

**ESTONIAN ROAD
ADMINISTRATION**

2006

ANNUAL REPORT

ESTONIAN MAIN AND BASIC ROADS



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Dear reader!

The copy of 'Annual Report 2006' you're holding gives you an overview of the activities on the national roads of Estonia in 2006.

The material is meant for both the 'road builders' and other readers closely or more generally involved in national road maintenance issues.

The report provides interesting information about the Road Administration and the Road Offices, road network, road pavement situation, funds allocated for the road management – both the funds earmarked for road management in the state budget and the European Union assistance, and the utilisation of these resources. It will also paint a picture of the traffic situation – the intensity, the safety, the level of motorisation. As a new item, we have included the monitoring of wild animals as an environmental protection activity, in the course of which we have introduced animal tunnels over the past two years.

The principles of statistical analysis have been applied for the compilation of the chapters dealing with the road network, road pavement situation, traffic, traffic safety and in part, also the road maintenance issues.

In short, it can be said that by many indicators, 2006 remained on the level achieved in 2005, and this is good reason for being glad. But traffic safety, which showed no tendency of improving, still remains a separate issue. So if you are interested, please have a look at the following pages.

Enjoy your reading!

Yours respectfully

Riho Sõrmus
Director General of the Estonian Road Administration

A handwritten signature in black ink, appearing to be 'Riho Sõrmus'.

Estonian Road Administration (ERA) is a government agency, which operates within the administrative area of the Ministry of Economic Affairs and Communications.

The area of activity of the ERA includes fulfilling the management and national supervision function within the scope of the duties prescribed by law, and applying enforcement powers of the state in the area of road management and traffic safety on the grounds and in the extent established by legislation.

The objective of the ERA's activities is to implement the state economic policy in the area of national road management and traffic safety.

ERA's mission:

WE SHALL CONNECT THE ESTONIAN PEOPLE WITH AN UP-TO-DATE ROAD NETWORK

ERA's vision:

TO PAVE ESTONIA'S ROAD TO DEVELOPMENT

The main functions of the Estonian Road Administration are:

- ◆ organising road management and creating conditions for safe traffic on the roads in the state ownership;
- ◆ exercising state supervision over the compliance with the requirements established by legislation regulating the ERA's area of activity and, where necessary, applying enforcement powers of the state;
- ◆ participating in the development of the legislation regulating the ERA's area of activity and making recommendations for amending and supplementing legislation, including improving Estonian terminology;
- ◆ participating in the development of policies, strategies, and development plans in the ERA's area of activity; preparing and implementing projects in the ERA's area of activity, including participating in the preparation and implementation of international projects.

Estonian Road Administration

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Road Administration agencies

Estonian Road Administration administrates the following state agencies:

- ◆ the Road Administration of Northern Region;

Offices under the administration of the Road Administration:

- ◆ Kagu Road Office;
- ◆ Pärnu Road Office;
- ◆ Saarte Road Office;
- ◆ Tartu Road Office;
- ◆ Viru Road Office

The main functions of the road offices include:

- ◆ organisation of supervision over the management of national roads and creation of the conditions required for safe traffic.
- ◆ road management of national roads on the basis of the road management plan and the approved budget;
- ◆ administration of national roads and other state property transferred into the possession of the road office;
- ◆ creation of conditions required for safe traffic on national roads;
- ◆ organisation of supervision over the management of national roads and creation of the conditions required for safe traffic.

The Road Administration of Northern Region has divisions in all the three counties comprising its area of activity while road offices operate in the counties where an operator performs road maintenance. The Road Administration of Northern Region and road offices and divisions in their respective counties issue permits, consents and approvals, perform owner surveillance on maintenance works and road management works not requiring a plan, submit proposals for preparing road management plans, organise and coordinate activities related to traffic control and traffic safety on nation-

The Road Administration of Northern Region is a local institution of the Road Administration. The area of activity of the Road Administration of Northern Region includes fulfilling the management and national supervision function within the scope of the duties prescribed by law, and applying enforcement powers of the state in the area of road management and traffic safety on the grounds and in the extent established by legislation in Harju, Järva and Rapla counties. The Road Administration of Northern Region does not perform maintenance works, but acts as the contracting authority for such works.

Road offices operate as state agencies under the administration of the Estonian Road Administration on the territory of the counties in their respective regions of activity. Road offices contract for road maintenance works, conduct maintenance in their respective areas of location and may perform any other works stated in their statutes.



al roads, counsel the management of local roads and streets and private roads.

In addition to the above, the Kagu Road Office includes a Road Museum operating in the former Varbuse Post Station by the historic Tartu-Võru post road in Põlvamaa.

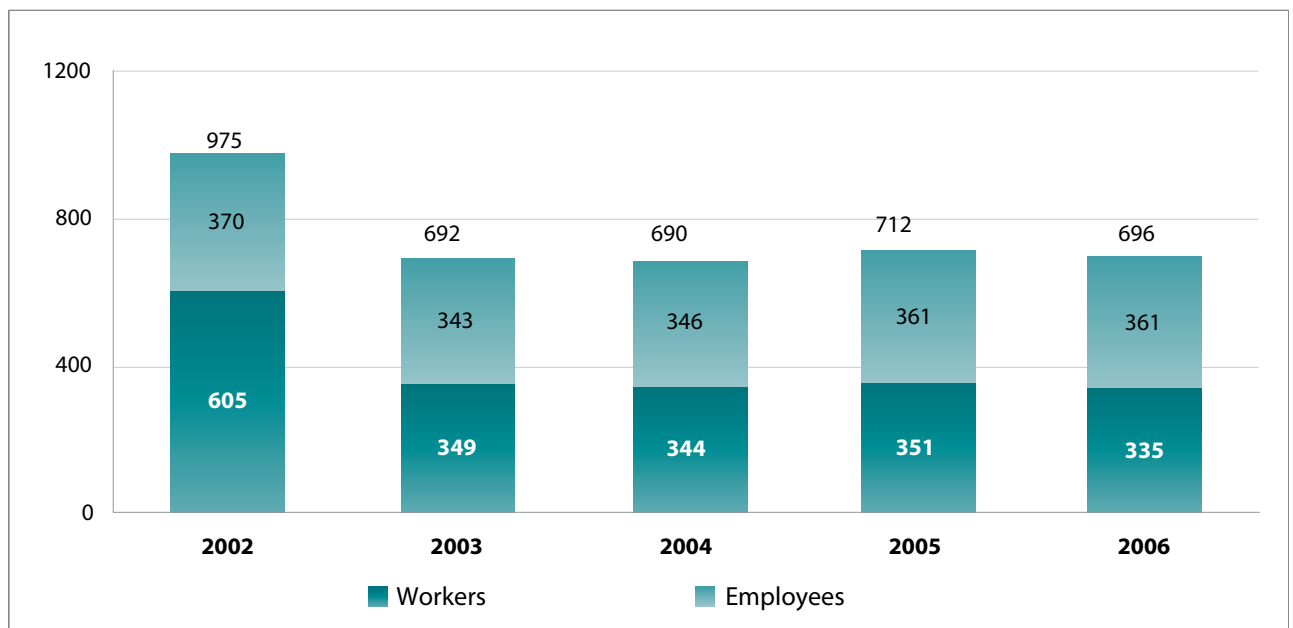
Personnel

As a result of the road management organisation reform launched in 2000 with the aim to separate the functions of a contracting authority and the contractor and to involve more private undertakings in road management, the number of the personnel of the agencies under the administration of the Estonian Road Administration has continuously decreased, reaching its lowest point by the end of 2004, when the reform was practically completed (a decrease by 60%).

In 2005-2006, the number of employees in the Estonian Road Administration grew, due to an increase in the work volume and additional tasks arising from the procedures required for the implementation of the European Union Structural Funds, while the number of employees in local agencies decreased proportionally. The total number of employees in the Road Administration and the administrated agencies stayed the same as in 2005. The decrease took place on account of workers, as the proportion of private undertakings continues to grow also in construction and repair works. At the end of the year, the total number of personnel in the Road Administration and the administrated agencies was 696 (including 96 employees in the ERA, 44 in the Road Administration of Northern Region and 556 in the road offices), of whom 335 (48.1%) were workers, 342 (49.1%) managers and specialists and 19 (2.8%) office clerks and support staff.

Of the managers and specialists 90 (26.3%) are licensed as road and civil engineers, 39 (11.4%) as road and civil technicians, and 123 (36.0%) as licensed specialists of other professions, while 90 individuals (26.3%) have completed no specialised professional training.

NUMBER OF PERSONNEL IN 2002 - 2006



Foreign relations



After Estonia's accession to the European Union in May 2004, the Estonian Road Administration was accepted as a member of the Conference of European Directors of Roads (CEDR), which expanded the opportunities to better study and apply EU legislation. In December 2006, the ERA organised a meeting of the executive committee of assistant general directors of the CEDR in Tallinn.

In connection with opportunities for using the funding from the EU Structural Funds the foreign assistance co-ordination staff of the Estonian Road Administration has participated in the relevant EU training programmes. In order to gain experience, employees have also visited road objects financed from foreign assistance funds in other Member States.

The ERA is a member of the International Road Federation (IRF), the World Road Association (PIARC), and the Baltic Road Association (BRA).

The ERA is an active partner in PIARC, working in various technical committees: TC 3.4 (winter road maintenance), TC 4.1 (database of roads) and TC 4.3 (road pavements) and is participating actively in HDM-4 (a programme for performing profitability calculations) related cooperation. The ERA has joined the World Interchange Network (WIN), which has been created by PIARC for the exchange and dissemination of speciality information through enquiries. As the representative of the Estonian state, the ERA took part in PIARC's annual meeting in Madrid, Spain.

In 2003-2006, the Estonian Road Administration acted as the Chairing Country of the Baltic Road Association, organising its scheduled events and the regular meetings of the Council (Board) of the BRA. Before handing the chair over to Latvia, the ERA organised the XXVI International Baltic Road Conference, which was held on 28-30 August 2006 in Kuressaare, Saaremaa, in the new Kuressaare Sports Centre completed in 2005. The conference drew 849 participants, including 539 official delegates from 20 countries, and included a road technology exhibition with 73 exponents (23 from Estonia). The conference also included a seminar held in Orissaare, addressing the permanent connection with Saaremaa, and technical excursions to visit the road network and construction objects of Saaremaa and Hiiumaa. The 95 presentations (49 from the Baltic States) made at the conference are available for viewing on the homepage of the Baltic Road Association at [\[ads.eu\]\(http://www.mnt.ee\) or the homepage of the Estonian Road Administration at <http://www.mnt.ee>. The Baltic Road Association together with the universities of technology of Estonia, Latvia and Lithuania launched a scientific-technical road management journal "The Baltic Journal of Road and Bridge Engineering", which is published regularly four times a year since 1 January 2006.](http://www.balticro-</p></div><div data-bbox=)

The ERA continued cooperating with the programme "Partners for Roads" initiated by The Netherlands with the aim to provide further training and opportunities to develop scientific-technical knowledge to the road specialists of the new EU Member States. The Dutch Government has decided that the cooperation programme with all the EU Member States that joined the EU in 2004 and 2007 will last until 2010.

Since 2000, Estonia is a member of the Standing European Road Weather Commission (SIRWEC). This cooperation continued in 2001-2006.

The contacts with Nordic road specialists in the field of scientific and technical issues, training, etc. based on the Memorandum of Understanding between the Baltic (BRA) and the Nordic (NRA) road associations continue, including contacts with the road administrations of Denmark, Norway, Sweden and Finland within the framework of direct cooperation agreements. Cooperation project NORDBALT between the BRA and the NRA included a joint seminar "The Organisation of Customer Orientated Road Transport" held in Helsinki in 2006. The joint meeting of the Boards of the NRA and the BRA was also held in Estonia, during the BRA conference in August 2006.

The Swedish and Finnish road administrations have helped train the personnel of the road weather station network. As a joint project between Finland, Estonia, Latvia, Lithuania and Russia, real-time road information is forwarded on the Internet.

The Estonian Road Administration represents Estonia in the international projects related to the Pan-European Transport Corridor 1. The integration of major Estonian roads into the network of European roads continued; the UN European Economic Commission included the Tallinn-Tartu-Luhamaa Road in the common European network of E-roads under number E263 and assigned the Jõhvi-Tartu-Valga-Valka-Valmiera-Incukalns Road the number E264 for its inclusion in the network of E-roads in December 2007.

Roads

The total length of national roads as at 01.01.2006 was 16,479 kilometres i.e. 29.0% of the total length of the Estonian road network, which is 57,025 kilometres.

The length of E-roads in Estonia is 715.494 km. The total length of the national roads increased by 9.1 kilometres, of which the length of main roads increased by 0.1 km. The length of basic roads increased by 5.7 kilometres, of which 5.3 kilometres is made up by new basic roads: No 94, Muuga Port Road, and No 95, Kõrveküla-Tartu Road. The length of secondary roads increased by 2.8 kilometres and the

length of ramps and connecting roads by 0.5 kilometres.

Of the national roads, 1,601 km (9.7%) are main roads, 2,391 km (14.5%) basic roads, 12,441 km (75.5%) secondary roads and 46 km (0.3%) ramps and connecting roads included in junctions.

The length of paved roads increased by 340 km from last year and is currently 9,368 km, i.e. 56.8% of the total length of the national roads. The majority of this increase was on account of paving gravel roads. The inclusion of roads on the list of national roads and the specification of paved locations has to a small degree also contributed to the increase in the total length of paved roads.

The density of national roads is 381 km per 1,000 km² and the density of all registered roads is 1,318 km per 1,000 km².

Road Network

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There are 918 bridges on national roads with the total length of 20,893 m, including 3 wooden bridges with the total length of 37 m.

According to the amendments made to the Roads Act, a national road register has been established on the basis of the Register of National Roads, providing information on both the national roads and other public roads. The national road register was established and its statutes endorsed with Regulation No 199 of the Government of the Republic of July 28, 2005.

The national road register is a web-based database, administered and processed under the authorisation of the Estonian Road Administration. The development of the database was started in 2003 and the respective software has

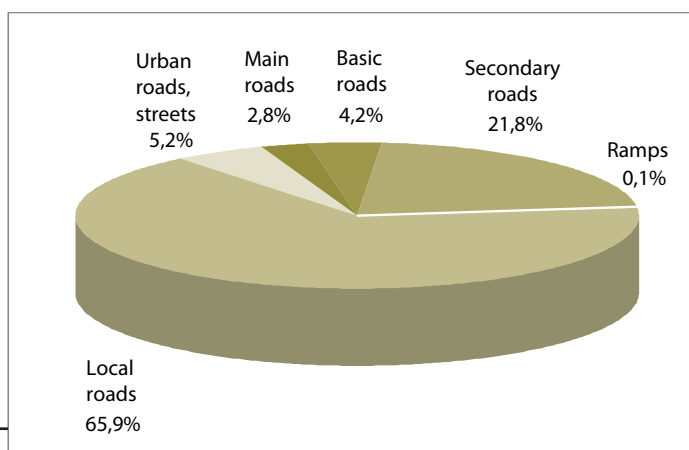
been upgraded in 2004-2006 to encompass the entire local road network as well as any other roads in the future.

As of January 1, 2007 the basic data on both the national and local roads has been entered in the new web-based road register. In cooperation with the Land Cadastre a map interface for the visualisation of the road register information is being used for the depiction of national roads.

The work to officially register land into the state ownership was also continued, with 1,020 ha of road land in the extent of 515 km was left in state ownership in 2006. Since the land reform, the total of 28,778 ha, or 98.7% of all road land has been registered into state ownership.

