⁴ (*Figures 5/a and 5/b*). This solution also gives a certain symmetry with the Buda side, where likewise both the southwest (M7) and the northwest (M1) high-speed roads reach the capital from the south.



Source: Budapest's transport development plan. General assembly proposal June 1999

Figures 5/a and /b. The M-NULL's latest functional diagram and proposed route

Although officially the completion of the eastern side of the M-NULL ring to link the M3 into the network as soon as possible is the encouraged solution, there are constant efforts by the road construction lobby to delay this link and press ahead with the building of the northern section of the M-NULL. "It is increasingly probable that the M0's northern bridge will be built first, and only afterwards the crossing at Aquincum," Népszabadság reported according to official sources in its Budapest supplement of 29 March 2000. In the north, despite disputes and court cases, there is continuous pressure to build, while on the eastern side every counterargument is meticulously scrutinised. "More circuitous M0?" was the title of the latest article of 4 April 2000 in the same daily dealing with the problems of the eastern section.

It has to be clearly seen that the already built southern section of the M-NULL started enormous investments on the section between the links to the M7 and the M5, concentrating developments demanding logistics here and forcing earlier plans for

⁴ Development Plan for Budapest's Transport Systems. Draft, material for agreement, general assembly proposals, background documentation. Fömterv Rt., Budapest, June 1999

the region to be changed. From the viewpoint of the capital it is not at all desirable that a similar logistic belt develop on its northern flank between Újpest/Óbuda (North Budapest) and the Danube Bend, or that by directing the traffic of the M3 motorway to the north of Buda traffic should be forced through a belt in the Buda Hills, where *forcing non-local traffic through would be totally unjustified*.

(Officially this road is numbered the M0 and many believe the 0 refers to the ring it is intended to form. According to our reasoning, however, it should be called the M-NULL, as the inhabitants of both Hungary and Budapest would be served far better if it stayed U-shaped and not become a closed O. János Vargha coined this eloquent play on letters in a television interview.)

As in the north the development of a logistic belt similar to the one in the south should not be allowed and as enabling the traffic from the M3 motorway to cross to the Óbuda (northern Buda) side of the Danube would provoke a catastrophic situation, there is *no need whatsoever for an M-NULL bridge in the north*. As regards the other bridge planned in the area to create the urban link between Újpest and Óbuda (the two sides of the Danube in the north), it needs to be emphasised and made a condition that its construction should not precede *the construction of the M3 motorway's (eastern) link leading to the southern M-NULL bridge*. If it were, taking traffic to the Buda side would cause a crisis there and force the building of an expensive motorway cutting through the hills. In reality *there is no need to build the western section of the M-NULL as a motorway, that is taking transit traffic originating elsewhere through the Buda Hills is unjustified*.

The Párkány (Štúrovo) paradox⁵

"There is no obstacle to the Esztergom-Párkány bridge being finished by the end of 2001," Népszabadság reported quoting a ministry spokesman on 8 March 2000.

A bridge was built in 1895 to connect cities, Esztergom and Párkány, now on the Hungarian and Slovakian sides respectively of the Danube. Although its piers stood throughout the twentieth century, it was open to transport for rather less than half of the period. Undoubtedly, today its towers reaching to the sky evoke the destruction 55 years ago, and keep the desire for the link to function again alive. The reconstruction of the bridge acquires its symbolic value as the last World War debt of reconstruction and as a tie between Hungary and Slovakia. Another strong argument in favour of the reconstruction is if, precisely because of the international context, one third of the HUF five billion investment were to be paid by the European Union.

⁵ Since the article was writing this bridge has already been constructed for all road traffic, just the way this advices wanted to avoid.

This, however, should not deter a thorough analysis of the significance in terms of transport of reconstructing the bridge.

Considering that the bridge links the centres of the two cities, its renovation will in any event enliven the co-operation between them. If this were sufficient reason per se for the reconstruction (and, for example the two cities were able to cover the missing costs), obviously it would be unnecessary to waste any breath on the matter. However, there was a need to support the reconstruction with other reasons that showed it was in the national interest.

And the justification was found in the expansion of Budapest's scope of influence as this would be the nearest border crossing to the Hungarian capital. (Today, too, it is that – only by ferry across the Danube.) In this way the issue of the Párkány bridge was transferred to the area of the main road network. Apart from this there are problems with the capacity of Road 10, its section crossing Vörösvár, and its approaches to Dorog and Esztergom. The attention now being devoted to it promises to improve all these.

The problem is that if there really is a need for a stronger main road network link in the area, then it should not break into the heart of Esztergom and this bridge should not be part of the link. Nevertheless, if there is no actual need for a national main road link yet today, the reconstruction of the bridge would create the demand. The middle sections of Road 10 are at present in need of correction, but if the bridge was built, a four-lane instead of a two-lane bypass would have to be built. The real problems, however, arise at the two ends of the route.

It can be expected that within a short space of time the inhabitants of Esztergom will, quite rightly, start to protest about the trundling through the city, and before long it will become apparent that it was a mistake to drive the main road across the city. The route of the main road would have to bypass the city – concomitant with which a new bridge would have to be built outside the city that would be capable of providing the traffic link befitting the new status of the road (with potentially two times two lanes).

If possible, the other end of the route in Óbuda in northern Buda would be an even bigger problem. Traffic appearing here would want to connect with the whole area of the capital. The ever larger tailbacks make it urgent to build another bridge across the Danube to connect to the M3 motorway. But, of course, opening such a link not only takes traffic away but also draws traffic in. The connection with South Buda would also need to be improved and a new argument would emerge to show the indispensability of a four-lane road along the Buda bank of the Danube (if construction has not already been begun by then).

