

# Annual Report 2008

Estonian Road Administration

## ---- Dear Reader -----





The present annual report of the Estonian Road Administration gives a thorough review about the financial resources, the specific activities and the achieved results of the ERA in 2008. As for an organization maintaining national roads, the last year was for the Road Administration differently notable and plenty of transformations.

**First, funding of road management:** based on the concretized prognosis the road management funds were reduced in the middle of 2008.

**Second, restructuring the road management organization:** five state trading companies were established on the basis of former road operations departments and performing of road operations works in Lääne-Viru, Pärnu, Saare, Tartu and Võru counties were rendered to entrepreneurs. The Road Administration with its subsidiary units was formed into a customer organization, as a result of what the total number of personnel decreased by a half.

**Third, improvement of traffic safety:** during the year 1863 personal injury accidents including 132 killed were registered in Estonia that is the smallest number of victims in last 50 years.

Being so far in the rear part of EU countries by traffic safety level, Estonia could be compared with Italy, Spain and Belgium today.

**Fourth, decrease of traffic flow:** changes in country's economy reflect directly in traffic flow. Fast growth of traffic density on main and basic roads in previous years has been replaced by fall first time in last 10 years.

**Fifth, developments on Tallinn-Tartu road:** Vaida-Aruvalla 6.8 km long I class road section was completed, construction of similar section on Mäo by-pass started and the tender for public procurement of design-construction works on Aruvalla-Kose section announced.

**Sixth, studies to investigate satisfaction of road users:** based on the inquiry carried out in 2008, 79% of drivers estimated the summer road conditions as "good or excellent".

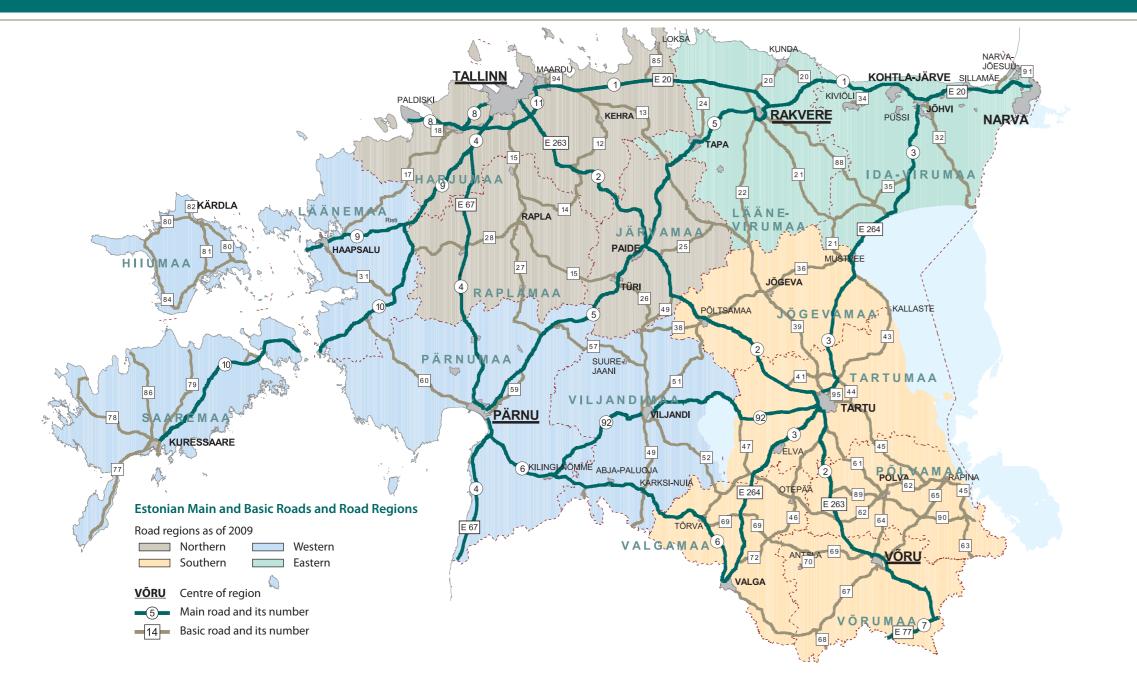
Would you enjoy the reading!

