

NATIONAL REPORT 2005

I Network

The total length of motorways and expressways network of Croatia at the end of the year 2005 is 1020,5 km out of which 20,8 km are not tolled (Zagreb bypass).

In 2005 several new sections of motorways and semi motorways in Croatia were opened for traffic of a total length of 93,3 km as follows:

On the A1 motorway : Zagreb-Split-Dubrovnik construction was finished on four sections which were opened to traffic: Tunnel Mala Kapela (5,76 km), bridge over Krka river on the section Skradin-Šibenik (0,4 km), section Pirovac-Skradin (10 km), section Skradin-Šibenik (9 km), section Šibenik-Vrpolje (14 km).

On the A2 motorway Zagreb-Macelj was opened to traffic the section Velka Ves-Krapina interchange (1,4 km).

On the A7 motorway Rupa-Rijeka-Žuta Lokva the section from interchange Jurdani to the Slovenian border (11 km) was opened to traffic.

On the A9 semi motorway Istrian Y- Kaštel – Pula the section from Medaki interchange to Umag interchange of total length of 41,7 km was opened to traffic.

Motorways in Croatia are operated by 4 companies: Hrvatske autoceste d.o.o. (operates all motorways with toll save for those in concession) and three concessionary companies BINA- ISTRRA d.d. Pula (operates Istrian epsilon), Autocesta Rijeka-Zagreb d.d. (operates Rijeka-Zagreb motorway) and Autocesta Zagreb-Macelj d.o.o (operates Zagreb-Macelj motorway).

II Sections under construction

As of December 31, 2005 the construction was under way on totally 84,10 km of motorways and 13 km of semi motorways and the duelling

of existing sections to full profile motorway was carried out on 19 km as follows:

A1 Motorway : Zagreb – Split - Dubrovnik Sector Split-Ploče (96 km, out of which 36,9 km under construction)

section Dugopolje-Bisko (11,8 km)

section Bisko-Šestanovac (25,1 km)

A2 Motorway : Zagreb-Macelj (17,2 km under construction and 7,4 km duelling of the existing section)

Section Krapina-Macelj (17,2 km)

Section Jankomir-Zaprešić (7,4 km), duelling of the existing section already in service

A3 Motorway : Bregana-Zagreb-Lipovac (30 km under construction)

Section Županja-Lipovac (30 km)

A6 Motorway : Zagreb-Rijeka (11,6 km duelling of the existing section)

Part of section Kupjak-Vrbovsko – tunnel Čardak area (3,0 km)

Part of section Vrbovsko-Bosiljevo – area from Zečeve Drage viaduct to Severinske Drage viaduct (8,6 km)

A7 Motorway : Rupa-Rijeka

Rest area Rupa

Control and maintenance center Rupa

A8 and A9 semi motorway: Istrian Y (13 km under construction)

section Vodnjan-Pula (13 km)

In 2006 the total number of 30 km of new motorways and 13 km of semi motorways will be opened to traffic, as well as 10,4 km of existing sections that will be built to full motorway standard :

- On the Bregana – Zagreb – Lipovac motorway, section Županja-Lipovac (30 km),

- On the Zagreb-Rijeka motorway, section Kupjak-Vrbovsko, tunnel Čardak area (3 km), duelling of the existing section in service as semi motorway

- in kilometers

	Company	2004 total	2004 not tolled	2005 total	2005 not tolled
1.	HAC d.o.o.	652,7	82	702,3	20,8
2.	ARZ d.d.	146,5		146,5	-
3.	BINA-ISTRA d.d.	88,6		130,1	-
4.	AZM d.d.	41	7,4	41,6	-
TOTAL		928,8	89,4	1020,5	20,8

- On the Istrian Y semi-motorway (13 km)
 - On the Zagreb-Macelj motorway the section Jankomir-Zaprešić (7,4 km), duelling of the existing section in service as semi motorway

In 2006, in addition to continuation of the works started already in 2005, the construction will start on new 105,7 km of motorways and 44,3 km of existing semi motorways shall be built to full motorway standard as follows:

A1 Motorway : Zagreb – Split - Dubrovnik
 Sector Split-Ploče (96 km, construction of new 40,3 km)
 section Šestanovac-Zagvozd (13,4 km)
 section Zagvozd-Račva (26,9 km)

A3 Motorway : Bregana-Zagreb-Lipovac
 Interchanges Kosnica, Rugvica and Križ

A4 Motorway : Goričan-Zagreb

Section from Hungarian border to Goričan (1,6 km)
 A4 Motorway : Beli Manastir-Osijek-Svilaj-Bosnia and Herzegovina (88,9 km, construction of new 54,3 km)

Section Đakovo-Sredanci (21,8 km)
 Section Osijek-Đakovo (32,5 km)

A6 Motorway : Zagreb-Rijeka (44,3 km duelling of the existing sections)

section Kikovica –Oštrovica (7,4 km)
 section Oštrovica-Vrata (12,5 km)
 section Vrata-Delnice (8,9 km)
 section Delnice-Kupjak (7,9 km)
 section Kupjak-Vrbovsko (7,6 km)

A11 Motorway : Zagreb-Sisak (47,5 km, construction of new 9,5 km)

Section Jakuševac-Velika Gorica south (9,5 km)

III Financing and Investment

- mln kn (mil EUR) (1 EUR = 7,6 kuna)

Company	2005.		Programm 2006	
	in new sections	in existing sections (enlargement, equipment etc)	in new sections	in existing sections (enlargement, equipment etc)
HAC	2.740,73 (360,62)	920,44 (121,11)	313,43 (41,79)	2.361,80 (314,91)
ARZ	89,68 (11,8)	41,56 (5,46)	972,93 (128,0)	189,72 (24,9)
BINA ISTRA	273,9 (36,5)	14,6 (1,96)	270,7 (36,1)	9,9 (1,32)
AZM	1.084,82 (142,74)	*	887,1 (118,28)	*
TOTAL	4.189,13 (551,20)	976,60 (128,5)	2.444,16 (321,6)	2.561,42 (337,02)

*agreements for constructing the Zagreb-Macelj motorway are lump sum agreements which do not separate financing of construction of new sections from the building of the existing section to the full motorway standard

In 2005 the total amount invested in construction of new motorway sections was 4.189,13 million kuna (551,20 mil EUR), and the amount invested in the motorway sections already in service was 976,60 million kuna (128,5 mil EUR).

financed with loans and toll revenues and in addition to these sources Hrvatske autoceste d.o.o. financed the motorway construction with revenues from fuel tax (0,60 HRK per liter).

IV Traffic

Motorway construction in 2005 was mainly

Number of vehicles in toll areas

Company	2004.		2005.			
	Light vehicles (1st and 2nd category)	Heavy vehicles (3rd and 4th category)	Light vehicles (1st and 2nd category)	% (05/04)	Heavy vehicles (3rd and 4th category)	% (05/04)
HAC	24.647.049	3.196.587	25.235.660	+2,46***	3.817.003	+19,41***
ARZ	10.198.543	1.565.562	10.320.894	+1,20	1.525.395	-2,57*
BINA ISTRA	2.324.893	337.154	3.375.597	+45,19**	373.001	+10,63**
AZM	4.198.455	-	4.442.852	+ 5,82	552.820	-
TOTAL	41.368.930	5.099.303	43.375.003	+4,89	6.268.219	+12,08

*Before the installing of the entirely closed system on the Rijeka-Zagreb motorway in 2004 and the opening to traffic of the new sections on Zagreb-Split motorway all the traffic was counted at several entrances and exits of the Rijeka-Zagreb motorway. By opening to traffic of the new sections of the Zagreb-Split motorway in summer 2004 such practice was abandoned. This explains the decrease of traffic whilst the revenues increased.