It is exactly this type of network development that we term supply-increasing, although, as can be seen, development always only gives in to oppressive forces and acts under pressure to decide – alternatives never arise which could be chosen but are missed.

But is there really an alternative?

We have no reason whatsoever to doubt the sincere desire for better co-operation between Esztergom and Párkány, and the need to improve relations between the neighbouring cities. Three options are open for this improvement.

The first, immediately obvious but rather rudimentary possibility is to increase the 10 ferry runs to and fro between the cities each day at present, perhaps with passenger boat crossing in the interim. (At the start possibly helping through city funds or even modest national subsidy.) Of course, if there is flood or drifting ice, life would stop, and doubtlessly a true, reliable link could not be built in this manner.

The second option respecting the tradition of the bridge would be to construct a pedestrian bridge with a cycleway using the piers, thus enabling the citizens of both cities to keep in continuous contact and affording the opportunity of crossing the river for all who need to, while sparing the two city centres from increasing transit traffic. (At the same time this would represent a major saving in construction costs, even if a covered carriageway protected from the wind and winter weather were constructed between the banks.)

The third option would offer public transport between the two city centres in cabins suspended on a taut cable secured to the towers. This is a truly bold and elegant solution that would give the European Union room to demonstrate its intention to help, although it would undoubtedly be a fiasco if after construction people wanting to cross still chose the cheaper water crossing.

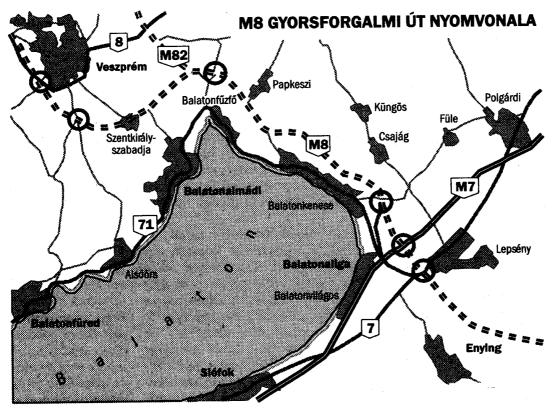
All these solutions are joint in that they make the declared aims of co-operation between the two cities and countries possible, but at the same time do not create traffic demand with a ripple effect with at present hardly foreseeable consequences.

It is worthwhile changing perspective for a moment to see the aforementioned three projects – the plans for the reconstruction of the Párkány bridge, the M-NULL's northern bridge and leading it to Buda, and the embankment freeway – from Óbuda's viewpoint. According to these, in the course of these "congestion relieving" solutions a number of new constructions would have to be made in the Óbuda-Békásmegyer area, where the significant transit traffic of Road 11 is already causing problems. Besides the traffic on the Aquincum bridge, a 2x2 lane motorway bridge would have to

be built, Road 10 would bring another 2x2 lanes, the Buda section of the M-NULL would continue as 2x2 lanes, and the embankment would also arrive here with 2x2 lanes. It hardly needs emphasising that these roads would be built to fill them with traffic. Is there anyone who seriously thinks that constructing all these roads would *reduce* the volume of traffic and improve conditions in North Buda?

Lake Balaton: "congestion relieving" motorways?

On 31 March 1999 Népszabadság reported that "Latest plans propose building the first 20 km section of the M8 high-speed road between the M7's Balatonaliga junction and Veszprém that would also relieve Road 71, which is unbearably crowded in the summer." (*Figure 6*)



Source: Népszabadság, 31 March 1999. Figure 6. The M8 section with mixed functions

One of the essential features of a network providing the basis for sustainable transport is that the levels with different functions must provide full coverage throughout the country independently of each other. This stratification ensures that the secondary road network can be travelled along separately – for instance, a slow-moving vehicle or a cyclist should not be forced onto a main road – but, naturally,

there have to be ways of passing from one level to another, so that the cross-over function is also catered for.

As regards the road network between settlements, the job of the *secondary network* is to enter settlements and provide a continuity of connections with the road network in the settlements, which itself has several layers. The *national main road network* provides links between larger towns, but does not take transit traffic into each of them. The purpose of the higher level *high-speed network* (together with the railway network) is to create links between regions. The last of these is the main carrier of transit connections.

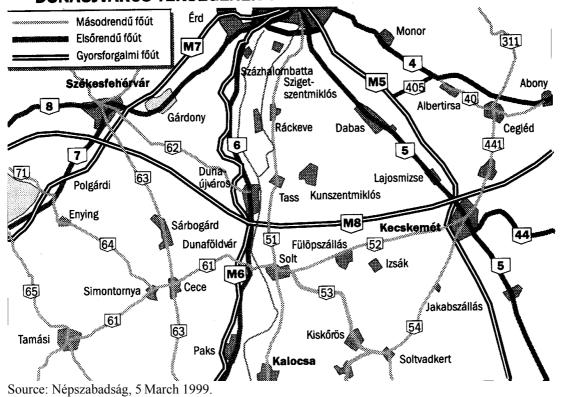
The high-speed networks accepted in international agreements as pan-European corridors clearly belong to the third type of network ensuring interregional connections. The sections of these transit roads in Hungary must be formed in a way as to satisfy the requirements of joining other roads at the borders, and within the country to avoid sensitive areas where the transit road would create disturbance or where high-speed road traffic would be seriously inconvenienced. Additionally, it is in the mutual interest of all that these transit connections should make travellers take relatively few detours and follow a relatively short route.



Source: Népszabadság, 12 July 1999.