Koit Tsefels Acting Director General of the ERA

## Estonian Main and Basic Roads ------

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#### Road Traffic

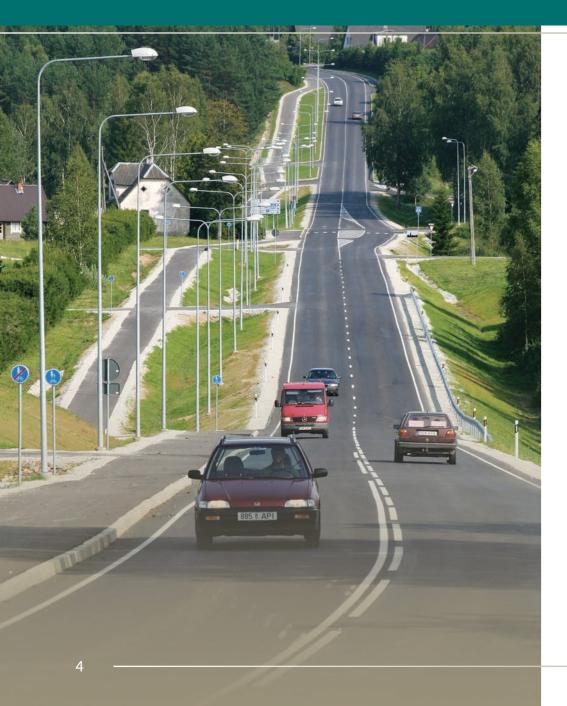
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## ----- Estonian Road Administration ------





Estonian Road Administration (ERA) is a government agency operating 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 a modern road network

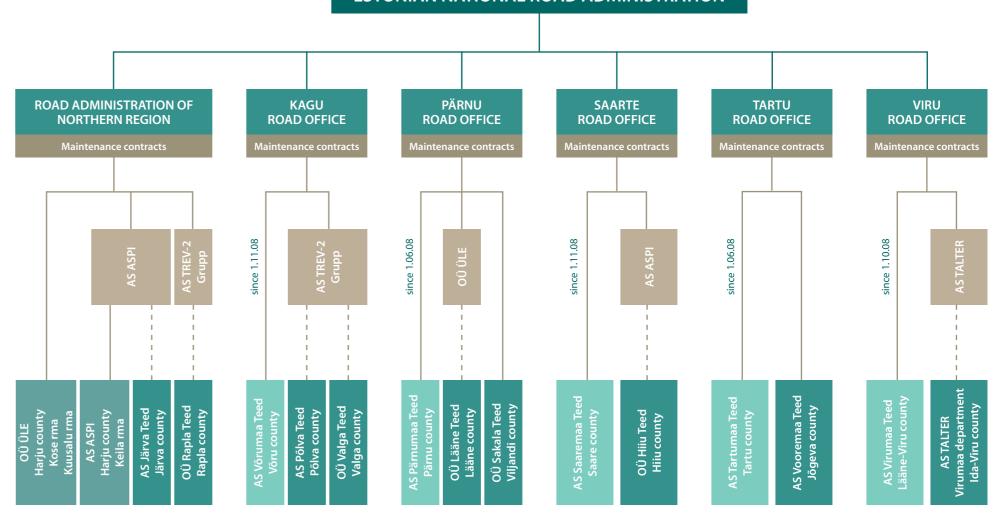
#### ERA's vision:

### To pave estonia's road to development

#### The main functions of the Road Administration are:

- organizing road management and creating conditions for safe traffic on the national roads:
- 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.
- 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.
- forming attitude and behaviour of road users, preparing traffic safety programmes and working plans, ordering researches and analyses of traffic accidents and informing the public about traffic safety situation.

### **ESTONIAN NATIONAL ROAD ADMINISTRATION**



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## ----- Estonian Road Administration ------



### **Road Administration Agencies**

Up to the end of 2008 the ERA administrated the following state agencies:

#### Local agency of the ERA:

• the Road Administration of Northern Region;

#### Offices under the administration of the ERA:

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

The area of activity of the Road Administration of Northern Region included 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 did not perform maintenance works, but acted as the contracting authority for such works.

Road offices operated as state agencies on the territory of the counties in their respective regions of activity. Road offices contracted for road maintenance works, conducted maintenance in their respective areas of location and might perform any other works stated in their statutes.

#### The main functions of the agencies included:

 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:
- organization of supervision over the management of national roads and over the creation of conditions required for safe traffic.

The Road Administration of Northern Region had departments in all the three counties comprising its area of activity while road offices had departments in the counties where an operator performed road maintenance. The Road Administration of Northern Region, road offices and their respective county departments issued permits, consents and approvals, performed owner surveillance on maintenance works and road management works not requiring a

## Road Management Reform

particular project, submitted proposals for preparing road management ormanagement plans, organized and coordinated activities related to traffic control and traffic safety on national roads, counselled the management of local roads and streets and Followed to the plan of restructuring road management or ganization for 2007-2009, approved earlier (Sept 13, 2007) by the decision of Government Cabinet Meeting, several organizational changes took place during 2008.