ROAD NETWORK

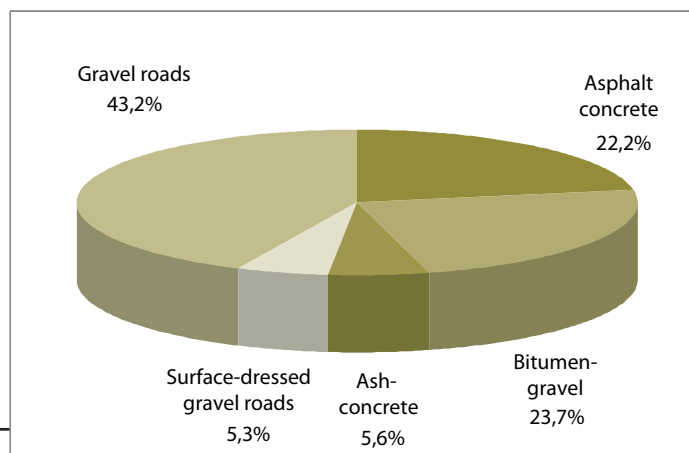
National roads	16 479 km
Main roads	1 601 km
Basic roads	2 391 km
Secondary roads	12 441 km
Ramps and connecting roads	46 km
Local and private roads	37 552 km
Urban roads and streets	2 994 km
Total:	57 025 km



Note: Local, private and other roads and streets as of 01.01.2007 according to the Statistical Office of Estonia

TYPES OF PAVEMENT ON NATIONAL ROADS

Asphalt concrete	3 661 km
Bitumen-gravel	3 906 km
Ash concrete	932 km
Surface-dressed gravel roads	869 km
Gravel roads	7 111 km
Total:	16 479 km

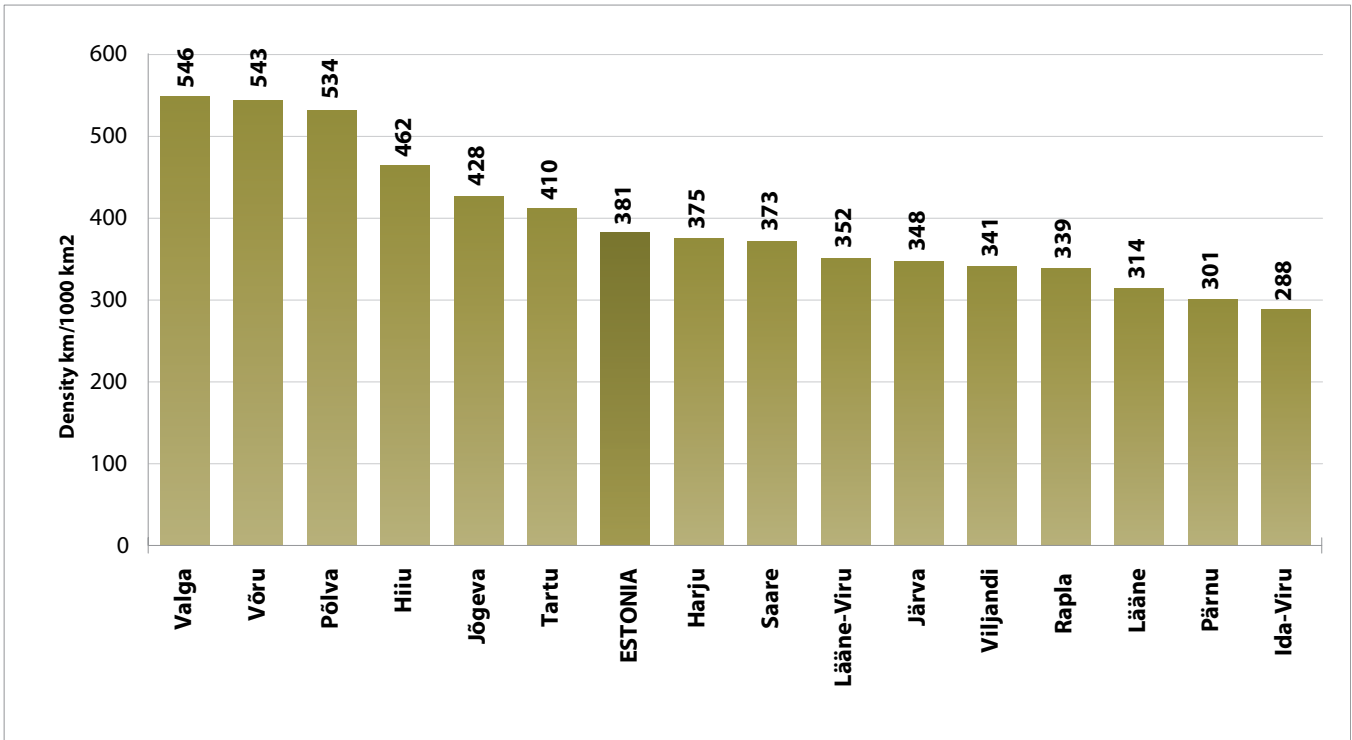


TYPES OF PAVEMENTS ON NATIONAL ROADS IN 2002-2006 (in km-s and percentage)

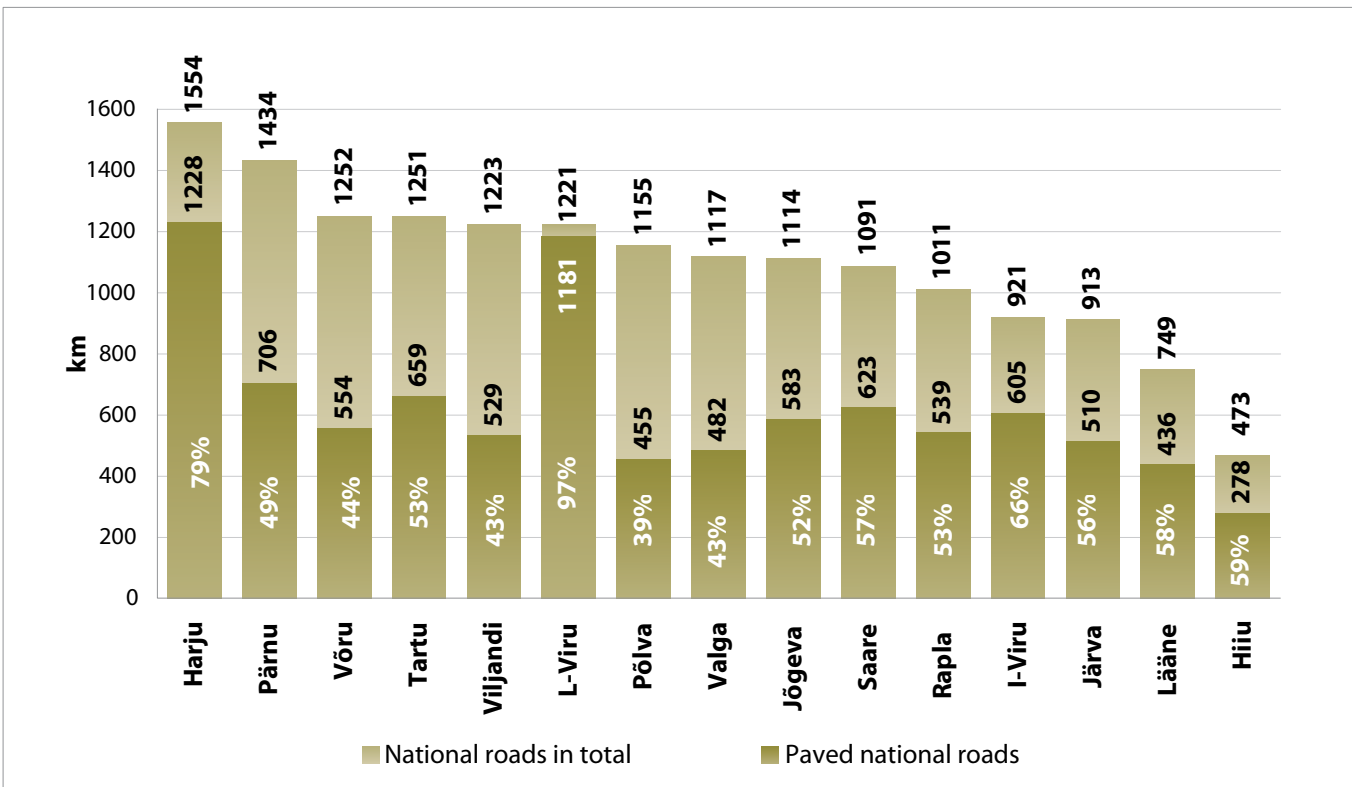
Year	2002		2003		2004		2005		2006	
	km	%	km	%	km	%	km	%	km	%
Asphalt concrete	3 302	20,1	3 354	20,4	3 382	20,5	3 482	21,1	3 661	22,2
Bitumen-gravel	3 995	24,3	3 971	24,1	3 962	24,1	3 957	24,0	3 906	23,7
Ash-concrete	927	5,6	927	5,6	927	5,6	926	5,6	932	5,7
Surface-dressed gravel roads	298	1,8	345	2,1	423	2,6	663	4,0	869	5,3
Paved roads in total	8 522	51,8	8 597	52,3	8 694	52,8	9 028	54,8	9 368	56,8
Gravel roads	7 921	48,2	7 855	47,7	7 765	47,2	7 442	45,2	7 111	43,2
TOTAL:	16 443	100,0	16 452	100,0	16 459	100,0	16 470	100,0	16 479	100,0



DENSITY OF NATIONAL ROADS BY COUNTIES IN 2006



SHARE OF PAVED NATIONAL ROADS BY COUNTIES IN 2006



Measurements of road surface evenness (IRI – International Roughness Index) and inventorying of defects on paved roads have been performed since 1995. Load bearing capacity has been measured since 1996 and rut depth since 2001. These four indicators of road surface condition mentioned above and in addition the traffic volume on the roads are the main indicators of PMS (Pavement Management System).

Data about the road surface condition are a part of the database of the National Road Register.

The development of PMS in Estonia started in 1997 and in 1998 a PMS group was established at the Estonian Road Administration, to deal with PMS analysis and take stock of defects on paved roads. Two analysis programmes (EPMS and HDM-4) are used in PMS analyses.

EPMS is a programme, which enables comparing and ranking the road sections or objects in need of repairs, proceeding from the indicators of road surface condition and the cost-effectiveness of the first year. HDM-4 is a programme used for performing profitability calculations at the strategic, programme and project levels.

Defect development diagrams indicate that the amount of defects is clearly dependent on the volumes of construction, repair and surface dressing works of pavements, i.e. the average amount of defects decreases as the volume of works increases. This decreasing tendency has been observed on all road types, but is more noticeable on main roads, where the traffic volume is considerably greater, but where the largest amount of funds has been directed to in the last years. The decrease has been significant also on secondary roads, where many new lightweight pavements have been constructed and the volumes of surface dress-

Condition of Road Surfaces and Bridges

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ing have grown, while the average traffic volume on these roads is low. The decrease is smallest on basic roads, which have a considerable traffic load, but not enough financial resources for repairs. Surface dressing is the main measure of reducing the amount of defects on basic roads.

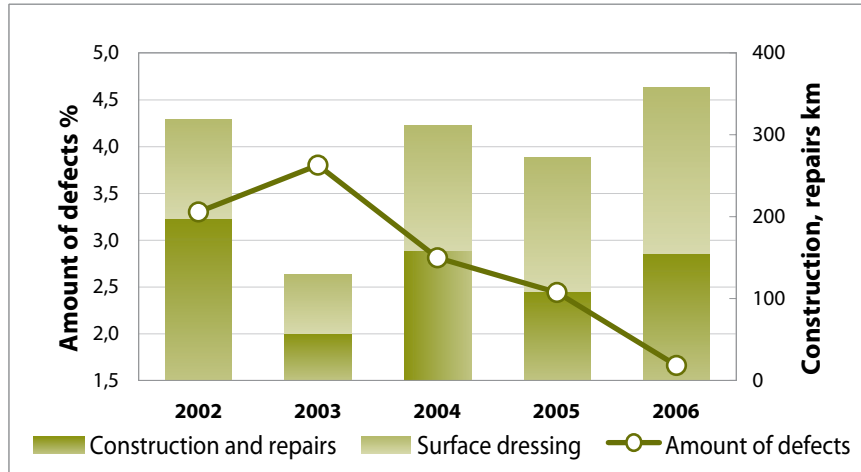
Upon studying the diagrams of changes in evenness, improvement can be observed on all road types, but still mainly on the main roads. There has been a slight deterioration in the whole network of paved national roads in earlier years, which indicates a scarcity of funds. The average IRI value of the road network has dropped slightly in 2005 and 2006 – this has been achieved through a certain increase in the funds allocated for the construction, repair and maintenance of pavements and rational planning of repair objects. However, the average level of evenness of basic roads and secondary roads is not satisfactory.

Estonia has worked on the practical implementation of the bridge network management system BMS since 2003, when the Technical Centre of Estonian Roads Ltd. performed the first inspections of bridges. As a result of positive feedback, 100 road bridges in the worst state of repair were inspected in Estonia in 2004. In 2005-2006 systematic bridge inspections were performed and the total of 657 bridges inspected by the end of 2006. The main objective of BMS is to obtain a detailed overview of the bridges in need of repair, to assess the general needs for repairs, to prepare a priority list of the repair objects, to plan the expenditures for repairs, etc. The work continues and the aim is to bring the data on all the bridges under the administration of the Estonian Road Administration into compliance with the requirements of BMS by the end of 2007.

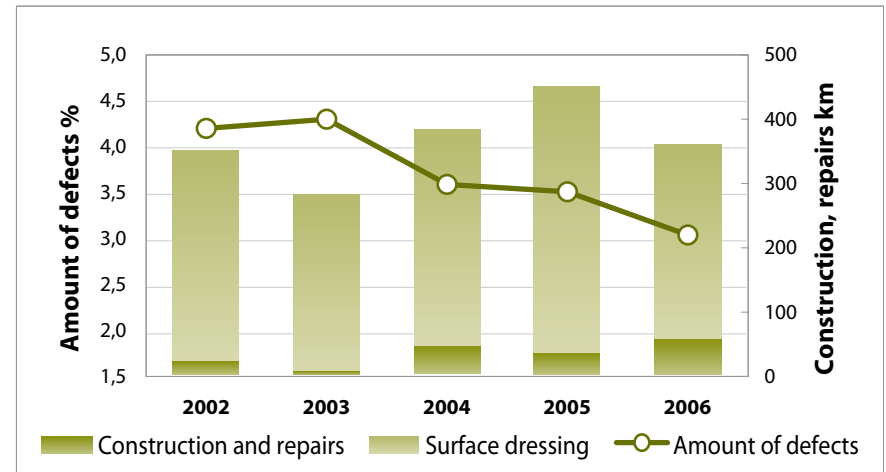


**CONSTRUCTION, REPAIRS AND SURFACE DRESSING OF PAVEMENTS CARRIED OUT IN 2002-2006
AND THE CHANGE OF THE AMOUNT OF DEFECTS PROCEEDING FROM THIS**