Figure 7. Transit road on the shore of Lake Balaton mixing functions

A road passing outside the settlements needs to replace and take the function of the existing road going through the centres of towns and villages on the shore of Lake Balaton. Thus in the region of either Balatonlelle or Balatonkenese, the new road bypassing close to the towns must be categorised as part of the national main road network. In its construction it should conform to regulations for main roads, but even if it conforms to higher specifications, it should not become an international transit route. The route of the road planned as the extension of the current M7 takes the role of Road 7 as it takes on the long-distance function of today's main road for its whole course (*Figure 7*). For the role of the pan-European, international, interregional, etc. transit road a route further from the shore, on a line linking Tab and Marcali could be marked which would ensure the regional connection of both the Balaton and the Kaposvár regions.



DUNAÚJVÁROS TÉRSÉGÉNEK GYORSFORGALMI ÚTHÁLÓZATA

Figure 8. Potential route corresponding to M8's national role

With the M8, mentioned at the beginning of this section, the situation is exactly the reverse. There we are talking about the construction of a high-speed road with the function of a transit road and forming a main national axis (*Figure 8*), and this function must also apply to the road's section between Veszprém and Dunaújváros. However, the role of interregional transit is not compatible with incidentally taking on the role of relieving congestion on Road 71 in one of its sections (See Figure 6 above).

Motorways: some pay, some decide

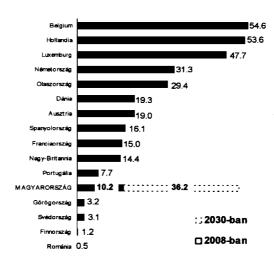
In 1996 Hungarian transport policy expressed on the basis of clear principles that the operation, maintenance and development of the traditional road network (main and secondary road networks) is a public duty which should be mainly financed by the road fund. For the building of the motorway network, on the other hand, additional resources need to be mobilised primarily in the forms of private capital and concessionary construction where costs need to be reimbursed by the users of the motorway in the form of tolls. This starting point provides an appropriate guarantee that on the one hand the operation and maintenance of one of Hungarian transport's fundamental assets, the 30,000 km road network, is tied to secure funds and does not have to compete with the investment resources of motorway construction, and on the other hand allows motorway development to be weighed in the market: further roads can only be built if investors deem construction profitable on the basis of its expected traffic. (This concept would certainly have been more rounded if it had included conditions for the stability of the local government road network and the railway network.)

Nothing came of these clear principles. Although the panacea and objective standard of concessionary development was proclaimed while there was hope that the market would finance the planned investments, this very same standard was considered unsuitable and objectionable the moment it was actually assessed and it became clear that motorway development concepts were very overblown. The conclusion drawn was not that a motorway network for which there was not at present effective demand should not be developed at the planned pace. Instead it was concluded by some strange logic that if potential users are not willing to pay for the extra service provided for them, the costs should be financed from public funds, and thus partly by those who do not use the motorways at all. Thus the other pillar of road management, managing the national road network from safe funds, came crashing down, which now must be satisfied with what is left of the road fund after motorway development. The maintenance of the existing 30,000 km of road thereby became uncertain and only a patched up solution remained: it gets as much as there is. (Compared to this, the issue of whether there should still be a separate road fund if it does not fulfil the tasks for which it was earmarked becomes almost pointless.)

The above is only connected to the issue of collecting tolls in part. In principle the overall costs of transport and those more or less in proportion with use are mainly collected in the form of tax levied on fuel. Further additional costs are incurred in particular cases, for example where the expense of providing the expected level of service would be especially high such as in city centres at peak times, or where a higher level of service is required compared to the general level; these are paid for by those requiring the special quality. The motorway network, which makes shipment by road profitable over distances where in the past it was not worthwhile using a lorry but the railway, belongs to this latter category. The relevant thesis states that when transporting goods of appropriate value long-distance road transport on a market basis is still profitable even if the actual costs of constructing the raised level network necessary for this have to be returned. Obviously, this, even in theory, could only occur where the building of a section of raised quality road is in the interest of a large number of hauliers, and the costs are borne and shared by an appropriate volume of traffic.

However, traffic that does not demand and is neither willing to pay for the raised level service cannot be included in the calculation of sharing costs. The misunderstanding of planning to construct transit routes on domestic sections which have a high volume of traffic anyway, such as the approach sections to the capital in Hungary, arises from this. The traffic is there but, unlike a haulier taking freight from Kiev to Zagreb, local traffic going from Gödöllő or Tatabánya to the capital is not in the category with a real interest in using a special quality network with accordingly high costs, a part of which they would have to bear. (Naturally, however, no one would complain if they got a very good quality motorway without paying extra, even those who otherwise would not make special sacrifices for it.)

In summary, elements of a network are now under construction in Hungary which are not suitable for payment by transit traffic precisely because the decisive part of local traffic using the motorways has a low ability and willingness to pay. It has already been mentioned that the structure of the network currently under construction is not suitable to become the national route for transit traffic because, instead of bypassing areas sensitive to traffic, it actually leads traffic through the capital or along the shore of Lake Balaton. As opposed to this, it would be desirable to gradually build transit routes which strengthen new poles and axes in the central line of the country. These, while relieving sensitive areas, would offer the possibility for a new spatial structure and also ensure that transit traffic crosses the country on the minimum possible length of road with minimal disturbance. These routes could be built gradually on the basis of real needs in a concessionary form at the users' expense.



Source: Az országos közúthálózat fejlesztése (2008. évig) KHVM Közúti Főosztály, Bp. 1999. [Developing the national road network (until 2008) Ministry of Transport, Communications and Water management, Highway Department]

Figure 9. Specific motorway provision [km/10,000 km²] in some European countries in 1996

Excluding the restrictions of ability to pay can lead to plans according to which the specific length of the long-term Hungarian motorway network greatly exceeds the current density of the German or Italian networks, a density which countries that are twice as densely populated as Hungary do not wish to expand (*Figure 9*).