Performing maintenance works was provided to contractors in Lääne-Viru, Pärnu, Saare, Tartu and Võru counties. Five state trading companies were established, based on the staff and properties being used by former road operations departments. State trading companies AS Tartumaa Teed and AS Pärnumaa Teed started their activities on June 1st, AS Virumaa Teed on Oct. 1st, AS Saaremaa Teed and AS Võrumaa Teed on Nov. 1st, 2008.

Transition to the fully contract based maintenance gives to state agencies a chance completely devote themselves to

planning road management, to carrying out their customerrole and to improving regional management of road organization.

After Jan. 1, 2009, respectively to the passed reorganization, the ERA administrates four regional agencies called as the next:

- Road Administration of Northern Region
- Eastern Road Centre (former Viru Road Office)
- Southern Road Centre (former Tartu Road Office with Kagu Road Office allied to)
- Western Road Centre (former Pärnu Road Office with Saarte road Office allied to)

(Dislocation of the agencies by their areas of administering look at the attached map "Estonian main and basic roads & Road regions")



## Draft Structure of the ERA in 2009

In addition to the above, the Kagu Road Office included a

Road Museum operating in the former Varbuse Post Station

by the historic Tartu-Võru post road in Põlvamaa.

private roads.



## ----- Estonian Road Administration ------

# ---- Foreign Relations -----



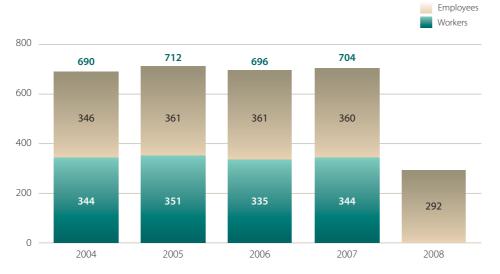
#### Personnel

The total number of employees in the agencies administrated by the Road Administration decreased by 60% in the course of the road maintenance organisation reform in 2000-2004 and remained stable up to the beginning of 2008.

In 2006-2007, the number of employees in the central office of ERA grew, due to an increase in the work volume and additional tasks related to using the European Union Structural Funds. Overall reforms continued in the shape of the 2<sup>nd</sup> stage of restructuring the administrated agencies, and were completed by December 2008. In comparison with 2007 the total number of personnel in the Road Administration and the administrated agencies decreased by 68 employees while all the workers moved to private sector. At the end of the year the total number of employees in ERA was 292 (including 105 in the central office, 43 in the Road Administration of Northern Region and 144 in the road offices), consisting of 271 (93%) managers and specialists and 21 (7%) office clerks and support staff.

There were 83 (31%) licensed road and civil engineers, 29 (11%) road and civil technicians, and 109 (40%) licensed specialists of other professions among managers and specialists.





Estonia joined the Schengen visa room on 21 December 2007. In connection with that the Road Administration reopened all the previously closed national roads crossing the southern border of Estonia.

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

The ERA is represented in professional committees of the mentioned organizations by natural members who are dealing with problems of winter maintenance, pavements quality, roads rehabilitation, HDM-4 etc. Also the cooperation with the Standing International Road Weather Commission (SIRWEC) has been continued.

In 2007-2009, Latvia chairs the Baltic Road Association (BRA). Considering that the representatives of the ERA have

participated in the regular meetings of the BRA Council and other scheduled events organized in Latvia. The traditional Nordic-Baltic seminar on restructuring road management was held in Liepaja in September 2008.

The ERA's cooperating with the programme "Partners for Roads" initiated by the Netherlands continues until the completion of the programme in 2010. Following this programme a conference on design and planning was arranged in Saaremaa in may, 2008.

Based on the Memorandum of Understanding between Baltic and Nordic Road Associations, and cooperation agreements concluded with the road administrations of Denmark, Norway, Sweden and Finland contacts with specialists in the field of scientific and technical issues, training, etc. are going on. In addition to seminar on restructuring mentioned above, joint project NORDBALT included seminars on traffic organization (Riga), on ac-

cessibility problems (Kaunas) and on pavement design (Oslo).

The Estonian Road Administration maintains the web page www.balticroads.net that is a medium of the joint project between Finland, Estonia, Latvia, Lithuania and Russia to forward real-time road information via Internet.

The Road Administration's delegation participated in the regular congress of NRA Via Nordica held in Helsinki (June, 2008), and cooperating with other Baltic States was an exponent at the roads related exhibition of the congress.

The Estonian Road Administration represents Estonia in international projects related to the Pan-European Transport Corridor 1. In agreement with Sweden the application has been launched to include Tallinn-Keila-Paldiski-Kappelskär road in the network of E-roads under number E-265.