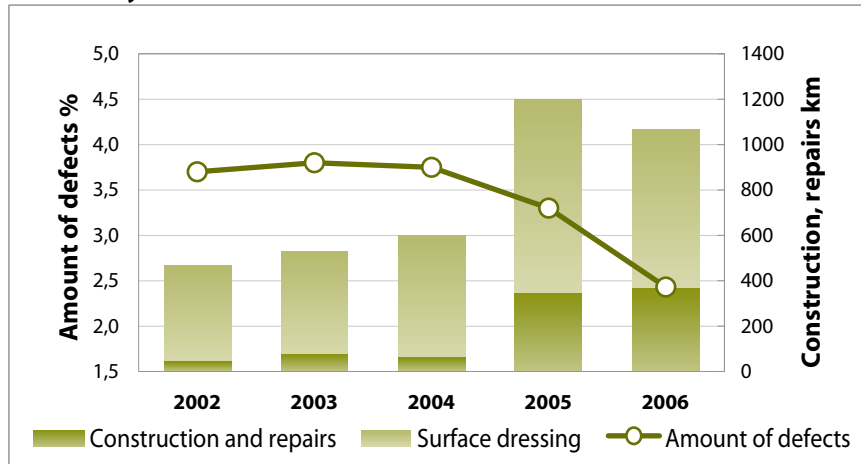
Main roads



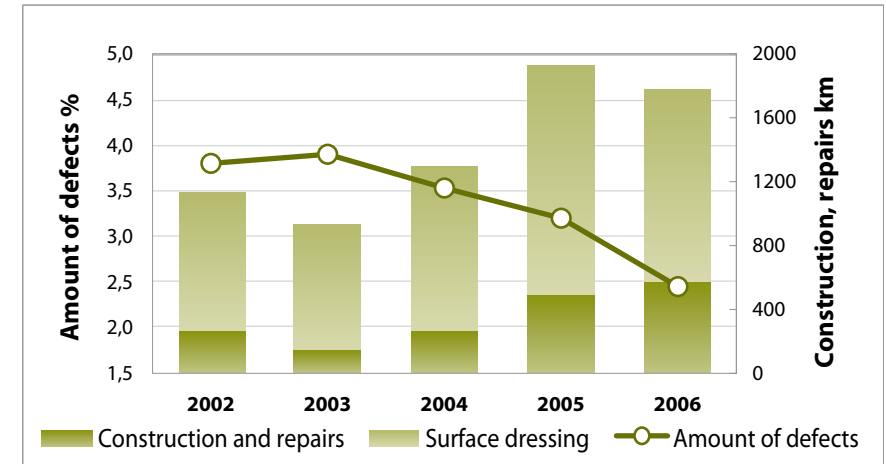
Basic roads



Secondary roads

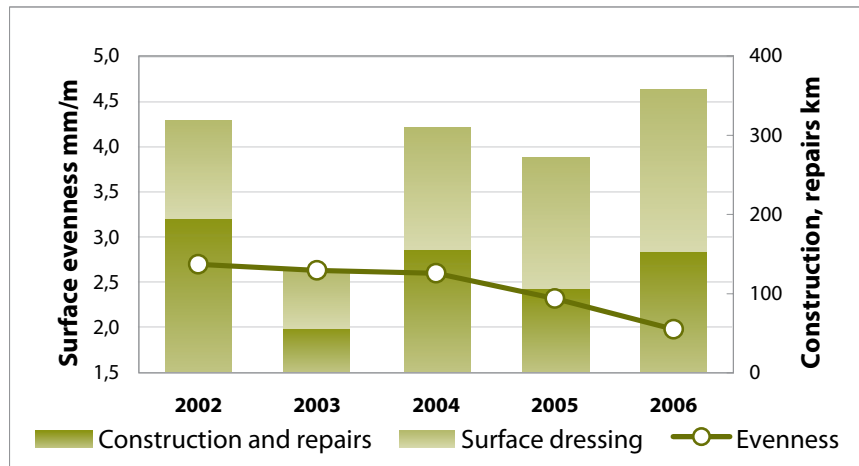


Total

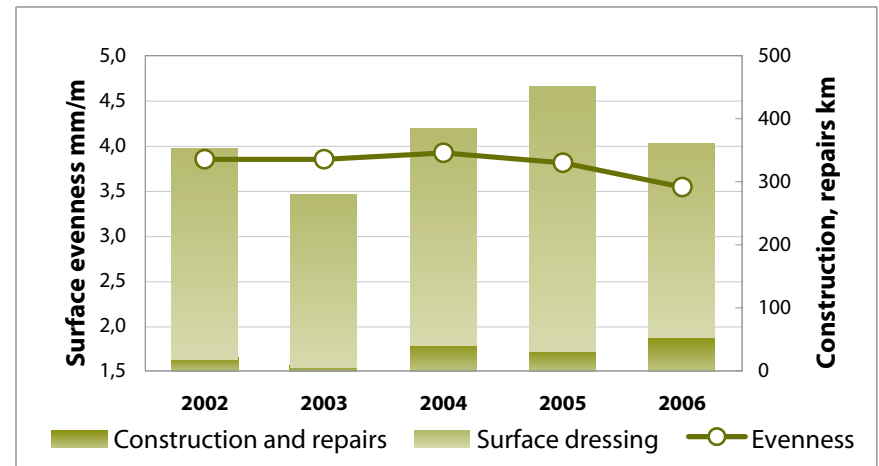


CONSTRUCTION, REPAIRS AND SURFACE DRESSING OF PAVEMENTS CARRIED OUT IN 2002-2006 AND THE CHANGE OF THE SURFACE EVENNESS PROCEEDING FROM THIS

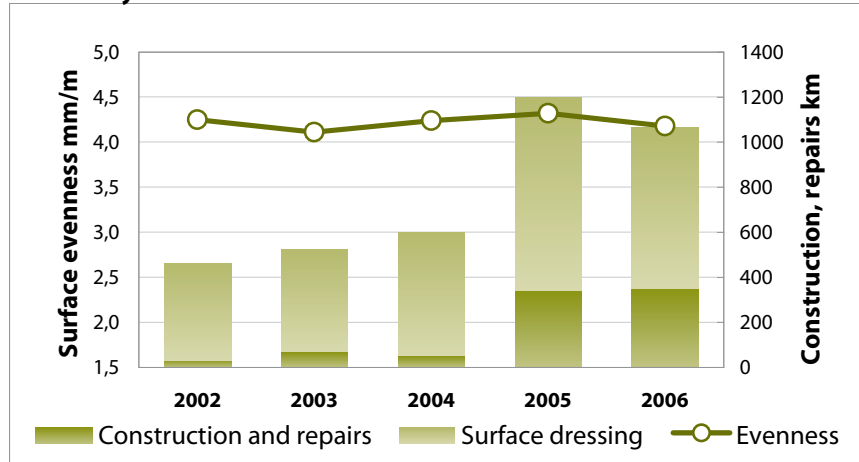
Main roads



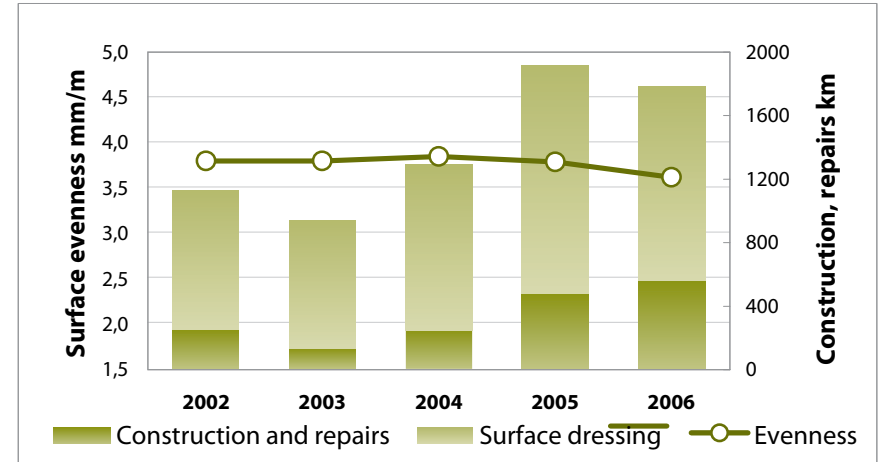
Basic roads



Secondary roads



Total



Pursuant to the Roads Act, from 2003 a sum equivalent to 75% of the fuel excise duty (with the exception of fuels with fiscal marking) and 25% of the excise duty imposed on fuels with fiscal marking is earmarked for road management purposes. The funding allocated for road management (national roads and local roads) is determined under the Roads Act. In 2006, 10% of the excise amount allocated for roads was assigned to local roads.

Since 2003, the calculated amount of funding for national roads is upon preparing the state budget considered to include all sources of financing – public revenue, European Union assistance and owner’s income. Thus, the amount allocated to roads from fuel excise is the smaller the larger the proportion of foreign assistance. Owner’s income reflects the services the road offices render to other institutions, which in essence is turnover. Expenses are incurred in order to receive income. The difference between income and expenses forms a profit, which the road offices use as an additional resource in road management works and for acquiring road management machinery and equipment. Following Estonia’s accession to the European Union we may apply for support for the development of the environment and transport infrastructure from the Cohesion Fund (CF) of the European Union.

This Fund is used to finance major transport and environment infrastructure projects with the value starting from 10 million euros. In the transport sector, support may be applied in

the amount of up to 85% of the project value for those roads, which belong to the trans-European transport network TEN-T. Thus, the CF funds can be utilised for the development of E20 Tallinn – Narva, E67 Tallinn – Pärnu – Ikla, and E263 Tallinn – Tartu – Võru – Luhamaa, Jõhvi – Tartu – Valga and Tallinn – Paldiski highways and the Tallinn ring road.

After accession to the European Union, Estonia got an opportunity to apply for funds for the repairs and construction of national roads from the European Regional Development Fund (ERDF). For the EU budget period of 2004-2006, 434 million kroons (273 million kroons by ERDF) were allocated for the action “Development of the Infrastructure of Transport” in the area of administration of the Ministry of Economic Affairs and Communications, which allowed financing projects of importance from the viewpoint of regional development for improving the national road network and the living environment. The share of EU financing is 75% of the value of the project, with Estonia’s co-financing making up the remaining 25%. The funds received from the ERDF were used for repairing basic and secondary roads and for paving gravel roads.

The basis for the utilisation of foreign assistance is the strategic plan “Projects financed by EU in 2002-2007” approved by the European Commission and the Ministry of Finance. In case of the utilisation of foreign assistance it is necessary to guarantee co-financing from the state budget.

Road Management Funds

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Road management costs are divided into operating costs and investments. Operating costs (personnel and management costs) cover road maintenance works, the aim of which is to ensure the required condition of roads and to create convenient and safe traffic conditions for road users all year round. Operating costs also include the expenses of maintaining the road management system. Investment funds are used for the development of the road network (construction of new lanes and roads, construction of bridges, construction of grade separations) and for road repairs, aimed at restoring the road quality that has dropped due to wear and tear on and damages to single road elements.

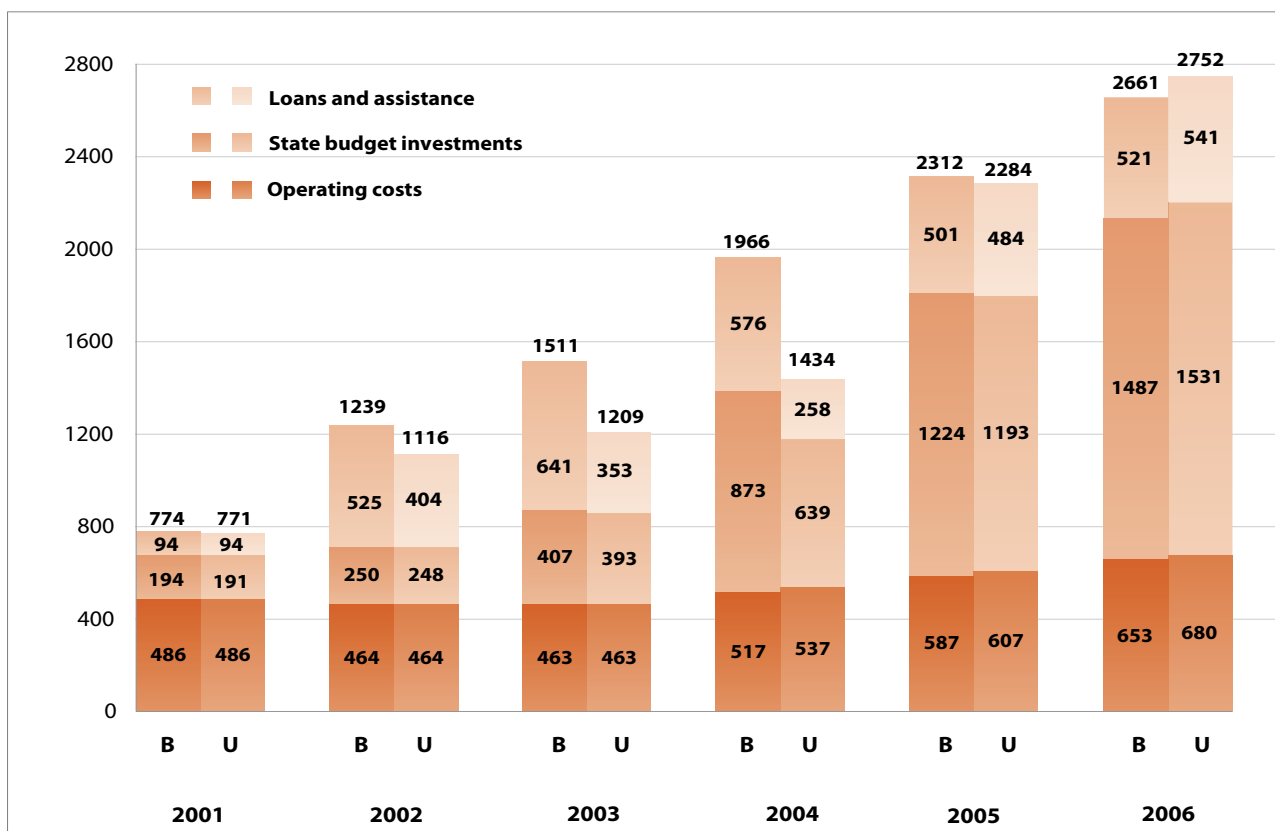
Initially, 2,404.7 million kroons were allocated to the Estonian Road Administration from the state budget of 2006, including the EU assistance. Another 256.1 million kroons were allocated from the supplementary budget – 29.1 million kroons on the basis of a more specific estimate of fuel excise and 224.0 million kroons for the construction of the Tallinn – Tartu – Võru – Luhamaa Road. Pursuant to Annex 4 of the Road Management Plan for 2006-2009 approved with Order No 323 of the Government of the Republic of 31 May 2006, additional funds are prescribed for the resources planned in the road management plan in the amount of 4,824 billion kroons for the construction and repair of the Tallinn – Tartu – Luhamaa Road in 2006-2014. The 2006 budgetary resources amounted to the total of 2,660.8 million kroons, of which operating

costs formed 634.8 million kroons, investments 2,003.2 million kroons and owner's income 22.8 million kroons. EU assistance (CF and ERDF) made up 521.2 million kroons of the budgetary resources. Together with the resources carried over from 2005 in the amount of 363.9 million kroons, the amounts available for road management totalled 3,024.7 million kroons, including owner's income 33.6 million kroons. The actual utilisation of funds (cash expense) was 2,752.3 million kroons, of which European Union assistance formed 540.9 million kroons and

FUNDS ALLOCATED FOR ROAD MANAGEMENT AND DYNAMICS THEREOF IN 2001 - 2006

Million kroons

Year	Budget		Utilisation	From this		
	Total	Including loans and assist-		State budget		Loans and assist-
				Operat-ing costs	Invest-ments	
2001	777	94	774	486	194	94
2002	1 239	525	1 116	464	248	404
2003	1 511	641	1 209	463	393	353
2004	1 966	576	1 434	537	639	258
2005	2 312	501	2 284	607	1 193	484
2006	2 661	521	2 752	680	1 531	541



B - budget
U - utilisation

owner's income 59.2 million kroons. From 2006, the principle of distributing road management resources between the road offices and the ERA was changed. The funds for the construction and repair of international main roads financed with the assistance of the EU and the funds for other main road

objects of great scope and importance financed from public revenue will be at the disposal of the ERA. The repair of other main and basic roads will be in the competence of the road offices. Therefore the share of resources at the disposal of the road offices increased in 2006.