The thought rightly occurs that *the railway could also offer a competitive solution if transit road freight was really made to pay the higher costs.* Naturally, we should be delighted about this, as this is just what we want: the railway to become suitable for taking the preponderance of transit traffic.

In connection with financing the construction of motorways new government ideas were officially announced on 29 February 2000. The faulty structure of the planned network did not change, and neither did the idea that building a network that could not be financed on the market would be realised from public funds (more precisely from loans repayable from public funds). On the contrary, it was announced in the new declaration that the ten-year programme would be accelerated and completed in five years, and the works would be handed out disregarding the public procurement procedure for spending public funds. This plan does not need to be commented on professionally; it shows clearly that in Hungary the maintenance of supply-expanding transport development at public expense still has considerable reserves, newer and newer allies, and people with direct interests.

The dignity of pedestrians

Népszabadság reported on 29 March 2000 with regard to the renovation of the end station of the HÉV suburban railway on Csepel Island that planners wished to get rid of a pedestrian thoroughfare. "There is no registered right of way for pedestrians in the operational area owned by the Budapest Transport Company," a spokesman commented. They did not say, but perhaps they meant to add, "Pedestrians should go around the end station and the vehicle yard – they've got no business here, they'll get in the way!"

Within settlements – until existing destinations (shops, services, libraries, clubs, etc.) are wound up or closed down – the majority of movements between destinations are very short, covering only a few hundred metres and involve going on foot. The *environmental value* the pedestrian in the street represents could only be appreciated if you happened to be in a town where there were no pedestrians any more.

In Hungary, too, conscious efforts are needed for this value to be preserved, and to ensure public areas in towns will remain enjoyable and home-like for us urban residents.

Numerous sources of danger threaten pedestrian life – public safety, public hygiene, the climate, proprietorship, legislation, habits, fashion – and among these transport is just a component. The majority of sources of danger are typified by the fact that they start self-reinforcing processes: the more we allow ourselves to be squeezed out of public areas, the more intolerable the situation becomes there, and the more others are squeezed out too.

Transport planning based on the earlier euphoria of the car – which considered just the car, and saw people and everything else as obstacles – significantly aided this process on both macro and micro scales. Micro scales are when local destinations start to disappear from the street and an increasing number of matters can only be arranged in distant, larger, "economical" institutions, and thus, against our will, we are forced to use means of transport. Macro scales are when the urban structure adapts to the "distant" way of life, and not only destinations disappear from the streets but even a row of houses has be demolished to make way for transport.

This period is characterised by transport planning in which the car has an unambiguous priority and everything from street planning to the curve of the kerbstone is done in the interest of facilitating the continuous flow of cars with as few obstacles as possible to impede its progress. The main criterion in designing crossroads is to get traffic into lanes easily for the traffic lights so as not to reduce the capacity of cars let through. All that disturbs this – the traffic island, the bus stop, the positioning of the zebra crossing – is determined by the capacity to let cars through. The pedestrian can go the longer way, people changing can go in a circle, the bus can wait – only automobile traffic is sacred.

Fortunately, in Hungary, too, with the passage of 30 years quoting the one-time priority is rather a caricature, in spite of the fact that a good few large junctions with inconvenient crossing and poor-quality changing embodying these principles are cast in asphalt and continue to determine our everyday movements even today.

Nevertheless, progressing outwards from town centres the right priority is slowly gaining ground: there are areas where traffic has to give way to pedestrians, there are facilities for cycling and there are bus stops where the bus does not have to manoeuvre into a small bay in the pavement but stops on the street next to a platform-like island, and at worst the cars behind it have to wait a little.

Although in many places even the pavements have not been won back for walking, we should not be narrow-minded. A great deal more than this should be achieved for a continuous belt of *zones with controlled traffic* between the access roads and the public transport routes *to be typical of our densely built-up cities*. Zones with a 30 km/h speed limit would make it absolutely clear that residential streets are not for speeding. Only people would drive there who really have to. Thus the issue of urban cycleways can be resolved in one step without special investment, as the cycleways are there today, already built, only at the moment cars use them. The 30 km/h speed limit puts the cyclist on an even footing in traffic, and indeed, through the spread of the use of the bicycle the very presence of a large number of cyclists would ensure that it is impossible to drive faster. It would also become clear that the cyclists' place is on the road and we could put an end to the adverse "generous" practice of cyclists gaining space primarily at the expense of pedestrians.

While numerous changes of approach in transport depend on whether the planners and decision makers can be persuaded of the necessity of the change, in the development of the micro-scale settlement system everyone can take part on a daily basis. How important a town regards pedestrians depends to a great extent on the behaviour of the pedestrians themselves. *We have to live and move around in the town in the knowledge – and with the dignity this gives – that public space is essentially ours*. We have no right to go through a red lamp or to cross a broad busy street anywhere contrary to the Highway Code, and that is how it should be. But we should not have to hurry at all when crossing the road in the correct manner. We should not have to wait; we should not have to get out of the way of a motorist on a zebra crossing if they want to turn in front of us. We should not have to cower if we are forced onto the road because there is not enough room to get past cars parked on the pavement. At such times we have to go on the road or rather, for our own safety, in the middle of the lane so there is no room for a car to get by or only at very slow speed.

The use of public space in towns by pedestrians in certain priority areas can naturally be encouraged and helped by street furniture, special paving and regulation. In the greater part of the town, however, where we move around every day, we have to wait a great deal, even in vain, for others to create for us the conditions of a more liveable urban lifestyle. Reducing traffic is among those objectives for which all of us can do something every day.