# ----- Road Network -----





#### Roads

The total length of national roads as at 1 January 2009 was 16,487 kilometres, i.e. 28.4% of the total length of the Estonian road network, which is 58,034 kilometres.

The length of E-roads in Estonia is 935 km.

Due to taking over certain local roads into the national network, reconstruction of traffic junctions and some corrections in road register the total length of the national roads increased by 21.8 kilometres.

Of the national roads, 1,602 km (9.7%) are main roads, 2,391 km (14.5%) basic roads, 12,444 km (75.5%) secondary roads and 50 km (0.3%) ramps and connecting roads included in junc-

The length of paved roads increased by 243 km from last year and is currently 9,922 km, i.e. 60.2% of the total length of the national roads. The majority of this increase happened on account of paving gravel roads.

The density of national roads is 380 km per 1,000 km<sup>2</sup> and the density of the entire registered road network is 1,336 km per 1,000 km<sup>2</sup> of the territory.

There are 926 bridges on national roads with the total length of 21,342 m, including 6 wooden bridges with the total length of 214 m.

The national road register, providing information on both the national roads and other public roads is publicly available to everyone.

As at January 1, 2008 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 Board, a new national roads layer based on the basic map of Estonia has been introduced for the purpose of updating the data and adding new data.

797 ha and 1130 ha of road land was entered respectively into the land cadastre and into the state assets register in 2008. Consequently 95% of the national roads have been entered into the land cadastre and 93% registered in the state assets register.

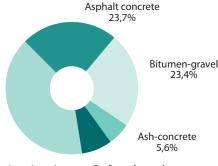
#### Road Network

National roads	16 487 km
Main roads	1 602 km
Basic roads	2 391 km
Secondary roads	12 444 km
Ramps and connecting roads	50 km
Local and private roads	38 489 km
Urban roads and streets	3 058 km
TOTAL	58 034 km



#### **Types of Pavement on National Roads**

TOTAL	16 487 km
Gravel roads	6 565 km
Surface-dressed gravel roads	1 238 km
Ash-concrete	929 km
Bitumen-gravel	3 855 km
Asphalt concrete	3 900 km



Surface-dressed gravel roads 7.5%

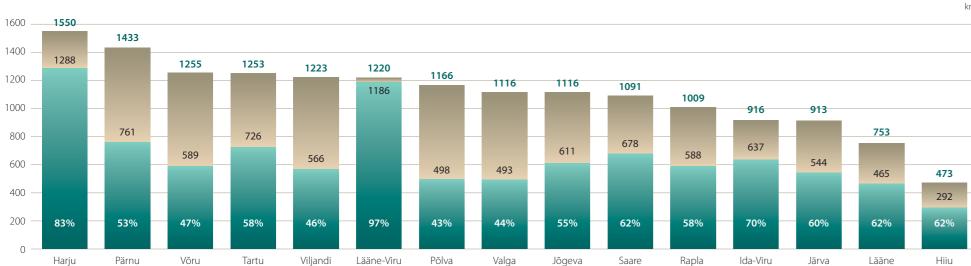
# Road Network -----



### Types of Pavements on National Roads in 2004-2008

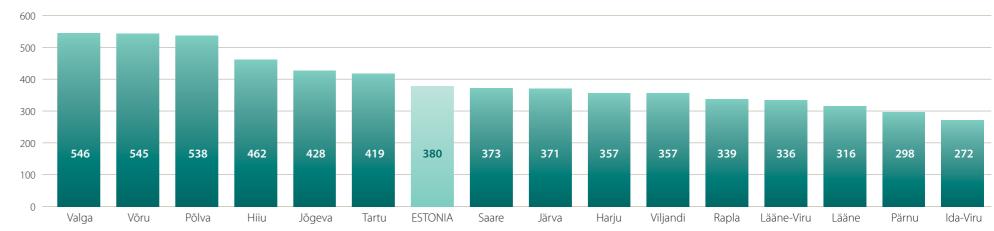
Pavement	20	004	20	05	20	006	200	07	20	008
ravement	km	%								
Asphalt concrete	3 382	20,5	3 482	21,1	3 661	22,2	3 753	22,8	3 900	23,7
Bitumen-gravel	3 962	24,1	3 957	24,0	3 906	23,7	3 907	23,7	3 855	23,4
Ash-concrete	927	5,6	926	5,6	932	5,7	936	5,7	929	5,6
Surface-dressed gravel roads	423	2,6	663	4,0	869	5,3	1 084	6,6	1 238	7,5
Total paved roads	8 694	52,8	9 028	54,8	9 368	56,9	9 679	58,8	9 922	60,2
Gravel roads	7 765	47,2	7 442	45,2	7 111	43,1	6 786	41,2	6 565	39,8
TOTAL	16 459	100,0	16 470	100,0	16 479	100,0	16 465	100,0	16 487	100,0