ROAD MANAGEMENT FUNDS OF 2006

thousand kroons

	Planned funds	Utilised funds (cash expense)	%
ASSIGNMENTS IN TOTAL , including:	3 024 739,6	2 752 295,3	91,0
from the state budget of 2006	2 660 845,0	2 388 554,0	89,8
<i>revenue of the state budget</i>	2 116 806,7	1 799 332,5	85,0
<i>owner's income</i>	22 795,0	48 366,7	212,2
<i>EU assistance</i>	521 243,3	540 854,8	103,8
- funds transferred from 2005	363 894,6	363 561,5	99,9
<i>revenue of the state budget</i>	353 081,7	352 748,9	99,9
<i>owner's income</i>	10 812,9	10 812,6	100,0
- single-purpose financing		179,8	
FOR THE EXPENDITURES IN TOTAL , including:	3 024 739,6	2 752 295,3	91,0
1. In the use of ENRA state institutions in total, including:	1 706 601,3	1 681 791,8	98,5
1.1. From the state budget in total , including:	1 586 060,4	1 561 159,0	98,4
- staff costs	115 028,9	115 028,9	100,0
- administration costs	453 289,9	451 330,9	99,6
- investments	996 314,6	947 317,6	95,1
<i>repairs of roads</i>	975 514,6	926 966,3	95,0
<i>acquisition of machinery and equipment</i>	20 000,0	19 718,1	98,6
<i>acquisition of information technology</i>	800,0	633,2	79,2
- owner's income	21 427,0	47 481,6	221,6
1.1.1. State agencies in total, including:	1 586 060,4	1 561 159,0	98,4
Road Administration of the Northern Region	431 611,3	412 330,4	95,5
Kagu Road Office	286 694,2	284 632,5	99,3
Pärnu Road Office	285 708,2	288 566,0	101,0
Saarte Road Office	186 959,8	193 253,8	103,4
Tartu Road Office	185 111,5	180 894,4	97,7
Viru Road Office	209 975,4	201 481,9	96,0
1.2. Funds transferred from 2005	120 540,9	120 453,0	99,9
<i>revenue of the state budget</i>	110 806,0	110 718,1	99,9
<i>owner's income</i>	9 734,9	9 734,9	100,0
- single purpose financing		179,8	
2. In the use of the ERA's Central Office in total, including:	1 318 138,3	1 070 503,5	81,2
2.1. Investments in total, including:	1 006 835,4	741 212,2	73,6
<i>for the construction and reconstruction of roads</i>	990 335,4	729 312,0	73,6
<i>purchase of land</i>	10 300,0	8 160,1	79,2
<i>acquisition of IT software and hardware</i>	1 700,0	1 252,0	73,6
<i>acquisition of weather information system</i>	3 700,0	1 688,1	45,6
<i>acquisition of vehicles</i>	800,0	800,0	100,0
2.2. Staff costs	27 384,5	27 384,5	100,0
2.3. Administration costs	38 876,7	36 352,0	93,5
2.4. Earmarking (<i>membership fee</i>)	320,0	320,0	100,0
2.5. Owner's income	1 368,0	885,1	64,7
2.6. Funds transferred from 2005 , including:	243 353,7	264 349,7	108,6
<i>for construction and reconstruction of roads</i>	240 521,6	261 690,0	108,8
<i>acquisition of IT software and hardware</i>	1 027,8	1 027,8	100,0
<i>owner's income for acquisition</i>	400,0	399,8	100,0
<i>for staff and administration costs</i>	1 384,3	1 232,1	89,0
<i>land surveying</i>	20,0	0,0	0,0

The funds allocated to the road offices from the 2006 budget for road management amounted to 1,586.1 million kroons (operating costs 568.4 million kroons, investments 996.3 million kroons and owner's income 21.4 million kroons), plus 120.5 million kroons carried over from 2005. The road offices had the total of 1,706.6 million kroons at their disposal, with owner's income making up 31.2 million kroons. Together with the warehouse balances of materials purchased the previous year, the total of 1,524.2 million kroons was used for the maintenance and repairs of roads and road facilities (436.5 million was used on road operations), 21.1 million kroons was used for acquiring road management equipment and other items and 17.1 million kroons for the repairs of the buildings of road regions, while 74.3 million kroons were used for maintenance expenses and other expenses. The profit received from owner's income was used to cover expenses in the total amount of 10.4 million kroons, of which 2.4 million kroons was used for road maintenance and repair, 7.4 million kroons for acquiring road management technology and 0.4 million kroons for the repair of buildings in road regions. As the supplementary

budget, allocating additional investment resources, was only approved at the end of the year, the respective amounts could not be utilised in full and will be used in 2007.

The total of 1,142.1 million kroons were allocated to the Road Administration from the 2006 budget (operating costs 66.6 million kroons, investments 1,006.8 million kroons and owner's income 1.4 million kroons), of which EU assistance formed 521.2 million kroons. This was complemented by the resources carried over from 2005 in the amount of 243.4 million kroons. The total of 1,318.1 million kroons were at the disposal of the Road Administration, which used 991.0 million kroons on the construction and repair of roads and road facilities, 4.8 million kroons on acquisitions and 72.7 million kroons on other items (maintenance costs, design, purchase of land). 265.6 million kroons of the resources allocated for investments from the 2006 budget was left unused, with 222.9 million kroons of the amount allocated from the supplementary budget for the construction of the Tallinn – Tartu – Luhamaa Road making up the bulk.

UTILISATION OF THE FUNDS ALLOCATED FOR THE MANAGEMENT OF NATIONAL ROADS

thousand kroons

	Funds in total			incl. Road Offices		
	Planned funds	Utilisation	Share %	Planned funds	Utilisation	Share %
FUNDS IN TOTAL, including:	3 024 739,6	2 766 315,8	100,0	1 706 601,3	1 694 249,3	100,0
1. ROADS	2 743 809,2	2 472 758,7	89,4	1 557 142,7	1 524 384,3	90,0
1.1. Road operation, including:	431 740,9	436 468,0	15,8	431 740,9	436 468,0	25,8
- summer service of paved roads		189 191,2			189 191,2	
- summer service of gravel roads		99 063,0			99 063,0	
- upkeep of road structures		3 493,9			3 493,9	
- winter service		144 719,9			144 719,9	
1.2. Road repairs, including:	1 526 997,2	1 520 803,0	55,0	698 529,4	695 250,6	41,0
- repairs of paved roads	1 208 462,8	1 180 620,1		391 824,4	366 897,1	
- surface dressing	204 445,7	219 793,5		203 260,5	218 608,3	
- repairs of gravel roads	81 995,3	76 301,9		81 995,3	76 301,9	
- repairs of road structures	32 093,4	44 087,5		21 449,2	33 443,3	
1.3. Construction and reconstruction, including:	785 071,1	515 487,7	18,6	426 872,4	392 665,7	23,2
- roads	680 186,3	419 993,8		353 865,1	329 049,3	
- road structures	104 884,8	95 493,9		73 007,3	63 616,4	
2. BUILDINGS, including:	17 091,2	17 327,6	0,6	17 091,2	17 327,6	1,0
- repairs in road master areas and central bureaus	17 091,2	17 327,6		17 091,2	17 327,6	
3. ACQUISITIONS	28 255,6	25 836,1	0,9	21 027,8	21 068,2	1,2
- machinery and vehicles	20 879,0	21 184,5		20 179,0	20 484,5	
- information technology	6 973,9	4 337,4		546,1	369,5	
- inventories	402,7	314,2		302,7	214,2	
4. PLANNING AND DESIGN	33 266,0	33 266,0	1,2			
5. LAND SURVEYING	21 244,5	19 084,7	0,7			
6. TRAFFIC EDUCATION	12 257,0	11 990,2	0,4	1 157,9	896,3	0,1
7. OTHER EXPENDITURE (maintaining, etc.)	135 108,6	126 861,4	4,6	78 920,2	73 344,6	4,3
8. FOR TRANSFER OF LAND FROM RESERVE FUND INTO STATE OWNERSHIP	99,6	11,8	0,0	99,6	11,8	0,0
9. OWN FUNDS	33 607,9	59 179,3	2,1	31 161,9	57 216,5	3,4

Notes:

1. Utilisation has been indicated in actual expenses together with the residue of building materials in stock bought last year.

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Road Management Works



The priorities of road management works, which determine the order of the importance of works in order to ensure safe and convenient traffic conditions for road users within the limits of the existing funds all the year round, are the following:

- ◆ Road operations;
- ◆ Repairs of international main roads – projects related to foreign assistance funds;
- ◆ Preservation of the existing pavements - surface dressing and repairs of gravel roads;
- ◆ Repairs of the asphalt pavements of basic and secondary roads and repairs of bridges;
- ◆ Construction of pavements on gravel roads.

Road Operations

The road operations are conducted in accordance with the requirements for the state of roads approved with the regulation of the Minister of Economic Affairs and Communications (RTL1 2003, 1, 2; RTL 2005, 114, 1760). The regulation establishes requirements for the state of roads – both in summer and winter – in terms of road surface, shoulders, road marking, side visibility and provision of public services and amenities and winter friction tests depending on the importance of the road and traffic volume and defines 4 service levels of the state of roads.

The total of 436.5 million kroons (including 277.9 million kroons, or 63.7% by companies under road operations contracts) was used for road operations. 144.7 million kroons was used for winter service and 291.8 million kroons on summer service. Road operations costs per 1 road kilometre amounted to 26.5 thousand kroons (23.9 thousand kroons in 2005; 21.3 thousand kroons in 2004).

During the year no changes took place as for the performers of road operations.

Road operations are performed by companies on 10,307.0 kilometres of roads, or 62.5% of the road network, which is divided between the companies as follows:

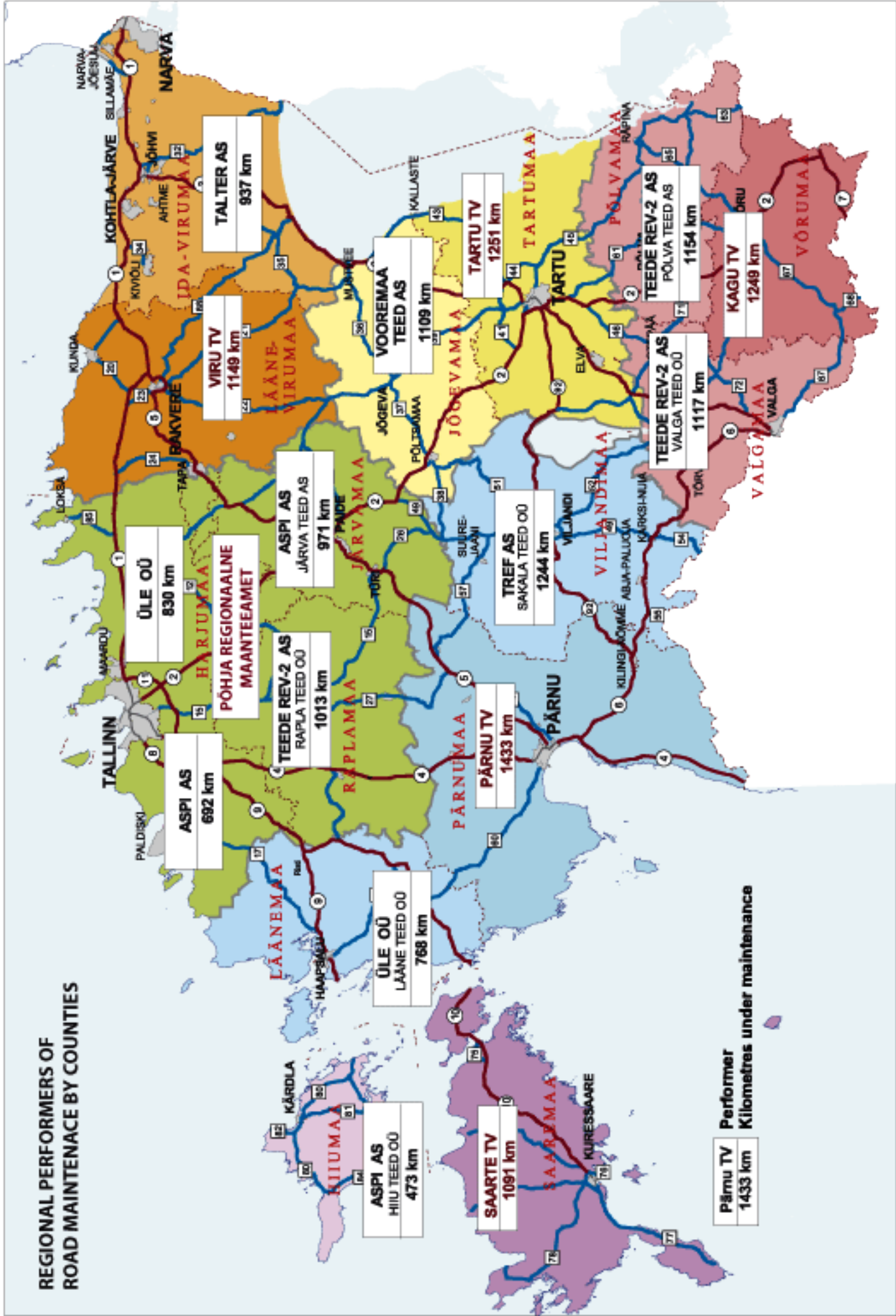
- ◆ AS Teede REV-2, 3,283.7 km – 19.9%. Works are performed by subsidiaries OÜ Rapla Teed in Rapla County, AS Põlva Teed in Põlva County and OÜ Valga Teed in Valga County;
- ◆ AS TALTER, 936.7 km – 5.7%. Works are performed by Virumaa department in Ida-Viru County,
- ◆ AS TREF, 1,244.0 km – 7.5%. Works are performed by subsidiary OÜ Sakala Teed in Viljandi County;
- ◆ AS ASPI, 2,135.8 km – 13.0%. Works are performed by a department in Keila region in Harju County and by subsidiaries OÜ Hiiu Teed in Hiiu County and AS Järva Teed in Järva County;
- ◆ AS Vooremaa Teed, 1,109.3 km – 6.7%. Performs works in Jõgeva County;
- ◆ AS ÜLE, 1,597.5 km – 9.7%. Works are performed by the company in Kose and Kuusalu regions in Harju County and by subsidiary OÜ Lääne Teed in Lääne County.



Road Offices carry out road operations on 6,168.9 kilometres of roads, which forms 37.5% of the road network, divided as follows:

- ◆ Kagu Road Office, 1,248.5 km – 7.6%, in Võru County;
- ◆ Pärnu Road Office, 1,432.8 km – 8.7%, in Pärnu County;
- ◆ Saarte Road Office, 1,091.3 km – 6.6%, in Saare County;
- ◆ Tartu Road Office, 1,250.7 km – 7.6%, in Tartu County;
- ◆ Viru Road Office, 1,149.0 km – 7.0%, in Lääne-Viru County.

REGIONAL PERFORMERS OF ROAD MAINTENANCE BY COUNTIES



Pärnu TV
1433 km
Performer
Kilometres under maintenance

There were no organisational changes concerning the road operations. The road operations were conducted within the framework of the existing road operations contracts and with the capacities of the Road Offices; the former proportions were not changed.

The second round of road operations contracts continued in Rapla and Jõgeva counties, where AS Teede REV-2 and AS Vooremaa Teed, respectively, became contracting partners. The companies are the same as in the previous period, but the content of the road operations contract is more thorough, with added preservation repairs and extended contract period, which in Rapla County national road operations contract is now seven years and in Jõgeva County contract eight years.

The weather conditions allowed opening all of the six ice roads operated by the Estonian Road Administration in winter/spring 2006: the Haapsalu – Noarootsi, Rohuküla – Vormsi and Munalaiu – Kihnu ice roads in the operating area of the Pärnu Road Office and the Saaremaa – Hiiumaa, Virtsu – Kuivastu and Rohuküla – Heltermaa in the operating area of the Saarte Road Office.

The development of the road weather stations system was continued, with the installation of one new road weather station, increasing the total number of road weather stations to 57. Open tendering procedure was organised for outsourcing the provision of maintenance to road weather stations; Technical Centre of Estonian Roads Ltd. being the successful tenderer. Six new road cameras were installed on the roads, which brings the number of road cameras now to ten.

Notes:

1. Of the 436.5 million kroon total volume of road operations performed in 2006, 277.9 million kroons (63.7%) worth were performed under road operations contracts.