THE MAIN AIMS OF HUNGARIAN TRANSPORT POLICY

Examples of investments have been looked at which expressly belong to the supply-increasing category, and in the long term will not improve but damage the living conditions in the area affected by transport, as well as the transport possibilities. Although in some cases we added demand-reducing alternatives to our criticism, the need for stable frameworks to be created for demand-reducing intervention is justified. Transport policy is intended to create stable transport intervention frameworks.

From the mosaic of examples until now, it can be deduced that important goals of Hungarian transport policy are to maintain the viability of the existing transport networks; to protect the quality of life of settlements, sensitive areas and environmental assets, and to improve transport safety; to develop a more balanced spatial structure and to provide appropriate external links; and to build an institutional and funding system that correspondingly affords opportunities to achieve the above. The majority of these aims have been given priority in the Hungarian government's transport policy, thus it is worth considering why they have not been enforced in the largest investments.

The transport policy with current effect was adopted by the government in 1995 and passed by parliament on 9th July 1996.⁶ The transport policy has five main strategic courses, which are in order

- the promotion of integration with the European Union,
- improving conditions for co-operation with neighbouring countries,
- the promotion of better balanced regional development in the country,
- the protection of human life and the environment,
- the efficient, market-conform operation of transport.

⁶ Transport Policy of the Government of the Hungarian Republic. Budapest, 1995 and Parliamentary Resolution 68/1996 (VII.9.) on Hungarian transport policy and key tasks for its realisation.

The promotion of integration with the European Union

Integration has become a catchword today which is the least refusable in the competition for central development funds. This encourages those involved in development to always devise claims that can be directly justified by their promoting the process of European integration. Moreover, a kind of consensus has developed between decision makers which favours the construction of large-scale backbone lines for transport to facilitate the European Union accession process, which are actually developments whose need is expressed in various European Union documents, assessments and recommendations.

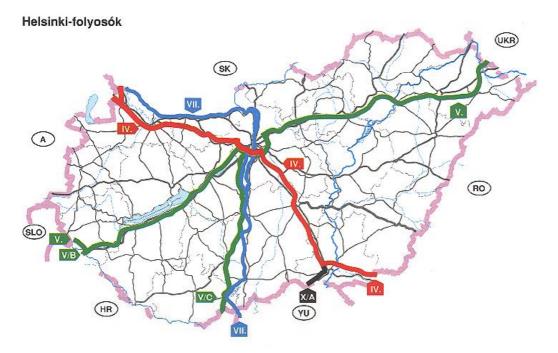
The core of the European Union is formed of countries which entered into association with already developed internal structures. For them developing a joint European network did not mean building *replacement* elements of the internal network but developing an overall structure linking and overlapping their existing internal structures. When, as the most important elements of European unity, these large networks appear in EU documents, the experience lying behind them is that for individually developed countries this step in fact creates the potential for integration in a higher unit.

For Hungary and similarly developed countries, however, developing and maintaining the internal network should be of at least equal importance to building backbone networks. *The advantages expected of backbone networks can only be made effective in these countries and their regions if there is an appropriately developed system of internal connections*. If there is not, the expensive backbone networks *will permanently operate asymmetrically*: that is many advantages will be sucked to those junctions where the side networks, the capillary networks able to absorb the advantages, are operating well, and very few, if any, will devolve where this kind of ability to receive is still wanting.

Undoubtedly, Hungarian transport policy contains objectives among its five main strategic courses that draw attention to the importance of a network of internal connections. Such an aim is "the promotion of better balanced regional development in the country", which expressly refers to the need to improve internal links within Hungary. In addition to this, compared to the centre of Europe, links between Central and Eastern European countries have a significance in terms of internal connections, and given Hungary's geopolitical situation "improving conditions for co-operation with neighbouring countries" strengthens such co-operation in six directions. Thus formally, the reason why development efforts in practice almost exclusively shift towards improving large international transit routes and all the subsectors express their own development perspectives in these terms cannot be justified by the lack of main strategic aims. Overall, however, it seems to be true that transport policy plays a role in trying to encourage rather than restrict unilateral endeavours in this direction. In other words, over the last three years the policy has not delivered on the otherwise

expectable fundamental task to coordinate and force the efforts and development needs of the subsectors between certain limits so that in the end all main strategic aims are realised.

The other problem with transit links is not that they are given priority and how they are timed, but the planned physical form and structure of the network. The border points of the pan-European corridors accepted in Helsinki naturally will be a constraint and commitment for Hungary following international confirmation and agreements with neighbouring countries. However, international agreements do not say that international transit routes would have to be driven across the capital and the region of its conurbation burdening the country's busiest sections of road, the approach sections to the capital, with this traffic. It must be clearly understood that the corridor view encouraged in the last decade is closely connected with the strengthening role of regions, and that the job of corridors is not any more to connect cities but European regions. In international recommendations a corridor named as (Kiev)-Budapest-(Zagreb) will feature even if both the line of the railway and the road crosses the Danube at Dunaújváros to the south of Budapest. On a European scale this too means that the region of the Hungarian capital is passed through and not just if everybody (against their will) is forced through Budapest's local traffic which both harms the city and is a disadvantage to the traffic.



Source: Útgazdálkodás 1994-1998. Közlekedési, Hírközlési és Vízügyi Minisztérium, Közúti Főoszt. [Road Management 1994-1998. Ministry of Transport, Communications and Water Management, Highway Department]

Figure 10. The official Hungarian interpretation of the Helsinki (or Pan-European) corridors

In planning both the transit routes and the logistic intersections based on them, a great deal more foresight than at present would be desirable; a conscious division of burdens, the relief of congestion in the conurbation of Budapest, and the gradual development of the central line of the country, that is building on the Székesfehérvár – Szolnok axis would be necessary. In the absence of consistent set objectives regarding the role and importance of this axis, planning improvisations became fixed in various concepts which through expensive diversionary constructions offer solutions that in the long run lead into a cul-de-sac. Here, as an example, we can point to the contradictions of the role of the M7 and M8 backbone lines on the shore of Lake Balaton.