## Share of Paved National Roads by Counties in 2008



## Density of National Roads by Counties





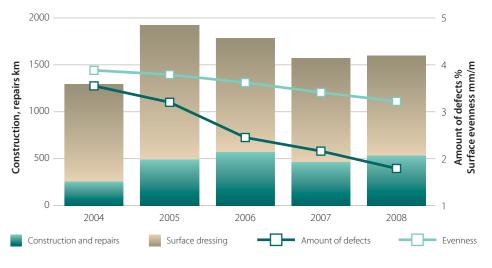
## Condition of Road Surfaces and Bridges

Measurements of the road surface roughness index 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 and in addition the traffic volume on the roads are the main indicators of PMS (Pavement Management System).

Upon studying the diagrams of changes in evenness, improvement can be observed on all road types, but still mainly on the **main roads**. The average IRI value of the entire national roads network has improved as a result of permanent and summarily growing volumes of the construction, repair and maintenance of pavements. The main measure to achieve the improvement of the average evenness of **basic roads and secondary roads** is continuously surface dressing.

Analyse of bridges and viaducts inspection data in 2004-2007 using BMS (Bridge Management System) has concluded their average amortization index 75.3%. To cover the total wear and tear of constructions about 30 bridges per year need to be repaired and ca 150 MEEK to be annually invested for the mentioned purpose. The database of bridge and viaduct condition shall be renewed in nearest years in order to keep the basis modern for analyse.

## Construction, Repairs and Surface Dressing of Pavements Carried Out in 2004-2008. Change of The Amount of Defects and of the Surface Evenness



12  $\overline{\phantom{a}}$  13

in km-s and percentage

# 





## Financing of Road Management

The funding for road management is allocated in a total 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. Distribution of the funding between national and local roads is determined under the Roads Act. 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.

To finance renovation of national roads it has been available to apply for support from the Cohesion Fund (CF) of the EU, from Regional Development Fund and from INTERREG programme. The basis for the utilisation of foreign assistance is the strategic plan "Projects financed by EU in 2007-2013" confirmed by the directive of the Government.

The Cohesion Fund is available to finance of those 6 roads (5,7% of the total length of Estonian national road network) development, which belong to the trans-European transport network TEN-T:

- Tallinn-Narva (E20)
- Tallinn-Pärnu-Ikla (E67)
- Tallinn-Tartu-Luhamaa (E263)
- Jõhvi-Tartu-Valga (E263)
- Tallinn-Paldiski (No. 8)
- Tallinn ringroad (No. 11)

The Regional Development Fund is available to finance development of all the other national roads. Amount of INTERREG instrument is marginal compared to the other funds, and its using is limited with cross-border cooperation programmes.

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 the 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 (the construction of new roads and bridges, the reconstruction of existing roads and bridges, the construction of grade separations etc) 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.

According to the principle of distributing road management resources, funds for financing large-scale road objects on TEN-T roads (with the engagement of EU assistance) and on other main roads were at the disposal of the Road Administration in 2008. The repair of other main roads and main connecting roads was within the scope of competence of the road offices.

Together with the resources carried over from 2007, the amounts available for road management totalled 3554 million kroons in 2008. The actual utilization of funds (cash expense) was 3414 million kroons, including 2764 million kroons at the disposal of the regional road offices and 650 million kroons at the disposal of the central Road Administration. (Read more precisely in attached tables)

# ------ Road Management Funds ------ Road Management



Road Management Funds of 2008

+	hai	usan	au	ro	nn	C

noad Management runds of 2006			thousand kroons
	Planned funds	Utilized funds (cash expenditure)	%
ASSIGNMENTS IN TOTAL	3 553 936,4	3 413 662,3	96,1
including:			
- from the state budget of 2008	3 351 673,0	3 221 257,8	96,1
revenue of the state budget	3 059 634,9	3 012 647,1	98,5
owner's income	27 700,0	74 169,3	267,8
EU assistance	254 338,1	122 610,4	48,2
return on sales	10 000,0	11 831,0	118,3
- funds transferred from 2007	202 263,4	192 404,5	95,1
revenue of the state budget	178 037,6	168 179,1	94,5
owner's income	24 225,8	24 225,4	100,0
FOR THE EXPENDITURES IN TOTAL	3 553 936,4	3 413 662,3	96,1
including:			
1. In the use of ENRA state agencies in total	2 716 768,9	2 764 054,8	101,7
including:			
1.1. From the state budget in total	2 540 963,4	2 588 255,0	101,9
including:			
- staff costs	139 935,6	139 935,6	100,0
- administration costs	581 960,7	581 935,9	100,0
- investments	1 792 106,8	1 791 248,6	100,0
repairs of roads	1 778 049,3	1 777 203,6	100,0
acquisition of machinery and equipment	8 939,8	8 935,6	100,0
acquisition of information technology	507,3	499,0	98,4
buildings	4 610,4	4 610,4	100,0
- owner's income	26 300,0	73 005,4	277,6
- special foreign co-finance		1 469,2	
- assignment and targeted financing	660,3	660,3	100,0
1.1.1. State agencies in total	2 540 963,4	2 588 429,3	101,9
including:			
Road Administration of the Northern Region	698 238,7	701 985,9	100,5