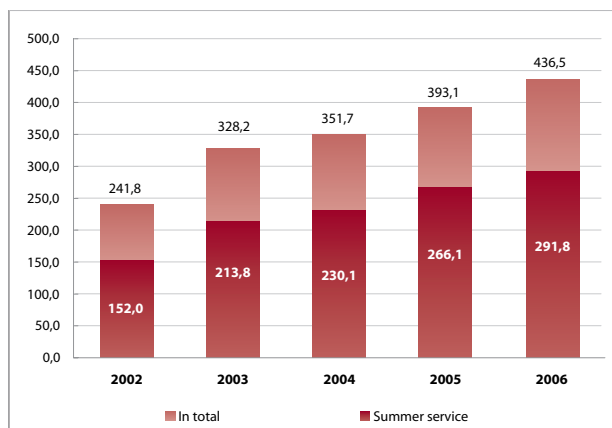
2. The steep rise in the cost of road operations in 2003 was due to the imposition of the regulation on requirements for road conditions, as well as due to changes in the methods of cost accounting: in order to make prices comparable to commercial prices, the value of the maintenance expenses of the road regions has been added to the cost of works.

EXPENDITURES FOR ROAD OPERATIONS IN 2002-2006

	Expenditures (million kroons)				
	2002	2003	2004	2005	2006
In total	241,8	328,2	351,7	393,1	436,5
<i>Including:</i>					
Summer service					
million kroons	152,0	213,8	230,1	266,1	291,8
%	62,9	65,1	65,4	67,7	66,8
Winter service					
million kroons	89,8	114,4	121,6	127,0	144,7
%	37,1	34,9	34,6	32,3	33,2

Remark:

Road operation works of 2006 in amount of 63,7% (277.9 million kroons) from the total amount (436.5 million kroons) have been performed by contracts



Repairs of International Main Roads

The total of 655.6 million kroons was used for the repairs of international main roads and for the preparation of projects in 2006. The European Union Cohesion Fund assisted with 506.2 million kroons, which is more than ever before.

In 2006 83.6 km of various sections were fixed on the Jõhvi – Tartu – Valga Road. With the value of 680 million kroons, this is the largest road project implemented in Estonia so far. The share of the European Union's assistance was 82% of the total cost. In addition to the reconstruction of the existing pavement, the project included the construction of a new 4.8 km by-pass around Raja village, which made the given road section considerably safer for the road users; the construction of a new entry road to Tartu City (Vana-Narva Road); the reconstruction of Transport Street in Valga City, which ensures transit traffic a safer and smoother connection to the Valga border station; the repairs or reconstruction of all the bridges on the repaired sections, except for Tõliste Bridge, the reconstruction of which was postponed to 2007 due to land ownership issues. Together with the repairs of main roads, 13.6 km of stabilised pavement was constructed on secondary roads, using crushed black rubble from repairing the pavement. Special attention was paid to improving the traffic safety and environment. The total of 25 km of pedestrian roads were constructed, plus 3 pedestrian tunnels and 1 wild animal culvert, 5.9 km of road lighting and 22 km of crash barrier was installed, and junctions were reconstructed.

The works performed under supplementary contracts for the repairs of the Maardu – Valgejõe road section implemented in the framework of the EU Cohesion Fund in 2005 included the repairs of an additional 5.1 km of pavement, 5 km of surface dressing, and installation of crash barriers for improving traffic safety.

At the end of 2006, work was started on the construction of the Puurmani grade separated junction, which is a part of the plans for reconstructing the Tallinn – Tartu Road. The project receives assistance from the CF and

includes the reconstruction of the existing 1.8 km dangerous road section at 147.6-149.4 km, the construction of a 67 km arch bridge on a new route across Pedja River and a 43 km viaduct on the road junction. The existing bridge will be repaired for local traffic. The contract cost is 160.4 million kroons, of which the CF's assistance forms 82%.

The technical project for the reconstruction of the Kukruse – Jõhvi section of the Tallinn – Narva Road was completed and preparatory works were continued along with the transfer of land and negotiations with local governments for the construction of the Vão – Maardu road section.

In the framework of CF assistance, engineering design works for the Tallinn ring road, the Tallinn – Paldiski Road and the Pärnu by-pass were continued, the preparation of the preliminary project for the Aruvalla – Kose road section of the Tallinn – Tartu – Võru – Luhamaa Road launched and the design of the Tartu by-pass and the Tartu – Valga road section was started.

State budget funds were used to complete the preliminary project for the Mäo by-pass on the Tallinn – Tartu Road and to start the preparation of the tender documents for the public procurement of design and construction services.



Repairs of Other Roads

EU Regional Development Funds resources were used to continue the repairs of the Jõesuu – Oiu section of the main road of Tartu – Viljandi – Kilingi-Nõmme that was launched in 2005. 10.5 km of asphalt concrete roads were commissioned, including the reconstruction of Vaibla bridge into a steel pipe bridge and the repair of Leie bridge, the construction of 0.4 km of light traffic road, the reconstruction of junctions and the maintenance of water drainage systems. The project cost amounted to 62.4 million kroons and the proportion of EU Regional Development Fund resources was 66%. The repairs of the 18.2 km Tartu – Tabivere section of the Tartu – Jõgeva – Aravete Road was started, to be completed in 2007. The project cost amounted to 146 million kroons and the proportion of EU Regional Development Fund resources was 43%.

State budget funds were used to repair 135.8 km of pavement in several counties. Repair sections with the total length of 5.4 km were completed on the Valga – Uulu Road in Karksi-Nuia and Abja in Viljandi County, along with the repairs of 1.2 km of the secondary road of Sultsi – Abja-Paluoja. Pavement repairs in Harju County included the following works: 4.2 km on the Tallinn – Pärnu – Ikla Road, 9.2 km on the Tallinn – Saku – Laagri Road, 3.4 km on the Saku – Tõd-

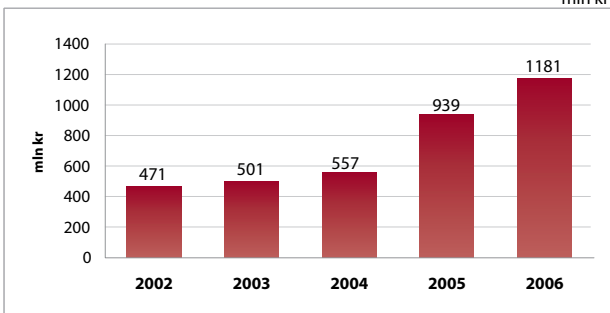
va Road, 5.8 km on the Tõdva – Hageri Road, 2.8 km on the Kasemetsa – Kiisa Road and 6.7 km on the Tallinn ring road. The repairs in Rapla County included: the 4.1 km Konuvere – Päärdu section on the Tallinn – Pärnu – Ikla Road, the 3.9 km Traksi – Kohila section on the Tallinn – Rapla – Türi Road, the Rapla – Järvakandi and Rapla – Märjamaa sections with the total length of 2.9 km in Rapla City, where the communications laid under the roads were renewed in cooperation with and financed by the city. Road repairs included the installation of junction and street lighting, the construction of 5 roundabouts, the installation of new traffic regulation equipment, the construction of footways and cycleways. The repairs in Järva County included: 1.8 km on the Paide – Mündi – Mäeküla Road, 2.3 km at the Türi – Arkma junction on the Pärnu – Rakvere – Sõmeru Road and 2.7 km on the Türi – Arkma Road, and the 12.6 km Oisu – Arkma section. 9.8 km of the Võru – Põlva Road were repaired in Põlva County and 5.5 km of the Pärnu – Lihula Road were repaired in Pärnu County. Repairs in Lääne County included 9.8 km of the Risti – Virtsu – Kuressaare – Kuivastu Road and repairs in Saare County 20.8 km of roads. In Hiiumaa, a 6.9 km section on the Heldermaa – Kärdla Road was repaired, the repairs of the Kärdla City section were started, to be continued in 2007. Repairs in Ida-Viru County included a 1.9 km section on the Kukruse – Tammiku Road. In Lääne-Viru County, the repairs of the Pärnu – Rakvere – Sõmeru Road and the Kadrina viaduct were started. The repairs of pavement on all the roads included the reconstruction of junctions, the maintenance of the road area and drainage systems, the installation of new traffic regulation equipment and the repair of bridges.

The programme to eliminate places dangerous to traffic was continued. The most important activity was the construction of the noise barrier wall at Pildiküla on the Tallinn – Tartu Road. The programme included the reconstruction of junctions, the installation of lighting at junctions and pedestrian crossings, the construction of extensions for bus stops, the installation of crash barriers. The construction of footways and cycleways was also continued, particularly by road sections where the traffic volume of cyclists and pedestrians is higher – road sections passing through and bordering on settlements. The total of 41.5 km of footways and cycleways were constructed, of which 29.4 km together with larger construction and repair objects were financed from the Road Administration's resources and 12.1 km from the resources of road offices in the framework of the programme to eliminate places dangerous to traffic.

REPAIRS OF PAVEMENTS

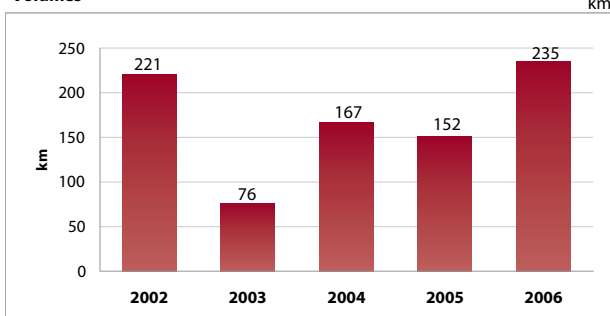
Expenditures

mln kr



Volumes

km



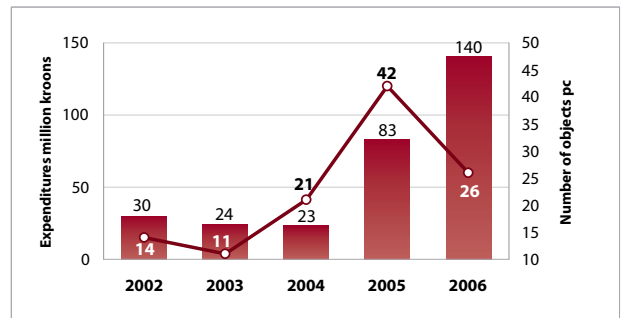
Bridges

A total of 26 bridges, viaducts and tunnels were built, reconstructed and repaired. With larger construction and repair objects, contracted by the ERA, 5 bridges were built and 4 repaired. The Põrvetu and Kobratu bridges were reconstructed on the Jõhvi – Tartu – Valga Road, the Põhu and Õru bridges were reconstructed into metal pipe bridges, the Lohusuu and Pukamõisa bridges were repaired, and on the Tartu – Viljandi – Kiltingi-Nõmme Road, the Vaibla bridge was reconstructed into a metal pipe bridge and the Leie bridge was repaired. 3 pedestrian tunnels were constructed on the Jõhvi – Tartu – Valga Road. The Konuvere bridge was repaired together with the Konuvere – Päärdu section of the Tallinn – Pärnu – Ikla Road. The funds allocated to the road offices, 14 bridges were constructed and repaired, of which 3 were in Harju County, 1 in Põlva County, 1 in Võru County, 2 in Pärnu County, 1 in Lääne County, 2 in Viljandi County, 2 in Jõgeva County and 2 in Ida-Viru County. The reconstruction of the Konuvere old stone bridge as a tourist attraction was started in Rapla County.

Preparations continued for establishing the permanent connection (fixed link) to Saaremaa. According to the results of financial-economic and environmental studies and in accordance with the proposals of an expert committee, the Government of the Republic issued Order No 170 in March 2006 for the preparation of a plan for the prospective organisation of the carriage of passengers and cargo across the Suur Strait, with the aim to compare different modes of traffic across the Suur Strait and to evaluate the economic, social, cultural and environmental effects thereof and to find the most suitable mode of transport for crossing the strait. The plan will be strategically evaluated for environmental effects, a cost-benefit analysis will be prepared and the most appropriate financing scheme proposed. On 4 September 2006, the Minister of Economic Affairs and Communications initiated the strategic evaluation of the environmental impact of the plan for the prospective organisation of the carriage of passengers and cargo across the Suur Strait, to be organised by the Estonian Road Administration.

By today, an environmental impact programme has been prepared. After the approval of the programme by the Ministry of Environment, a plan will be prepared and strategically evaluated for environmental effects, to be completed in 2008.

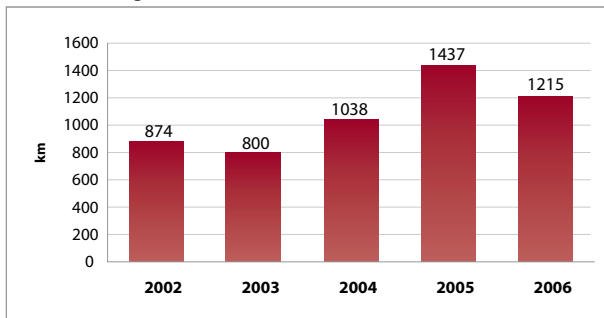
Bridges



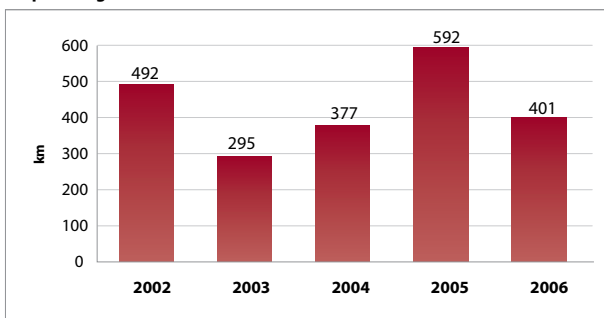
Surface Dressing and Repairs of Gravel Roads

Although the financing allocated from the state budget investment funds for the surface dressing and repairs of gravel roads increased, the volume of works performed was smaller than last year, because the unit price increase due to a rise in the price of materials. Surface dressing was carried out on the total of 1,215 km, which ensures the minimum annual volume needed for the preservation of pavements. The repairs of gravel roads have still not reached the necessary level. The total of 401 km of gravel roads were repaired.

Surface dressing 2002 - 2006



Repairs of gravel roads 2002 - 2006



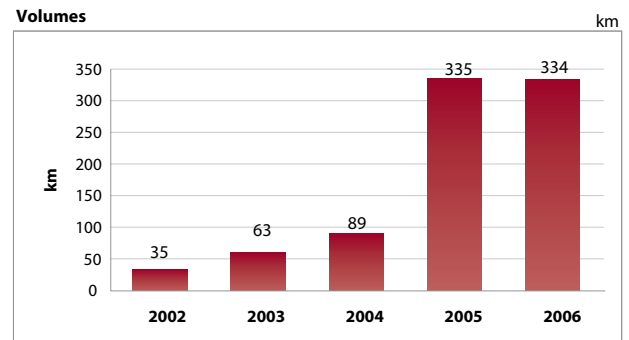
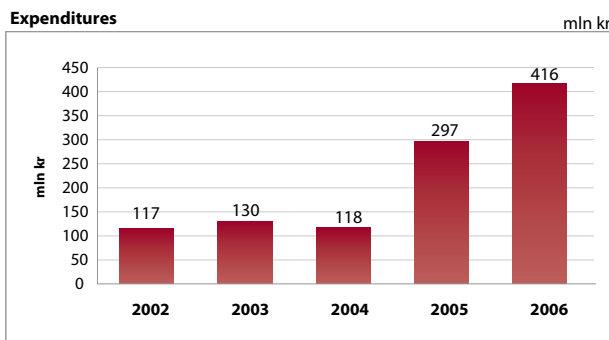
Pavements on gravel roads

In total, 333.9 km of gravel roads were paved, mostly on secondary roads. The volume of such works was on the same level as in 2005. This has become possible due to the implementation of light-weight and cheaper pavement materials – like crushed black rubble obtained from repair works and double surface dressing of gravel roads. 23.5 km of the pavement was contracted by the Estonian Road Administration. The most important one of the works was the 9.9 km Mustjala – Tagaranna section on the Tõlli – Mustjala – Tagaranna Road, which ensures the required access to the newly opened Saaremaa Port. Together with repairing the pavement on the Jõhvi – Tartu – Valga Road, 13.6 km of the secondary roads of Laatre – Lüllemäe – Hargla and Valga – Suurekõrtsi were paved of crushed black rubble stabilised with cement. 310.4 km of pavement were built on account of the funds allocated to the road offices to cover the sections between settlements and other roads characterised by high volume traffic in all the counties. The longest one of these was the 8.1 km section on the basic road of Rakvere – Ranapungerja, the construction of which was started in 2005.