Similarly disturbing is that development concepts still wish to provide a railway link with Transdanubia by leading the transit corridors across the capital, instead of exploiting the numerous existing circumstances favouring the creation of a central axis across the Great Plain (Záhony–Debrecen–Szolnok, and Békéscsaba–Szolnok and Szeged–Cegléd directions).

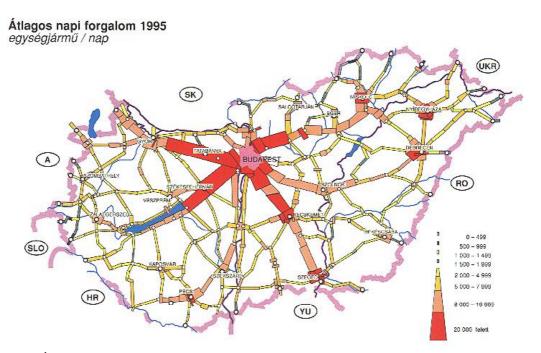
Improving conditions for co-operation with neighbouring countries

Although the policy contains this strategic objective, when the need for a direct rail link with Slovenia or ensuring possibilities for a southern or eastern motorway connection come onto the agenda, the future is decided about through improvisations which through new elements turn earlier priorities completely upside down. The problem is not when a Slovenian, Croatian or any other link is revalued, but when the consequences of this cannot be fitted into the existing structure, although transport policy states the strengthening of connections with neighbours as a priority. This shows that at the time the transport policy was conceived, a transport structure which would follow from taking priorities seriously was not consistently enforced. This results in hurried improvisations and plans such as the one intending to use a structural element in developing a Croatian link – i.e. the construction of the M6 motorway radiating from the capital – which undermines another strategic objective of the transport policy, the aim of improving the internal spatial structure.

The promotion of better balanced regional development in the country

For a long time all professional material on the Hungarian transport network has considered it important to emphasise that the Hungarian transport system is *exaggeratedly single-centred and organised radially on Budapest*. It is well known that it was an important aim in the last century that the Hungarian capital should develop into a centre capable of competing with Vienna. One of the things that helped achieve this was the construction of a transport network with Budapest clearly at its centre. Internal proportions turned further in Budapest's favour when following the Paris Peace Treaty at the end of the First World War the country lost two thirds of its territory and with it its biggest cities went to neighbouring countries. This is common knowledge and these facts are often quoted. Exactly for this reason the way forward for transport development would be to promote balanced development by undoing this unfortunate structure, for instance by creating a pole in Transdanubia or the Great Plain.

However, it is held to be evident by public professional opinion that a better balanced regional development primarily can be promoted by improving the accessibility to the different regions, meaning (explicitly or inexplicitly) accessibility from Budapest. This means that we wish to reinforce the very structure which had a decisive role in creating today's imbalance. (Psychologists refer to "even more of the same" cases when conflict deepens increasingly because those involved do not realise that they themselves by their repeated attempts to reach a solution become the mainstays of the problem. Transport has an unfathomable wealth of "more of the same" cases: such are building new lanes to eliminate bottlenecks, and the "today I'll go by car because it takes me so long to get there" trap.) The transport policy accepted in 1996 did not escape this approach either, as essentially the M1-M3-M5-M7 motorway crossing centred on the capital is expected to better contribute to the balance of the country's internal regions (apart from solving transit). (One traditional argument proposes that although transit could go elsewhere, nevertheless motorways should be built where it is appropriate for domestic traffic, and this is the four major routes mentioned with the heaviest traffic as the capacity of these became exhausted first.) Above all, the adverse spatial impacts of this structure should be highlighted. Nevertheless, it is worthwhile recalling that the above mixing of functions resulted in an insoluble situation where the collection of motorway tolls intended to make transit traffic pay chiefly affected domestic traffic, in particular traffic from the suburban conurbations, but the equitable solution of not making local traffic pay also means losing real transit tolls.



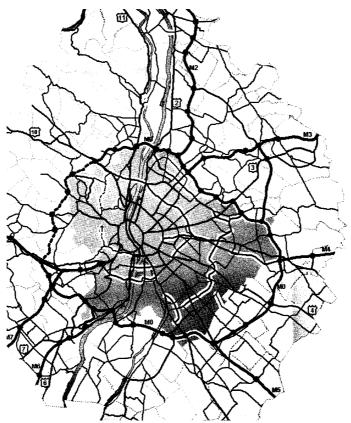
Source: Útgazdálkodás 1994-1998. Közlekedési, Hírközlési és Vízügyi Minisztérium, Közúti Főoszt. [Road Management 1994-1998. Ministry of Transport, Communications and Water Management, Highway Department]

Figure 11. The Hungarian road network's traffic in 1995 expressed in average daily traffic [vehicles/day]

A fundamental change of mentality is needed. Stringing the whole country onto rays emanating from the capital and strengthening the existing, inherited structure is not only disadvantageous for the transit traffic, but also for achieving regional balance within the country. Indeed it is clear that increasing the capital-centredness actually exacerbates the capital-provinces incline, making regional differences greater rather than balancing them out.