thousand kroons

	Planned funds	Utilized funds (cash expenditure)	%
Kagu Road Office	448 851,0	463 818,8	103,3
Pärnu Road Office	564 068,8	572 306,5	101,5
Saarte Road Office	160 418,8	169 819,6	105,9
Tartu Road Office	347 648,1	351 706,8	101,2
Viru Road Office	321 738,0	328 791,7	102,2
1.2. Funds transferred from 2007	175 805,5	175 799,8	100,0
revenue of the state budget	152 781,3	152 775,9	100,0
owner's income	23 024,2	23 023,9	100,0
2. In the use of the ENRA's Central Office in total	837 167,5	649 607,5	77,6
including:			
2.1. Investments in total	716 476,1	541 801,4	75,6
including:			
for the construction and reconstruction of roads	617 713,1	456 324,1	73,9
purchase of land	83 000,0	79 719,6	96,0
acquisition of IT software and hardware	1 963,0	1 963,0	100,0
acquisition of road and weather inspection systems	13 000,0	2 994,7	23,0
acquisition of vehicles	800,0	800,0	100,0
2.2. Staff costs	46 718,5	44 853,6	96,0
2.3. Administration costs	45 400,0	44 469,0	97,9
2.4. Transfers (membership fee)	715,0	715,0	100,0
2.5. Owner's income	1 400,0	1 163,8	83,1
2.6. Funds transferred from 2007	26 457,9	16 604,7	62,8
including:			
for construction and reconstruction of roads	13 053,5	13 053,4	100,0
acquisition of IT software and road inspection systems	10 878,5	1 025,4	9,4
administration costs	121,3	121,3	100,0
land consolidation	1 203,1	1 203,1	100,0
owner's income for acquisition	400,0	400,0	100,0
owner's income for staff and administration costs	801,5	801,5	100,0

# 



## Utilization of the Funds Allocated for the Management of National Roads

thousand kroons

		Funds in total			incl. Road Offices	
	Planned funds	Utilization	Share %	Planned funds	Utilization	Share %
USED FUNDS IN TOTAL	3 553 936	3 400 585	100,0	2 716 769	2 750 855	100,0
1. ROADS	3 043 874	2 827 556	83,1	2 449 867	2 455 454	89,3
1.1. Road operations	602 585	590 235	17,4	602 585	590 235	21,5
- summer service of paved roads	0	257 673			257 673	
- summer service of gravel roads	0	142 859			142 859	
- upkeep of road structures	0	7 391			7 391	
- winter service	0	182 312			182 312	
1.2. Rehabilitation repairs	1 446 164	1 354 722	39,8	1 416 164	1 333 528	48,5
- repairs of paved roads	1 011 436	847 169		981 436	847 169	
- surface re-dressing	250 086	246 623		250 086	246 623	
- repairs of gravel roads	131 755	129 762		131 755	129 762	
- repairs of road structures	52 887	131 168		52 887	109 974	
1.3. Construction and reconstruction	995 125	882 599	26,0	431 118	531 691	19,3
- roads	953 503	790 922		401 496	487 630	
- road structures	41 622	91 677		29 622	44 061	
2. BUILDINGS	5 421	2 215	0,1	5 421	2 215	0,1
- repairs in road master areas and centres	1 921	2 215		1 921	2 215	
- construction and reconstruction	3 500			3 500		
3. ACQUISITION	36 403	15 471	0,5	9 761	8 688	0,3
- machinery and vehicles	9 887	9 034		9 187	8 334	
- information technology	2 420	2 318		329	228	
- inventory	345	226		245	126	
- road and weather inspection systems	23 751	3 893				
4. PLANNING AND DESIGN	118 888	166 401	4,9	82 129	82 784	3,0
5. LAND CONSOLIDATION	84 203	91 013	2,7			
6. TRAFFIC EDUCATION	16 769	16 761	0,5	1 769	1 400	0,1
7. OTHER EXPENDITURE (maintaining, designing, etc.)	195 176	181 499	5,3	117 937	103 725	3,8
8. FOR TRANSFER OF LAND FROM RESERVE FUND INTO STATE OWNERSHIP	86	84	0,0	86	84	0,0
9. OWN FUNDS	51 926	98 395	2,9	49 324	96 030	3,5
10. TRANSFERS	1 190	1 190	0,0	475	475	0,0