** A significant increase in traffic is due to opening for traffic of the whole new section of Istrian Y – i.e. Umag-Kanfanar (the data are cumulative for tunnel Ucka toll plaza and Mirna toll plaza)

*** In the course of 2005 HAC opened to traffic 3 new sections and certain exits changed their type. The increase in 2005 is not comparable with 2004 because the number of sections under toll is different. Only the 2006 will allow us to make comparison.

Note: the data do not comprise the number of vehicles that travelled the motorways free of charge.

Compared to the previous year the total traffic volume on motorways in 2005 increased by 5,6 %.

GDP growth in 2004	Traffic growth in 2004	GDP growth in 2005	Traffic growth in 2005
3,8 %	10,2 %	4,0 %	5,6 %

In 2004 the total motorway network was increased by 193 km i.e. by 26,5 % in comparison to the previous year and in 2005. the network was increased by 92 km i.e. by 9,9 %

V Toll rates

Considering the fact that the completion of the motorway network in Croatia is still not finished, open and closed toll systems are used on constructed sections of motorways. However, once the network will be completed, closed toll system with several entrances and exits shall be applied on all motorways.

The toll rate (VAT excluded) for light vehicles - passenger cars (I vehicle category) in closed toll system is 0,33 HRK/km (0,043 EUR/km), and in open toll system it is 0,29 HRK/km (0,038 EUR/km). The toll rate ratio between the I and the IV vehicle category is 1:4.

In 2005 HAC did not increase tolls on its network but only introduced tolls on new sections (48,6 km opened to traffic in 2005). In 2005 a prepaid smart card payment with 10% discount was

launched as well as winter toll tariff with 23,5 % discount for prepaid smart cards.

In January 2005 BINA ISTRRA increased the tariffs on its network by 3,7% in comparison with the year 2004. After the opening to traffic of the whole new section Umah-Kanfanar in June new toll plaza is in service on the Mirna viaduct. Tolling system is open. Prepaid discount of 40% was introduced for the IV category of vehicles.

In 2005 there was no increase of toll rates on Rijeka-Zagreb motorway. Prepaid smart cards were introduced with 10% discount and prepaid smart cards with 23,5% discount in winter season.

Zagreb-Macelj motorway did not increase toll rates in 2004. The toll system is opened.

VI Toll revenues (VAT excluded)

1 EUR = 7,6 kuna

Company		2004		2005		% (05/04)
		kn	EUR	kn	EUR	
1.	HAC	774.591.367	101.919.168	974.835.682	129.978.091	+25,85
2.	ARZ	296.887.712	39.064.172	340.086.598	44.748.236	+14,55
3.	BINA-ISTRRA	85.551.000	11.256.710	106.842.582	14.245.678	+24,89
4.	AZM	61.018.007	8.028.685	68.887.470	9.184.996	+12,90
TOTAL		1.218.048.086	160.268.732	1.490.652.332	198.157.001	+23,64

In 2005 total toll revenues increased by 23,64% compared with the preceding year.

This is result of increase in traffic volume, opening to traffic of new motorway sections

and the slight adjustment of toll tariffs on some motorways in Croatia.

VII Safety

Number of accidents	2004					2005				
	HAC	BINA ISTRRA	ARZ	AZM	RH	HAC	BINA ISTRRA	ARZ	AZM	RH
- deaths	28	3	8	1	40	26	9	7	2	44
- with injuries	218	20	73	4	315	296	26	86	3	411
- with material damage	1136	99	489	36	1760	1492	112	362	104	2070
TOTAL number of accidents	1382	122	570	41	2115	1814	147	453	109	2525
TOTAL number of deaths in all accidents	32	3	8	1	44	29	13	7	3	52

On all motorways in Croatia 2525 traffic accidents occurred in 2005 out of which 52 accidents were with dead people and 411 accidents with injured people.

In comparison with the previous year the number of accidents increased by 19,4 % and the motorway network increased in the same period by 9,9 %.

VIII Medium and Long Term Forecasts and Tendencies

In accordance with the Transport Development Strategy of the Republic of Croatia, which was adopted by the Croatian Parliament, Croatia should have the total network of 1.365 km by the year 2013.