In total, 20.5 km of asphalt concrete pavement and 208.2 km of various mixed-in-place substance pavements were laid down. 80.7 km of the latter were built of crushed black rubble. This was done mostly in Tartu, Jõgeva and Valga counties in connection with the repairs of the Jõhvi – Tartu – Valga Road and the extensive repair works of the Road Administration of Northern Region in three counties 2005-2006. Double surface dressing of secondary gravel roads has become popular over the last years as it allows to make the roads dust-free at a limited expense. 105.3 km of such roads were built.

The total of 10.9 km of surface roads were reconstructed into gravel roads in Tartu and Ida-Viru counties.

PAVING OF GRAVEL ROADS



ROAD CONSTRUCTION, REPAIRS AND OPERATIONS ON NATIONAL ROADS IN TOTAL

Activities	Unit	Volume in total	Including		
			Main roads	Basic roads	Secondary roads
1. Road construction	th.of kroons	419 993,7	81 432,7	23 667,3	314 893,7
<i>Including:</i>					
a) Construction of paved roads	th.of kroons	416 416,0	81 432,7	23 667,3	311 316,0
	km	333,9	-	8,8	325,1
<i>From this by the types of surfaces:</i>					
- asphalt concrete	th.of kroons	213 452,7	80 095,8	21 422,3	111 934,6
	km	20,5	-	8,1	12,4
- mix in plant and place	th.of kroons	143 481,1	1 336,9	1 909,1	140 235,1
	km	208,1	-	-	208,1
- surface dressing of gravel roads	th.of kroons	59 482,2	-	335,9	59 146,3
	km	105,3	-	0,7	104,6
b) Construction of gravel roads	th.of kroons	3 577,7	-	-	3 577,7
	km	10,9	-	-	10,9
2. Construction and reconstruction of bridges	th.of kroons	95 493,9	33 539,2	9 524,3	52 430,4
- bridges	tk/m	11/166,2	6/70,3	3/45,2	2/50,7
- overpasses	tk/m	3/15,0	3/15,0	-	-
3. Repairs of roads	th.of kroons	1 476 715,5	826 152,9	315 829,2	334 733,4
a) repairs of pavements	th.of kroons	1 180 620,1	783 492,2	251 616,4	145 511,5
	km	235,2	152,9	48,6	33,7
<i>From this by the types of surfaces:</i>					
- asphalt concrete overlays	th.of kroons	1 177 326,4	783 261,2	250 536,0	143 529,2
	km	235,0	152,9	48,5	33,6
- mix in plant and place (bitumen-gravel, stabilization, macadam)	th.of kroons	3 293,7	231,0	1 080,4	1 982,3
	km	0,2	-	0,1	0,1
b) repairs of gravel roads	th.of kroons	76 301,9	-	993,1	75 308,8
	km	401,2	-	4,8	396,4
c) surface dressing	th.of kroons	219 793,5	42 660,7	63 219,7	113 913,1
	km	1215,0	205,1	303,3	706,6
4. Repairs of bridges	th.of kroons	44 087,6	29 546,9	8 345,0	6 195,7
- bridges	tk/m	12/536,5	5/366,5	2/97,3	5/72,7
- overpasses	tk/m	-	-	-	-
5. Road operations	th.of kroons	436 468,0	118 532,8	97 700,5	220 234,7
<i>From this:</i>					
- summer service	th.of kroons	291 748,0	71 480,2	61 405,1	158 862,7
- winter service	th.of kroons	144 720,0	47 052,6	36 295,4	61 372,0
Road construction, repairs and operations in total	th.of kroons	2 472 758,7	1 089 204,5	455 066,3	928 487,9
Repair buildings	th.of kroons	17 327,7	3 668,1	7 308,5	6 351,1
Construction, repairs and operations in total	th.of kroons	2 490 086,4	1 092 872,6	462 374,8	934 839,0

ROAD CONSTRUCTION, REPAIRS AND OPERATIONS IN 2002-2006

Activities	Expenditures thousands of kroons					Construction and repairs of roads - km, bridges - pc/m				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
1. Road construction	117 268	129 720	118 254	297 031	419 994					
<i>Including:</i>										
a) construction of paved roads	117 268	129 631	118 254	296 920	416 416	34,9	63,2	89,4	334,9	333,9
<i>From this by the types of surfaces:</i>										
- asphalt concrete	99 461	111 980	34 199	146 468	213 453	5,8	14,8	3,3	28,4	20,5
- mix in plant and place	11 030	5 769	70 605	96 648	143 481	10,4	7,5	48,9	181,4	208,1
- surface dressing of gravel roads	6 777	11 882	13 450	53 804	59 482	18,7	40,9	37,2	125,1	105,3
b) construction of gravel roads		89		111	3 578					10,9
2. Construction and reconstruction of:	11 623	19 151	19 600	43 760	95 494					
- bridges						5/131,7	6/90,5	15/380,2	10/209,6	11/166,2
- overpasses										3/15,0
3. Repairs of roads	582 269	598 959	741 320	1 210 429	1 476 715					
<i>Including:</i>										
a) repairs of pavements	471 381	501 192	557 094	939 337	1 180 620	221,1	76,0	167,3	152,0	235,2
<i>From this by the types of surfaces:</i>										
- asphalt concrete	471 232	495 554	547 904	925 696	1 177 326	221,1	75,0	167,3	146,1	235,0
- mix in plant and place	149	5 638	9 190	13 641	3 294		1,0		5,9	0,2
b) repairs of gravel roads	38 364	21 045	75 637	98 717	76 301	492,3	294,5	377,4	591,8	401,2
c) surface dressing	72 524	76 721	108 589	172 375	219 794	873,5	799,9	1 038,1	1 436,7	1 215,0
4. Repairs of bridges and overpasses	18 095	4 395	3 501	39 350	44 088					
- bridges						9/218,6	5/127,0	6/95,7	21/587,4	12/536,5
- overpasses						2/85,0			11/432,4	
5. Road operations	241 793	328 187	351 680	393 051	436 468					
<i>Including:</i>										
- summer service	151 980	213 812	230 071	266 093	291 748					
- winter service	89 813	114 375	121 609	126 958	144 720					
Construction, repairs and operations in total	971 048	1 080 412	1 234 355	1 983 621	2 472 759					



Traffic count on main and basic roads was conducted similarly with the previous years. The count was conducted by the Technical Centre of Estonian Roads Ltd. Traffic count of secondary roads is conducted by local road agencies. Traffic was counted in 48 stationary counting points on main and basic roads and in 125 mobile counting points on basic roads. In stationary counting points data were collected all the year round, in mobile points in spring, summer and autumn. As compared to 2005, the traffic volume on Estonian roads has taken a significant leap – 10.8% on main roads and 9.7% on basic roads. The average daily traffic volume in 2006 was 4,190 vehicles on main roads and

1,440 vehicles on basic roads. The road section with the largest volume in Estonia is located on the Tallinn – Narva Road from the Tallinn City limits to the Nehatu – Loo – Lagedi junction on road No 11110, where the traffic volume is 35,180 vehicles a day.

The traffic performance has been determined in cooperation with the Tallinn University of Technology since 1995. It can be seen from the attached diagrams that although the main roads form only 9.7% of the national roads, they take 48% of the traffic performance.

Road Traffic

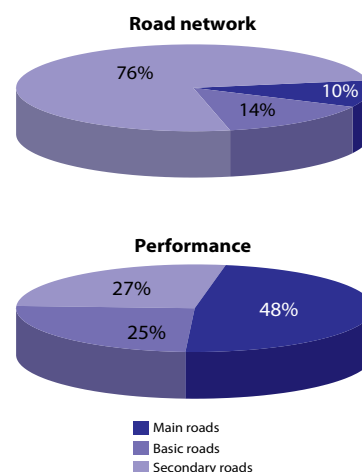
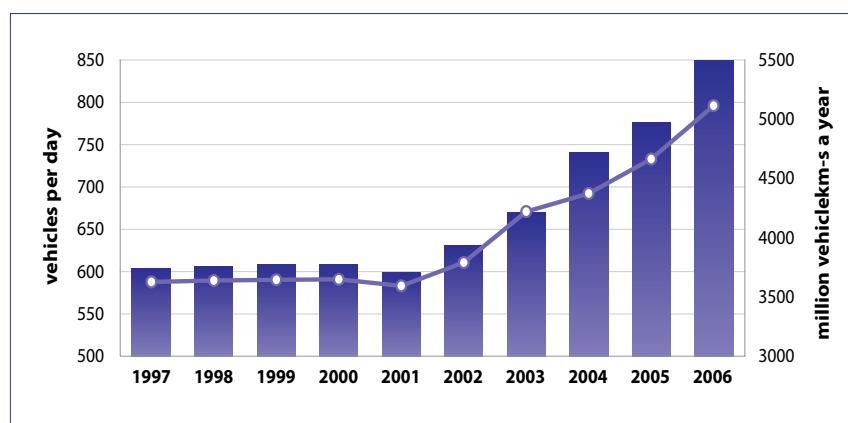
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AVERAGE TRAFFIC FLOW AND OVERALL TRAFFIC PERFORMANCE ON NATIONAL ROADS IN 1997-2006

Year	Traffic flow (vehicles per day)				Performance Million vehiclekm-s a year
	Main roads	Basic roads	Secondary roads	National roads on average	
1997	2 610	1 054	299	604	3 626
1998	2 811	1 187	254	606	3 638
1999	2 866	1 142	253	608	3 644
2000	2 965	1 096	251	608	3 648
2001	2 888	1 082	237	598	3 593
2002	3 062	1 182	241	632	3 790
2003	3 229	1 156	250	669	4 219
2004	3 534	1 238	277	740	4 372
2005	3 808	1 279	291	776	4 663
2006	4 190	1 440	303	850	5 113

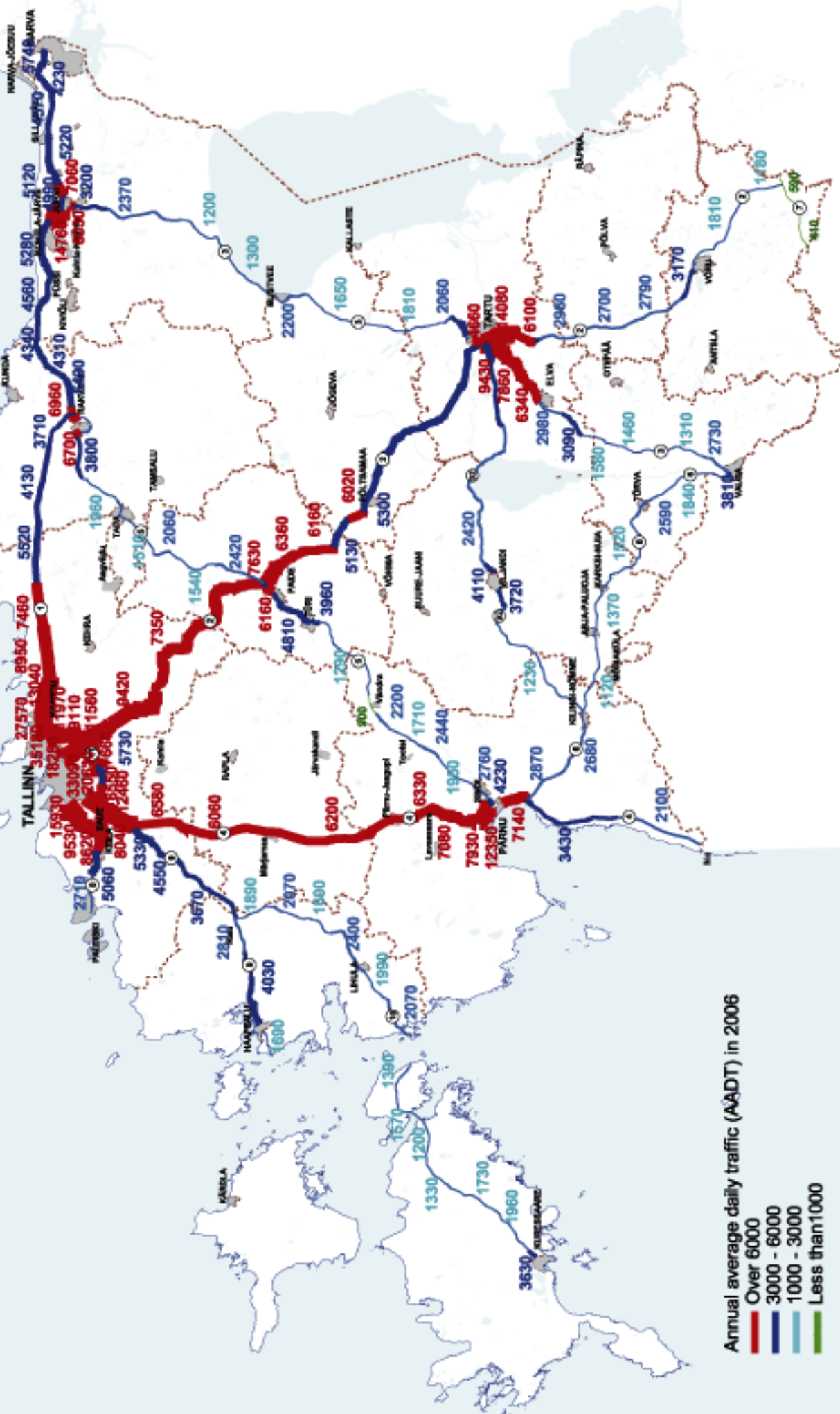
TRAFFIC PERFORMANCE ON NATIONAL ROADS IN 2006



NUMBER OF VEHICLES

Year	Number in total	Including			Vehicles per 1000 inhabitants	
		Lorries	Buses	Cars	Vehicles in total	Cars
1990	297469	47295	8202	241972	190	154
1991	328591	58877	8628	261086	211	168
1992	354606	62728	8409	283469	189	188
1993	389059	62971	8663	317425	210	215
1994	440198	61124	6918	372156	232	257
1995	456051	65598	7009	383444	258	269
1996	484731	71304	6829	406598	295	289
1997	510740	76605	6457	427678	309	307
1998	537877	80617	6306	450954	332	278
1999	545926	81030	6196	458700	398	334
2000	552061	82119	6059	463883	404	339
2001	493349	80535	5542	407272	362	299
2002	486182	80179	5306	400697	359	295
2003	522776	83430	5364	433982	387	321
2004	562199	85732	5284	471183	417	350
2005	585175	86201	5194	493780	435	367
2006	652250	92860	5378	554012	485	412