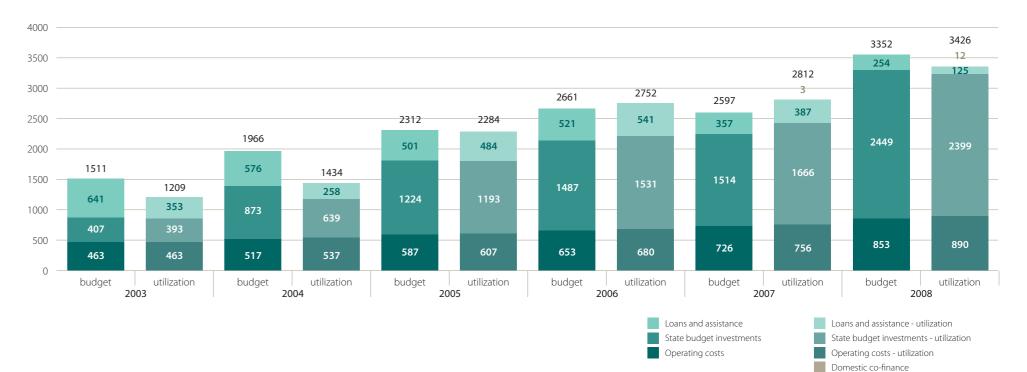
#### Remark:

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

## Funds Allocated for Road Management and Their Dynamics in 2003-2008

million kroons

	В	udget		Utilization					
				From this					
Year	TOTAL	Including loans	IN TOTAL	State b	udget				
		and assistance		Operating costs	Investments	Loans and assistance	Domestic co-finance	Local government partnership	
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			
2007	2 597	357	2 812	756	1 666	387	3		
2008	3 352	226	3 426	890	2 399	125		12	







### **Road Operations**

Road operations are continuously conducted in accordance with the requirements for the state of roads approved with the regulation No. 45 of the Minister of Economic Affairs and Communications (2002). A new draft of requirements was worked out but not adopted due to cuts of the budget.

Since nov.1, 2008 the road offices got free from road operations and all such works are now based on long-term contracts. Respective state trading companies started in Lääne-Viru, Pärnu, Saare, Tartu and Võru counties. Realization of stocks being the property of the state enterprise Vooremaa Teed was initiated.

Distribution of the volumes between performers of road operations has been shown on the attached map.

The total of 590.2 million kroons (including 182.3 million kroons for winter service and 407.9 million kroons for summer service) was used for road operations in 2008. Road operations costs per 1 road kilometre amounted to 35.8 thousand kroons (30.7 thousand kroons in 2007; 26.5 thousand kroons in 2006).

The information system of road weather stations was improved by adding seven new cameras and by founding a new testing station for electronic equipment.

## **New Technologies**

#### Surface dressing with glass fibre supplement

A new surface dressing technology was tested for rehabilitation of crumbled and cracked asphalt pavements in order to improve their weather- and waterproofness – surface dressing with glass fibre supplement. First the bituminous binder is spreaded in two layers while glass fibre is left between these layers. Next the binder is covered with stone aggregate. In comparison with classic dressing the method makes road surface more durable and long-lived as water absorbing will be prevented.