Due to technical and transport characteristics of motorways and motorway facilities with toll and due to particularities of their financial management a specific organisational structure has been established in order to operate such facilities. Beside ensuring the continuity of maintenance of the existing motorways and facilities, as well as continuation of construction already undertaken, in the future period are planned an intensive improvement of regular maintenance organisation, automatisa-

tion of toll collection and providing of high quality services area.

The organisation structure of motorway management

The Government of the Republic of Croatia entrusted the management of motorways to the following legal entities:

- Hrvatske ceste d.o.o. – Croatian Roads (HC) – in charge of operation of the state roads and co-ordination with local and county roads in preparation of documentation for motorway construction up to location permit procedure;
- Hrvatske autoceste d.o.o. – Croatian motorways (HAC) – in charge of operation, construction and maintenance of motorways and other toll motorway facilities;
- Concessionary companies for construction and operation of motorways and motorway facilities:
 Autocesta Rijeka-Zagreb d.d. (ARZ)
 Autocesta Zagreb-Macelj d.o.o. (AZM)
 Bina-Istra d.d. (BI)
- County Roads Authorities - Županijske uprave za ceste (ŽUC) – in charge of operation of local and county road network

PROGRAMM OF CONSTRUCTION, MAINTENANCE AND OPERATION OF PUBLIC ROADS FOR THE PERIOD FROM 2005 TO 2008

- in mil EUR

N.	Description of investment	Legal entity	in charge of	operation of	public roads	TOTAL 2005-2008
		HAC	HC	ŽUC	Concessionary company	
0	1	2	3	4	5	6(2+3+4+5)
1	CONSTRUCTION OF PUBLIC ROADS	1.497,2	613,3	122,4	361,3	2.594,2
1.1	MAINTENANCE OF PUBLIC ROADS	371,5	594,7	337,6	136,6	1.440,4
1.2	TOTAL 1.-2.	1.868,7	1.208,0	460,0	497,9	4.034,6

The above table shows that 1.858,50 mil EUR are planned to be invested in construction of motorways (column 2+5) and 508,10 mil EUR in maintenance of motorways (column 2+5) in the period from 2005-2008.

HAC d.o.o.

In the above mentioned period it is planned by the program of the HAC company to open to traffic 209 km of motorways. Out of this 209 km, 142,6 km are already under construction and while the construction of the remaining 66,4 km shall start and be completed during this period.

At the end of the period of this Program regular maintenance of 927 km of motorways is planned to be carried out.

Bina-Istra d.d.

The Concession agreement provides for implementation of the Istrian epsilon project in II phases. In the first phase the project shall be built as semi-motorway, but all road facilities shall already be built in full motorway profile. From the signing of the concession agreement by now 130,1 km of semi motorway are in service.

By December 2006 the last section Vodnjan-Pula (13 km) is planned to be opened to traffic.

Autocesta Rijeka-Zagreb d.d.

The total length of the Rijeka-Zagreb motorway project is 146,5 km, out of which 90,93 km are built as full motorway. The remaining 55,57 km are built as semi-motorway with additional lane for slow vehicles on slopes, in places where it is necessary.

Pursuant to the Resolution of the Government of the Republic of Croatia the Concessionaire has been given the approval to start the construction of the phase II of the Rijeka-Zagreb motorway, i.e. the doubling of the remaining section Bosiljevo- Viaduct Stara Sušica.

During the continuation of construction the

focus shall be on the construction of the remaining sections, together with Tunnel Tuhobić, which is the longest motorway facility of the II Phase of construction. The completion of this tunnel would also mean the completion of the entire project of the Rijeka-Zagreb motorway in full profile.

Construction is under way already on 11,6 km out of which 3 km shall be opened to traffic in 2006 and construction of remaining 44,3 km shall be undertaken.

Zagreb-Macelj d.o.o.