TRAFFIC DENSITY ON MAIN ROADS



Annual average daily traffic (AADT) in 2006

- Over 6000
- 3000 - 6000
- 1000 - 3000
- Less than 1000

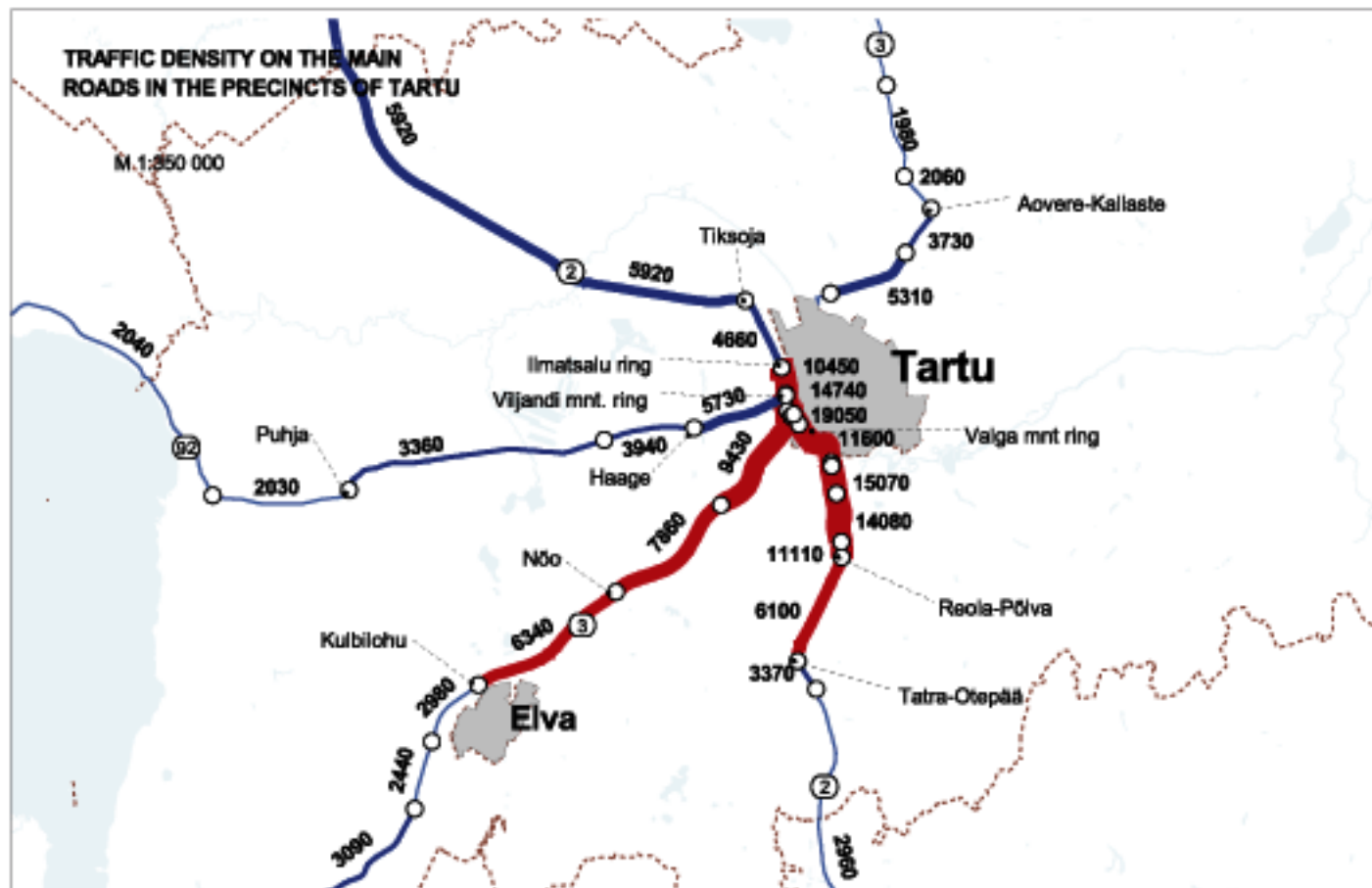
TRAFFIC DENSITY ON THE MAIN ROADS IN THE PRECINCTS OF TALLINN

M 1:350 000



TRAFFIC DENSITY ON THE MAIN ROADS IN THE PRECINCTS OF TARTU

M 1:850 000



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Traffic Safety



Traffic Accidents

Over the last seven years the activities of the Estonian Road Administration in the field of traffic education have been conducted in accordance with the Estonian National Traffic Safety Programme and its priorities until 2015. When in 2003-2005 we could state that the number of traffic fatalities remained at the lowest level in the last decades, then 2006 saw an increase in the number of fatalities from traffic accidents.

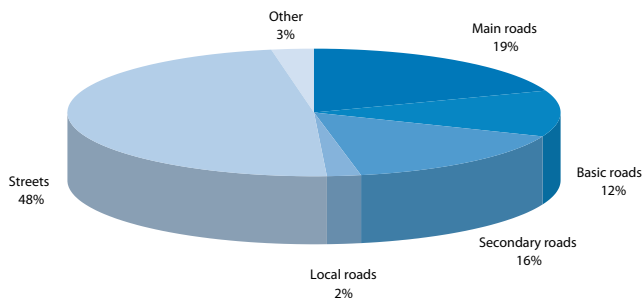
In total, there were 2,582 traffic accidents with casualties in 2006 (2,341 in 2005), where 204 people were killed (169 in 2005) and 3,503 injured (3,028 in 2005). The increase in the number of passenger cars was more rapid than in previous years, with the 12% annual increase resulting in the motorisation level of 412 passenger cars per 1,000 people at the end of the year (367 in

2005). The data of traffic surveys indicate that the traffic volume on roads is growing, particularly on main roads.

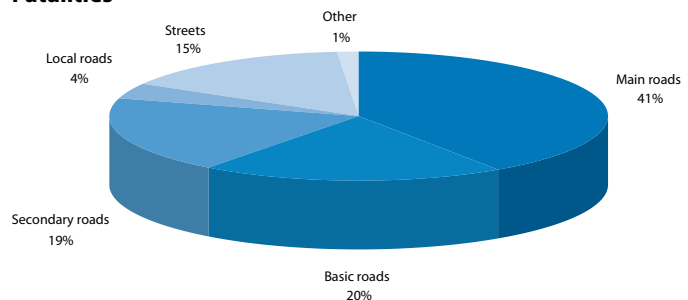
20% of all the traffic accidents and 41% of all the victims of traffic accidents were registered on main roads, which make up only 2.8% of the whole road network. In total, 503 (in 2005, respectively, 428) traffic accidents, 83 fatalities (75 in 2005) and 782 casualties (594 in 2005) were registered on main roads.

40% of all the traffic accidents registered on main roads were motor vehicle collisions, with fatalities amounting to 36 people (32 in 2005). The rise in the driving speed poses an ever increasing danger to pedestrians and cyclists using the main roads. Although they were involved in only 16% of the registered accidents, every third accident involving them was fatal. The highest incidence of car accidents can be noted on the Tallinn – Narva Road in Ida-Virumaa and on the Tallinn – Tartu – Võru – Luhamaa Road in Järva County and on the Tallinn ring road.

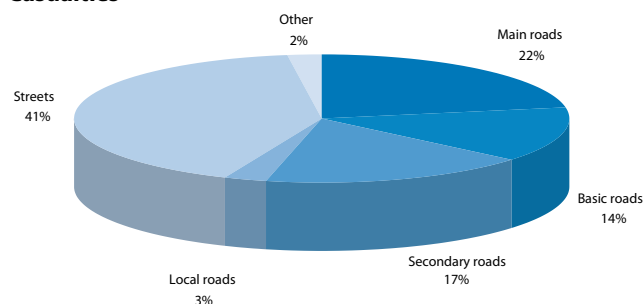
Traffic accidents



Fatalities



Casualties



Children and Young People in Traffic

2 17 (248 in 2005) up to 15-year-old pedestrians and drivers of vehicles were involved in traffic accidents, 128 (159 in 2005) of them caused the accidents themselves. 3 (8 in 2005) children were killed and 199 (228 in 2005) children were injured as independent road users. Nearly 80% of all the traffic accidents involving children occurred in towns, every third one in Tallinn.

While in Tallinn the majority of children involved in traffic accidents are pedestrians, then elsewhere in the country nearly 40% of the injured children are either cyclists or driving a motor vehicle, mainly motorbikes. This trend is showing a growing tendency. The number of cyclists, moped drivers, motorbike drivers and car drivers who are underage for participating in traffic are increasingly more often involved in traffic accidents. According to preliminary data, the number of such children involved in traffic accidents in 2006 was 41, or nearly a fifth of the total number of children involved in traffic accidents. The

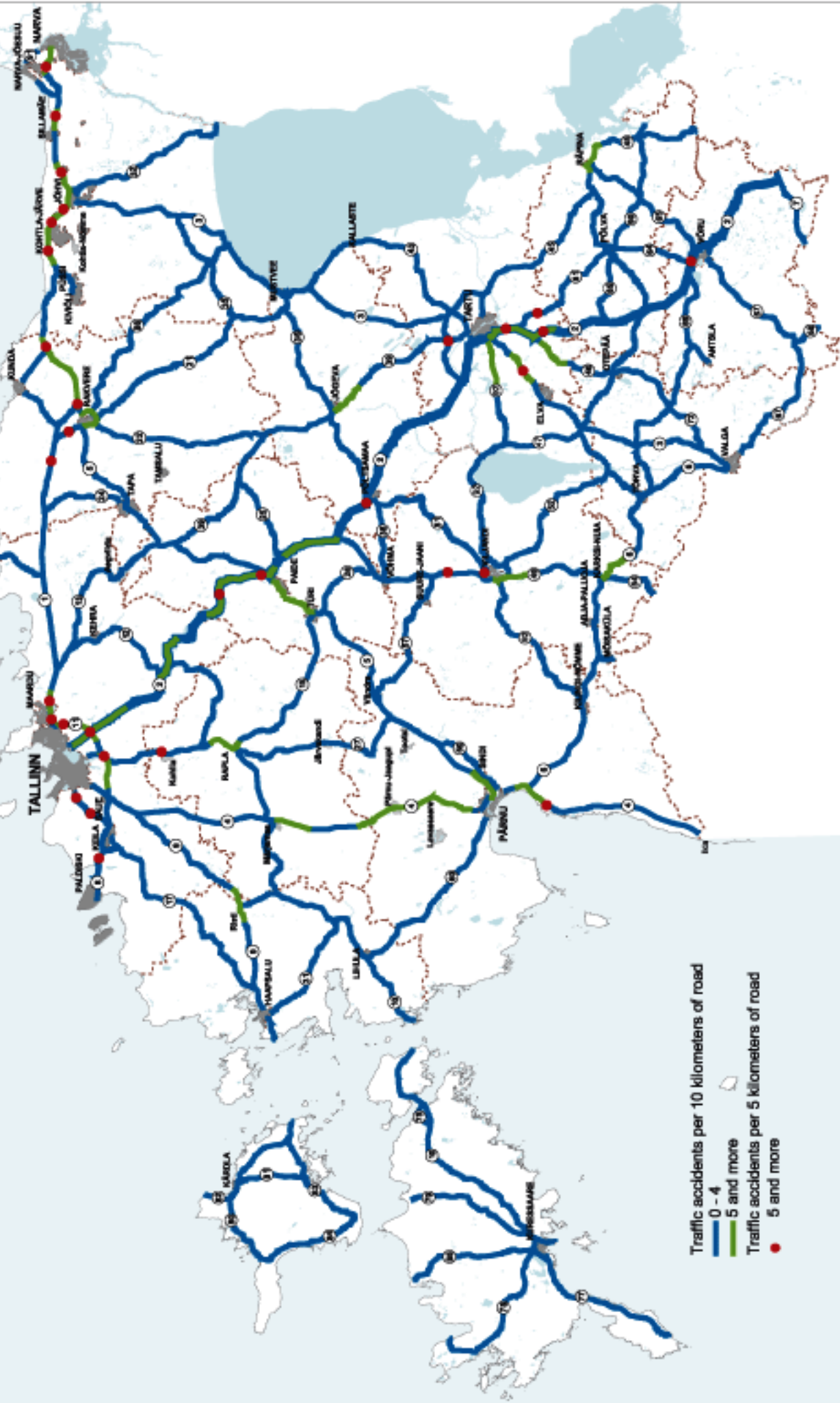
youngest motorbike driver who caused a traffic accident was 11 years old, the youngest car drivers were 13, with one of them causing a fatality. The youngest drunken car driver was 14 years old. Every fourth traffic accident involving children was a bicycle accident, with the youngest cyclists involved in an accident being 4 years old.

The number of children who were injured while travelling as passengers in cars is still high. The older the children, the less often they use the seat belt. All 5 children killed in passenger cars were 12-15 years of age and were travelling with the seat belt unfastened. While every second child of up to 5 years of age who was injured in a passenger car was wearing a seat belt, then only every fourth among those 13-15 years of age had their seat belt fastened. The total of 403 children (378 in 2005) were injured and 8 children (13 in 2005) were killed in 354 traffic accidents.

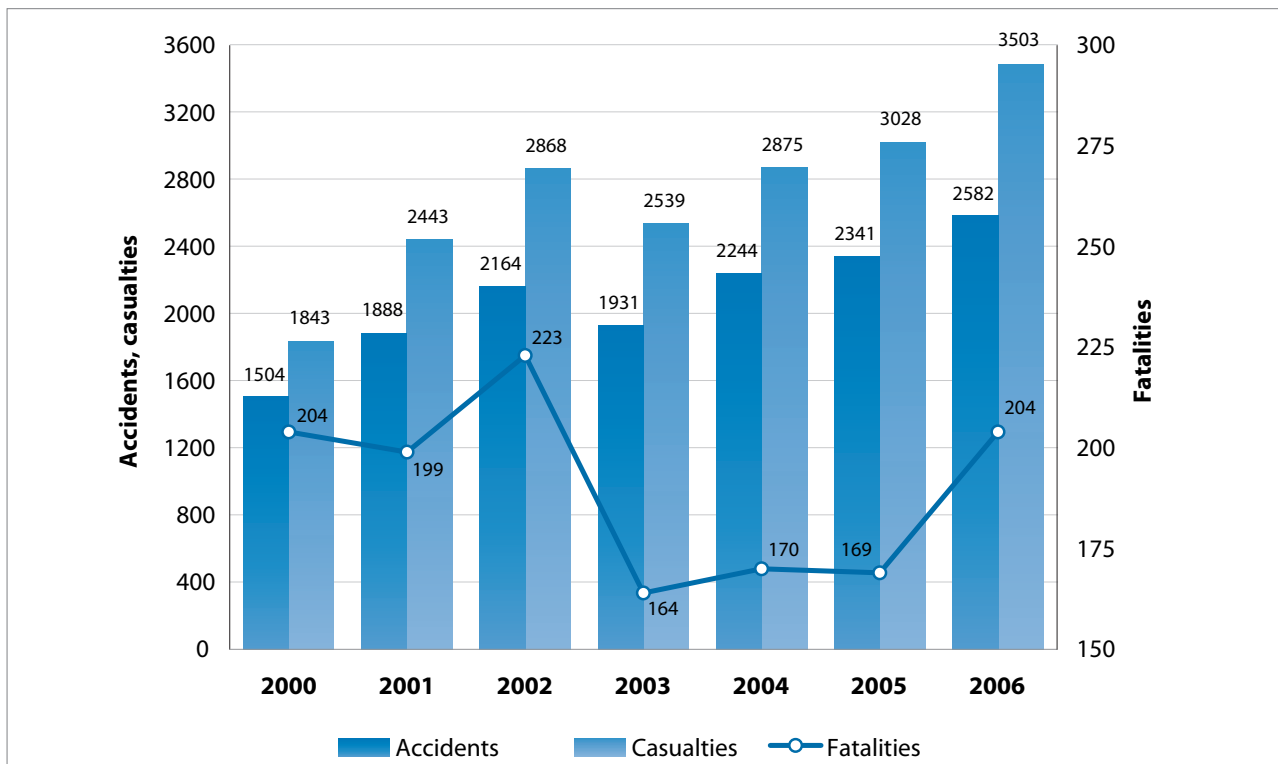
Compared to 2001, the number of up to 25-year-old young car drivers involved in accidents had grown from 468 to 750 by 2006, or 60%. If we added young motorbike drivers, this would mean that every third traffic accident with casualties involves an up to 25-year-old motor vehicle driver. Although the number of fatalities from such accidents has slightly decreased in the last years, there is an increase in the number of young people driving cars involved in accidents without the license.