It is unquestionable that in addition to the capital-provinces incline there is a west-east development incline within Hungary. However, this does not mean that this incline would be effectively ameliorated by tying Eastern Hungary to the capital. Numerous regional analysts point to the fact that it is an erroneous oversimplification to regard the region of the Great Hungarian Plain as a homogeneously undeveloped area. Here, too, poles of development stand out, but until now these poles have been unable to become sufficiently dynamic. It is precisely reinforcing their roles as junctions that would contribute to stimulating the development of the existing poles and increasing their spatial organising powers, and not turning them into satellites of the capital. To strengthen their role as junctions, however, developing the internal networks of regions and raising the standard of the basic fabric would be

needed, and then this developing, co-operating fabric would be capable of reaping a profit as a dynamic region from the backbone networks crossing the region as well.



Source: Regional plan for the conurbation of Budapest, preparatory stage. Pestterv, April 1999

Figure 12. A proposed road network programme with seven motorways emanating from Budapest

(To be fair to the drafters of this proposal, it must be said that they took the concept from a national regional development plan that was then on the drawing board.^{7 8})

Over recent years various regional concepts and development plans have been drawn up continually, some of which acknowledge the effects transport exercises on the structural interrelations of regional development, and other plans obediently adopt old transport proposals.

⁷ Regional plan for the conurbation of Budapest. Preparatory stage, material for agreement, Pestterv, Budapest, April 1999

⁸ National regional plan. Preparatory work phase, material for agreement. Váti, Budapest, March 1999.

Above, exactly because of its *centralising effect*, we condemned the transport policy's concept of a road network based on four motorways (M1-M3-M5-M7) starting from the capital. It is worthwhile pointing out that versions of even worse centralisation have popped up from time to time. While the construction of the four motorways' more distant sections from the capital were delayed due to their lower traffic volumes, a series of plans appeared to replace the sections near the capital of three other national roads with motorways (*Figure 12*). The M6 has already been mentioned as a Croatian connection and this has crept into the foreground under the guise of a pan-European corridor.

A 35 km congestion relieving section of Road 2 between Vác and the – then and there still non-existent – M-NULL was quietly built in the framework of a road programme for bypassing settlements. Since it was completed, it has been frequently mentioned in professional contexts as the M2. Transport policy has not counted on the M2 motorway in the long term, and if it were proposed as a N-S link, it would not make sense to take the traffic through the capital. Instead it would seem logical to continue it along the Vác–Gödöllő–Pécel–M5 line, as the latest plans for the capital keep the M-NULL just as far from Budapest (See *Figure 5*) as this.⁹

The next motorway from the capital to emerge is the M4, which would thread its way into Budapest along Road 4 or Road 31 going through the Tápió Valley. The need to modernise Roads 4 and 31 is indisputable as is the necessity of replacing sections crossing settlements. Nevertheless it must be underlined that it is a fundamental misunderstanding of functions and tasks to try to develop a national transit network on the basis of the capacity requirements of 20-50 km suburban sections. Apart from this it is clear that building another three motorway approach sections radiating from the capital would cause even greater centralisation than the further construction of the four existing motorway sections starting from the capital, although they likewise have a centralising effect.

The primary aim of the above is to illustrate that *the regional development impacts of transport investments are not thought through even on a basic level*. At the same time developments differing from the situation described in the transport policy yet not governed by any other strategic guideline burgeon. Transport policy cannot be content with declaring more balanced regional development as a main strategic aim. It should promote actual developments towards set targets, and hinder developments that are contrary to this. Neither has happened.

⁹ Development Plan for Budapest's Transport Systems. Draft, material for agreement, general assembly proposals, background documentation. Fömterv Rt., Budapest, June 1999

Protection of human life and the environment

Transport policy did not only highlight aspects of environmental protection among its main strategic objectives, but certain components of environmental protection were also given an important role in subsidiary aims and tasks. In this respect this transport policy advanced more than any of its predecessors. However, while environmental protection is an important factor within transport policy, it is one which influences fundamental transport policy decisions only to a slight extent. The introduction of certain packages of measures from time to time significantly influences the current situation (with very important results, e.g. the discontinuance of the supply of leaded petrol). Nevertheless they hardly have any effect on the development of investments determining the future. Protection against pollution of the air, water and soil, noise pollution, and protection of habitats and countryside, as well as the impact assessment of investments embracing all these, significantly contribute to the improvement of the environment. However, this only means that whatever is built now causes less harm to the environment than what was built before. Apart from this, in principle the same investments are being built as before. A true advance is observable where concern for the environment penetrates the levels of structural change, financing and choice of means, which are the essence of transport policy, and as a result of this a different kind of transport develops from that before. Such a change can today only be observed in transport within settlements.

Transport policy itself has dealt relatively little with traffic in settlements although this accounts for almost half of all traffic. At the same time, transport policylike concepts are being prepared for various settlements, including the capital, which occasionally show elements of transport planning that are entwined with environmental protection from the start.

Transport's efficient, market-conform operation

Although efficient, market-conform operation is a means rather than an objective on a stricter theoretical level, in the process of transformation opening up the market became an essential aspect of the years of the change of regime. Thus the transport policy of the nineties had to accept that the development of a transport sector in a harmonious relationship with the trends of governing economic policy is an *objective*. In this respect the frequently referred to requirement of efficiency in European Union transport policy was an incentive.

The difference is that in the EU's transport priorities the creation of an efficient, competitive economy is encouraged, while domestic transport policy aims at the efficient operation of transport itself. There is a significant difference between the two: aiming at economic efficiency as a whole does not mean that within it transport also must necessarily be efficient in every one of its elements. *Making the efficiency of*

transport itself into an aim represents the rule of economic indicators where in the short term elements financially deemed uneconomic, such as urban public transport, the railway network, and the maintenance of side roads, must be downgraded, cut back and emaciated, and in their place economical activities must be conducted. In contrast with this, the efficiency of the economy as a whole (which in itself poses numerous questions not analysed here) happens to mean for transport that transport results do not need to be examined in themselves but within the limits of broader processes of which transport forms only a part.