In accordance with the Concession agreement the Concessionaire undertakes to build the section from Krapina to Macelj (17,2 km) and also to double the existing section Jankomir-Zaprešić (7,4 km) up to full motorway profile.

The construction of Zagreb-Macelj motorway shall be entirely completed by 2007, when will be finished the construction of Krapina-Macelj section of a total length of 17,2 km.

IX Significant actions already started (and or achieved in 2005) and foreseen for 2006

In 2005 AZM had started to set up a closed toll system on the section Zaprešić – Krapina and completed it in February 2006. The system accepts smart cards, which will be in commercial use starting from April 2006. In accordance with the Resolution of the Government of the Republic of Croatia a significant discount shall be applied for the residents living in the Zabok-Krapina area.

Toll lanes are automatic and manual. On the automatic toll barriers cash payment is not available and once the customers get used to such way of passage the traffic on toll plazas will be significantly speeded up. In parallel the road signing has been modernised and Krapina Centre for maintenance and traffic control was put in operation. This centre is equipped with a modern traffic management and control system, SOS system, meteorological system and automatic variable signing. In 2007 AZM

plan to complete the section Krapina – Macelj, which will have the state-of-the-art equipment.

BINA –ISTRA d.d.

In the course of 2005 the main activities were related to computerization of toll system in order to achieve better traffic flow. Therefore in the course of June 2005, when the new section of Istrian Y together with Mirna toll station was opened to traffic, at the same time the upgraded toll system at the Učka tunnel was put in operation. One of the main objectives of the company is improvement of road safety. For that purpose was prepared a safety study in compliance with Directives of the EC. In addition to tunnel safety certain actions regarding the road safety are also planned in 2006 in terms of technical improvements and in terms of public campaigns.

HAC plan for the year 2006 to focus on electronic toll, tariff's liberalisation and protection of environment.

ARZ

In the course of 2005 company Autocesta Rijeka – Zagreb focused its activities on upgrading of the existing sections to full motorway profile (11,6 km).

In addition to these investment activities the Company also dealt with improvement of

quality of services. In that respect in spring 2005 the Lučko toll station was extended for 2 additional lanes and in summer 2005 for 3 additional lanes.

In addition to smart cards with 10% discount, which are in use since 2003 on ARZ and HAC motorways, in 2005 were launched also winter toll tariffs with 23,5 % discount for prepaid smart cards.

The activities planned for 2006 are mainly related to contracting and than building of the phase II B i.e. construction of the existing sections to full motorway profile (from Kikovica to viaduct Stara Sušica) of the total length of 44,26 km.

Besides the construction, the Company will focus its activities to achieving the interoperability of contactless toll payment, mainly with HAC company. EFC interoperability is the only segment of toll collection that is not yet reached between these two companies.

At the beginning of 2006 the Company launched the Project of implementation of environmental management system in accordance with the norme ISO 14001:2004 in order to protect the environment efficiently by respecting the regulations and by defining the important aspects and impacts of the activities of our company to the environment.

MAIN KEY FIGURES – 2005

COUNTRY : CROATIA	2005
Total motorway network length, km	1020,5
1x 2 lanes	192
2 x 2 lanes	695,3
2 x 3 lanes	133,2
2 x 4 lanes	0
No. of km under construction - January 1, 2006	116,4
Forecasts of opening motorway sections – 2006	43,0 10,4 (full profil construction)
Annual toll revenue in 2005, in EUR	198.157.001
Permanent staff	3214
Average daily traffic LV	14.080
Average daily traffic HV	1.945
Average daily traffic LV + HV	16.025
Total number of accidents	2525
Number of accidents with injured	411
Number of dead	52
Km traveled (10 ⁶ x km)	3.891.800.626
Number of toll plazas	68
Number of lanes	321
Number of tele-toll equipped lanes	123*
Number of tele-toll subscribers	22.200 **
Number of rest areas (with stations services)	55
Number of rest areas	87
Number of restaurants	16
Number of hotels	7

** EFC lanes are not yet in commercial use

* SMART card subscribers