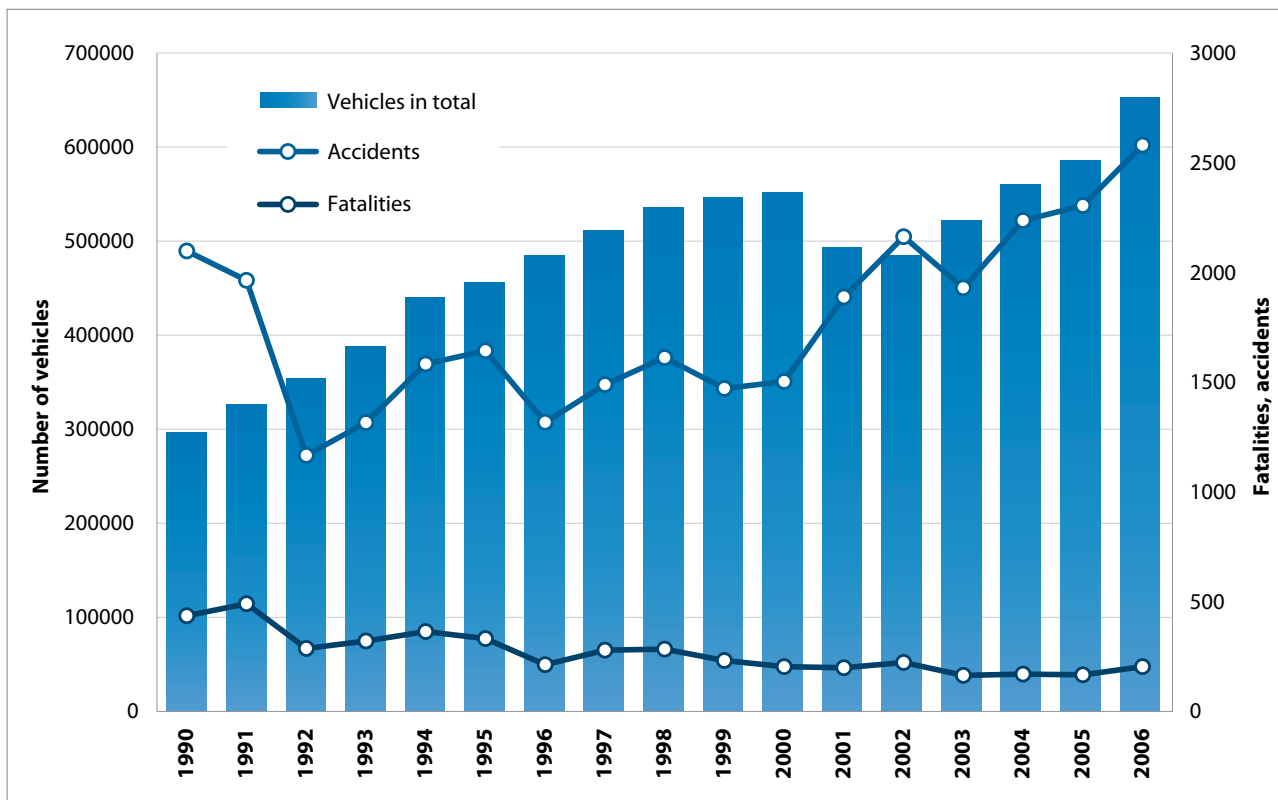
TRAFFIC ACCIDENTS WITH INJURIES ON MAIN AND BASIC ROADS



TRAFFIC ACCIDENTS IN 2000 - 2006



NUMBER OF VEHICLES, TRAFFIC ACCIDENTS AND FATALITIES



TRAFFIC ACCIDENTS IN ESTONIA IN 1996 - 2006

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total traffic accidents	1318	1490	1613	1472	1504	1888	2164	1931	2244	2341	2582
<i>1996=100%</i>	<i>100,0</i>	<i>113,1</i>	<i>122,4</i>	<i>111,7</i>	<i>114,1</i>	<i>143,2</i>	<i>164,2</i>	<i>146,5</i>	<i>170,3</i>	<i>177,6</i>	<i>195,9</i>
Traffic accidents per 10 000 vehicles	27,2	29,2	30,0	27,0	27,2	38,3	44,5	36,9	39,9	40,0	39,6
Traffic accidents per 100 000 inhabitants	93,7	107,0	116,9	107,3	110,0	138,8	159,6	142,9	166,5	174,1	192,1

Fatalities	213	279	284	232	204	199	223	164	170	169	204
<i>1996=100%</i>	<i>100,0</i>	<i>131,0</i>	<i>133,3</i>	<i>108,9</i>	<i>95,8</i>	<i>93,4</i>	<i>104,7</i>	<i>77,0</i>	<i>79,8</i>	<i>79,3</i>	<i>95,8</i>
Fatalities per 10 000 vehicles	4,4	5,5	5,3	4,2	3,7	4,0	4,6	3,1	3,0	2,9	3,1
Fatalities per 100 000 inhabitants	15,1	20,0	20,6	16,9	14,9	14,6	16,4	12,1	12,6	12,6	15,2
Fatalities per 100 accidents	16,2	18,7	17,6	15,8	13,6	10,5	10,3	8,5	7,6	7,2	7,9
Fatalities per 100 injuries	13,8	15,2	14,3	13,7	11,1	8,1	7,8	6,5	5,9	5,7	5,8

Casualties	1547	1835	1990	1691	1843	2443	2868	2540	2875	2971	3503
<i>1996=100%</i>	<i>100,0</i>	<i>118,6</i>	<i>128,6</i>	<i>109,3</i>	<i>119,1</i>	<i>157,9</i>	<i>185,4</i>	<i>164,2</i>	<i>185,8</i>	<i>192,0</i>	<i>226,4</i>
Traffic accidents caused by drunken drivers	317	379	423	322	318	391	495	394	394	431	512
<i>1996=100%</i>	<i>100,0</i>	<i>119,6</i>	<i>133,4</i>	<i>101,6</i>	<i>100,3</i>	<i>123,3</i>	<i>156,2</i>	<i>124,3</i>	<i>124,3</i>	<i>136,0</i>	<i>161,5</i>



Types of Traffic Accidents

The number of collisions between moving motor vehicles was 802 (698 in 2005), with 58 drivers and passengers killed (52 in 2005). The situation started to get worse from the second half-year, with the last quarter turning out to have the highest rate of accidents – 212 collision accidents with 23 fatalities were registered. The rate of accidents has grown on roads both inside and outside settlements, but fatal accidents generally take place only on roads with high-speed and more intense traffic. The main causes of collisions were ignoring the rules on the crossroads, using inappropriate driving speeds, mistakes when passing, changing lanes or turning. The higher rate of accidents in the first and last quarter of the year also indicates the drivers' lack of skill upon driving in winter conditions and in the dark, as well in rush-hour traffic.

626 (639 in 2005) collisions of motor vehicles with pedestrians were registered, with 61 pedestrians killed (46 in 2005). Every third pedestrian accident on roads outside settlements was a fatal one, and the majority of pedestrians on roads outside settlements are killed in the dark. In 2006, the number of such fatalities was 28, which is more than ever before in this century. Nearly three fourths of pedestrians killed on roads outside settlements are in active working age – 25-65. 2/3 of all the pedestrian accidents occurred in the five biggest towns in Estonia. In Tallinn, 279 cases when pedestrians were struck by a vehicle, involving 13 fatalities among the pedestrians, were registered. The cases of pedestrians crossing roads at random places have decreased; accidents involving pedestrians converge more and more clearly to the junctions, pedestrian crossings and public transport vehicle stops, where approximately 2/3 of all the pedestrian accidents in the capital city were registered. Besides children of primary school age, elderly people of retirement age are more and more often involved in traffic accidents.

TRAFFIC ACCIDENTS BY TYPES

	Traffic accidents					Fatalities					Casualties				
	Total	Including				Total	Including				Total	Including			
		National roads	Local roads	Streets	Other places		National roads	Local roads	Streets	Other places		National roads	Local roads	Streets	Other places
TOTAL	2582	1209	58	1242	73	204	162	8	31	3	3503	1878	93	1452	80
<i>incl. in daytime</i>	1731	766	38	874	53	120	93	3	21	3	2350	1223	69	1001	57
<i>at night</i>	851	443	20	368	20	84	69	5	10	0	1153	655	24	451	23

By types

Collision of motor vehicles with moving vehicles	1034	455	10	553	16	77	69	0	7	1	1504	783	12	689	20
<i>incl. with motor vehicle</i>	802	374	6	415	7	58	53	0	5	0	1271	709	8	543	11
<i>with motor/bicycle</i>	232	81	4	138	9	19	16	0	2	1	233	74	4	146	9
Collision of motor vehicles with obstacle	100	70	1	27	2	0	0	0	0	0	163	122	3	36	2
<i>incl. with standing vehicle</i>	36	17	0	17	2	0	0	0	0	0	58	30	0	26	2
Collision with pedestrian	626	116	8	463	39	61	37	1	21	0	588	85	7	457	39
One-vehicle accident	743	550	37	149	7	66	56	7	3	2	1149	865	66	211	7
Other accidents	79	18	2	50	9	0	0	0	0	0	99	23	5	59	12

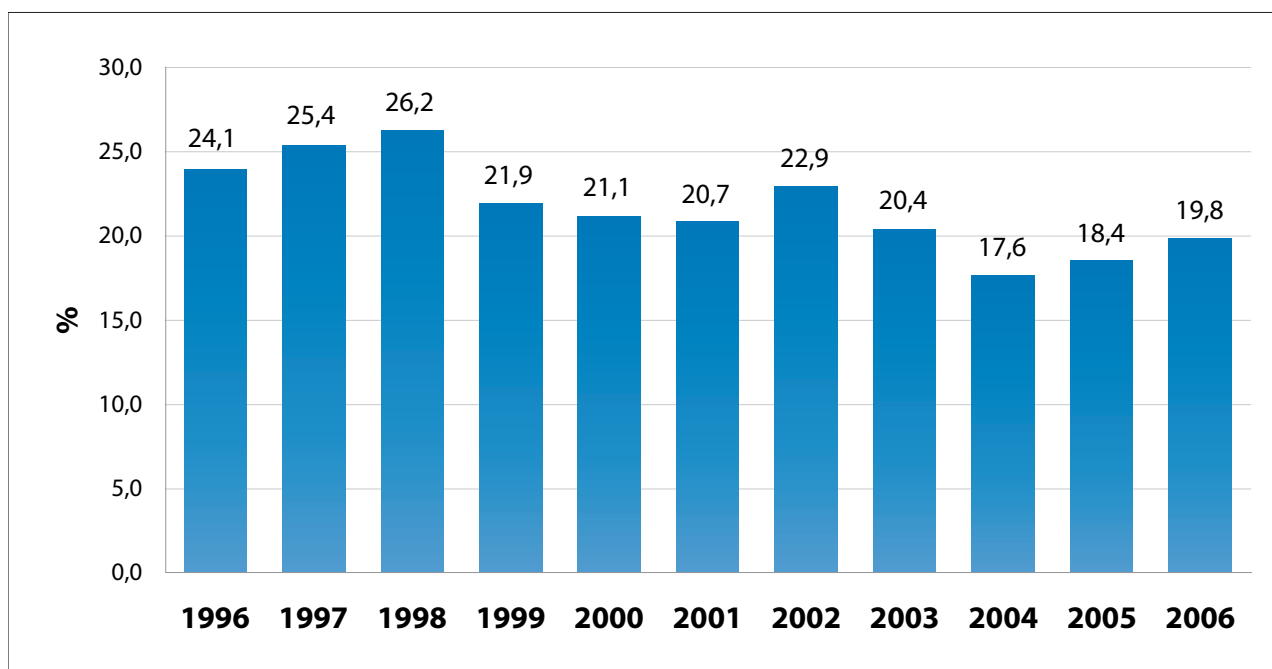
Nearly 30% of all the traffic accidents with casualties involved only one vehicle. In the total of 743 accidents (599 in 2005) 66 people were killed (48 in 2005), excessive speed and overestimating one's abilities being the biggest problems. Summer traffic on smaller local roads had a considerable effect on the increase in the number of fatalities. Beginners and inexperienced drivers are more often involved in accidents. 44% of drivers who drove off the road had been consuming alcohol.

Cyclists or moped drivers were involved in 232 (253 in 2005) accidents, 19 (14 in 2005) of the cyclists were killed. Cyclist accidents have become a problem primarily among up to 15-year-old children, who made up nearly a fourth of all the injured cyclists. 73% of all the bicycle accidents were registered on roads inside settlements. The main mistakes made by cyclists are neglecting to give the required signal before manoeuvres, and mistakes on crossings.

Drunken Drivers

The decrease of the number of people killed in 2003-2005 has been largely achieved through a decrease of the number of drunken drivers among the drivers involved in fatal traffic accidents. Although the proportion of drunken drivers among those involved in traffic accidents is on the rise, the number of fatalities caused in such accidents has not grown in the last years. While in 2002, 68 persons were killed in accidents involving drunken drivers of motor vehicles, in 2006 such accidents killed 47 people. At the same time it is evident from the statistics of police raids that drunken drivers have not disappeared from the roads – from among the drivers of motor vehicles participating in traffic 0.9% were drunk, in 2002 there were 3.3% such drivers. 512 drunken drivers were involved in traffic accidents (435 in 2005), with the youngest being a 14-year-old car driver.

TRAFFIC ACCIDENTS CAUSED BY DRUNKEN DRIVERS
(% from traffic accidents with casualties)



The year 2006 was definitely a milestone in the traffic education activities of the Estonian Road Administration – 10 years passed from the preparation of the first children’s traffic calendar, the publication of which every year until this one has become a nice tradition. The annual thematic traffic safety campaigns that date back to the same time have improved the use of seat belts and child safety equipment in cars, reduced the rate of drunk driving and increased the use of reflectors by pedestrians. The range of various traffic related learning materials issued for teaching children has grown considerably, and various teaching methodological materials have been prepared also for using at the traffic training courses of kindergarten and general education school teachers and in driving schools.

The work in 2006 was aimed at continuing activities influencing the positive development of the attitudes and behaviour of the participants in traffic. Traffic safety campaign “Secure your life, fasten the seat belt also in the back seat!” offered those who were interested a chance to feel the protection provided by a seat belt in “accidents” at the speed of 7 km/h at trade shows and various events in different places in Estonia. The summer campaign “Drive sober” offered the free of charge service of breathalysers at events where the consumption of alcohol was not excluded. The aim of the traffic safety project conducted at crowded events in various places in Estonia on eight summer weekends was to The traditional autumn campaign promoting the use of



“Children’s Traffic Calendar” – tradition from 1996, that still lives today



Sudden braking at 7 km/h

Traffic Education



reflectors was titled "Show yourself! Always wear a reflector!" and was run on television, radio and outdoor adver-



Offering the use of breathalysers to those interested at "Beer Summer" at Tallinn Song Grounds

tising spaces from November to December – during the darkest period of the year, when the probability of pedestrian accidents is the highest.

The need to wear a helmet while cycling was reminded in the traffic safety campaign called "Real players wear helmets", which was a novel topic promoted to the public in 2006. The campaign was first of all aimed at children 7-15 years old and their parents.

In the first and last months of the year, the advertising boards by the main roads carried the message "It is slippery, don't hurry!," warning drivers of winter road condi-



Outdoor advertisement of the "Real players wear helmets" campaign

tions so they could choose a safe driving speed.

The traffic safety related further training programme for kindergarten and general education school teachers was also continued throughout the year, with new traffic related learning materials issued to be used by children in learning the safe behaviour in traffic and by teachers of child-care institutions and driving schools in their work:

- ◆ "Bicycle Game" – a computer game/educational tool providing useful knowledge to cyclists
- ◆ "Drink or Drive" – an audiovisual learning programme for driving schools, in order to increase the drivers' awareness of conditions caused by

drinking that affect traffic safety

- ◆ "Zebra Corner" on the child-orientated Internet portal www.lastekas.ee, offering children the opportunity to take part in traffic quizzes, solve puzzles, watch thematic films and relate their views on traffic in the Internet environment.

The traffic safety related instruction, information and learning materials issued to educational institutions are described in the Traffic Study catalogue updated in 2006, which has also been published on the homepage of the Road Administration in order to facilitate the placement of orders.

New traffic teaching projects that were launched include the creation of traffic education playgrounds in kindergartens, where teachers can introduce the smallest kids to the ABC of traffic in a safe environment, using merry activity games.



Traffic safety advertisement by roads in winter months



TV-clip and outdoor advertisement of the reflector campaign