In relation to the criteria of efficiency, it must be underlined that it is a mistake to regard financial efficiency as a criteria through which transport policy aims could be compared or choices be made. Setting transport policy aims requires broad, longterm social, economic and professional considerations and consensus, and only in the next step, in the choice of means to achieve the set objectives, must efficiency be given a major role.

TOWARDS A NEW TRANSPORT STRATEGY

Different cases have been examined where the striking difference in results of proposals of supply-increasing transport planning that generates traffic on the one hand and demand-reducing intervention aiming at moderate traffic on the other could be clearly observed. We saw that current Hungarian transport policy, although its strategic aims are not contradictory to the possibility of supply-reducing, environment-friendly transport development, is unable to show in practice a definite guide-line in the development of investments. Seemingly a level is missing from the strategic aims which could turn strategic formulations into professional transport objectives. As a closing remark we shall summarise the type of transport policy objectives we believe it is possible to evolve through combining environment-friendly solutions.¹⁰

In selecting transport policy's professional objectives, we must take a decisive position on a few very simple questions that can be influenced to some extent by professional solutions.

Which solutions of our everyday problems do we wish to support?

The one which involves more transport or the one which demands less transport, or possibly does not even require travelling?

¹⁰ Elaboration of the Plan of Environmental Protection Measures. Transport sector study. Ministry of Environmental Protection and Regional Development, PHARE programme, COWI, Budapest, December 1998.

- Do we wish to give motorised traffic advantages everywhere or in a conflict situation should we support pedestrian or bicycle traffic?
- Do we wish to support the advantages of private car transport with public funds or try to spread civilised ways of public transport?
- If short-term market calculations show that transport modes which most pollute the environment are cheaper, should we let this trend prevail or should we intervene in order to protect less polluting means?
- Do we accept that long-distance traffic is more important and superior; that it may cut through towns and residential areas, and stopping, parking and loading must be adapted to it, or do we restore the protection of our living spaces where local traffic is handled in unity with its integral parts, departure and arrival?
- Do we organise our lives around through traffic, expecting it to make the economy boom, or do we understand that the boom, and even the share of the profit on transit, depends on local networks, the existence of capillaries, and the terminals of transport?
- Do we maintain and further strengthen our inherited, single-centred, centralised transport structures, or do we consciously attempt to create a multi-layered grid structure through new developments?
- Do we hope for improvement through the technological development trends that created today's transport structure "even faster, even further, with even more power" or do we believe in technology being the suitable means for the creation of a type of transport that serves a more human, liveable, homely world?

	BENEFICIARIES OF DEMAND-REDUCING SOLUTIONS	BENEFICIARIES OF SUPPLY- INCREASING INTERVENTIONS
(a)	solutions involving less traffic or no traffic	solutions involving more traffic
(b)	pedestrian and non-motorised traffic	motorised traffic
(c)	public transport	private transport
(d)	environment-friendly transport modes	transport modes that pollute the environment
(e)	local traffic	long-distance traffic
(f)	destination traffic	transit traffic
(g)	loose, layered network structure	single-centred structure
(h)	emission-reducing technological solutions in the long term	technological solutions maintaining today's structure

Table 1. Category pairs to be compared on the level of transport policy

The category pairs listed in *Table 1* oppose each other. Today both spontaneous processes and rigid routines shift developments in favour of the right-hand column in all cases; we have called these supply-increasing interventions. In the knowledge of a long-term and environmentally aware value system, the task of a desirable transport policy is to create circumstances through conscious intervention that *enable the al-ternatives in the left-hand column to become professionally well-grounded, viable objectives*, while *not* neglecting current trends. Environment-friendly and demand-reducing strategic aims based on this are given in *Table 2*.

These aims, which are still general in the form they are expressed here, have to be refined, made more specific and interpreted as regards the different scales of transport and thus on the level of local, regional and international connections. Likewise it must be clearly understood that demand-reducing solutions do not mean that only measures affecting traffic requirements directly on the transport demand side are acceptable under any circumstances. In certain cases intervention on the supply side, building a tram line, removing a traffic lane or widening a pavement, form part of the arsenal of effective means. For this reason we can further refine strategic objectives by identifying interventions realisable both on the supply side (networks, vehicles, fuel) and the demand side (traffic requirements) which are professionally acceptable and at the same time exert their effect in the direction of the objectives laid down.

To reduce the volume of transport by con solutions to	
To reduce motorised traffic by favourir	ng non-motorised transport options
Favouring public transport, and in certa	in cases restricting private transport
Favouring environment-friendly transpo modes that greatly pollu	
Placing transport issues of local connect long-distance	
Favouring destination traffic as opp	osed to through (transit) traffic
Structural correction of the transport network layered str	6
Technological development to permanent	tly reduce emissions in the long term

Table 2. Environment-friendly, demand-reducing strategic transport objectives

At the end of the thought process regarding transport developments and transport policy, we return once more to the quotation "*The question's not what to do, but the wherewithal to do it*". This statement is still not true. As regards the first half, hopefully we have come a little closer to knowing what we need to do – but this is very different from what the author of the quotation thought should be unambiguously done. In respect of the second half of the quotation, what *we* believe needs to be done, although not cheap, costs far less than the supply-increasing developments which strengthen the obsolete structure and involve much construction, yet do not provide a solution while adversely affecting the environment. Such developments that constantly increase traffic force further developments to be made and obstruct the improvement of transport conditions.

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TRAFFIC – THE MAIN OBSTACLE TO TRANSPORT

Tamás Fleischer

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