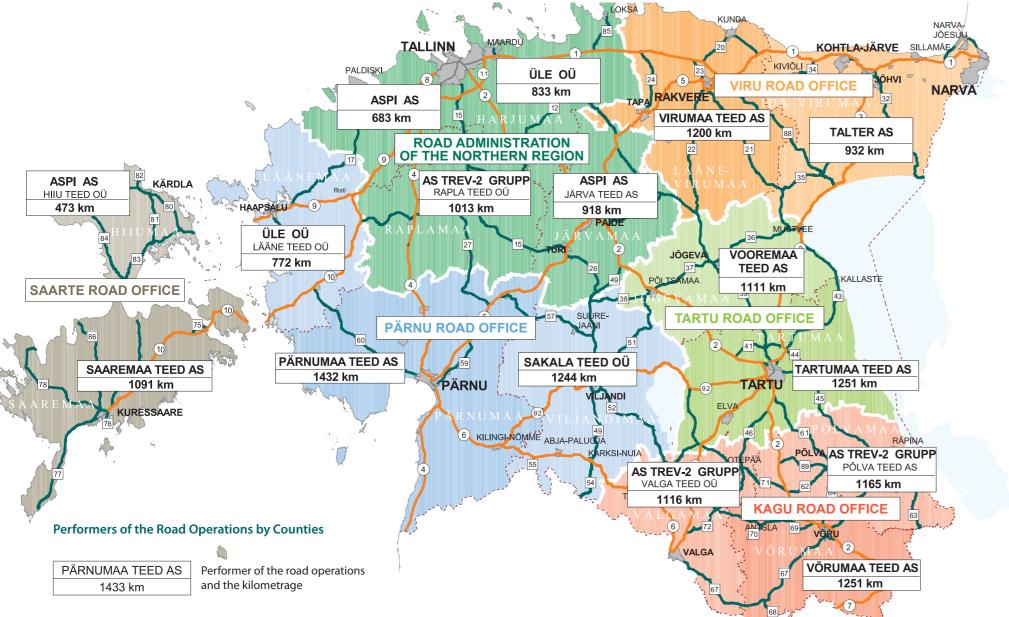
In 2008 surface dressing with glass fibre was executed on 47.9 km of roads. It is planned to use this method in the nearest future about 50 km annually.

#### Ruts repairs with slurr

A technology similar to classic bituminous slurry and microsurficing technologies was experimentally used for repairs of ruts caused by studdied tires on Tallinn-Tartu road km 42-44.

## ------ Road Maintenance Works ------





## Expenditures for Road Operations in 2004-2008

	Expenditures (million kroons)								
	2004	2005	2006	2007	2008				
n total	351,7	393,1	436,5	506,3	590,2				
including:									
Summer service									
million kroons	230,1	266,1	291,8	346,2	407,9				
%	65,4	67,7	66,8	68,4	69,1				
Winter service									
million kroons	121,6	127,0	144,7	160,1	182,3				
%	34,6	32,3	33,2	31,6	30,9				

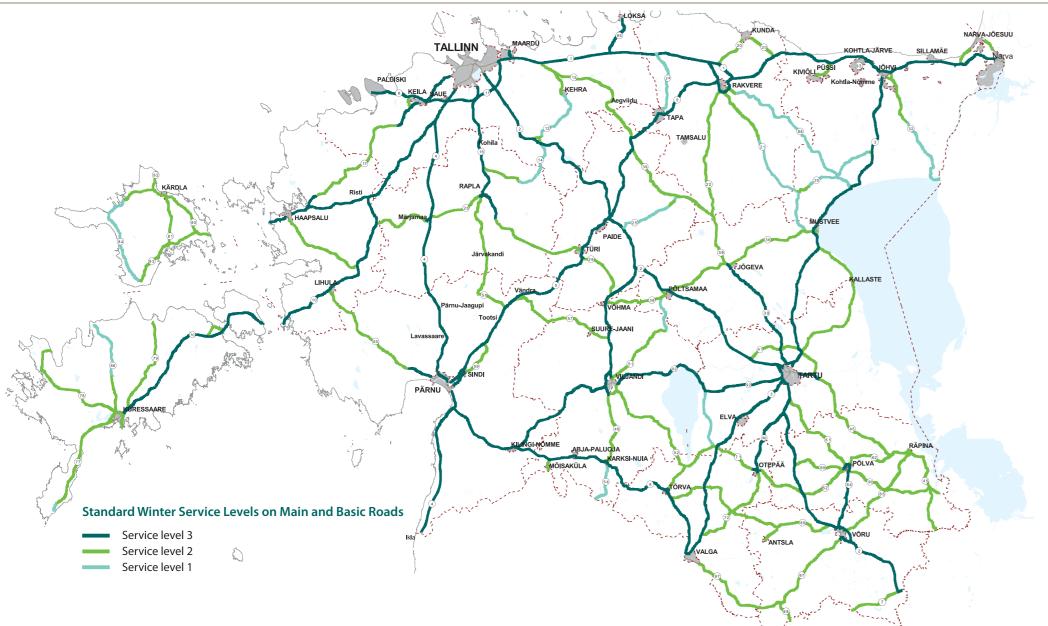
#### Remark:

75,7% or 446,8 million kroons from the total amount (590,2 million kroons) of road operation works in 2008 have been performed by contracts.









## Repairs of TEN-T Roads

After the renovation started in 2007 the 6.8 km long 2x2-lane Vaida-Aruvalla section on Tallinn-Tartu-Luhamaa road was reopened for traffic in September 2008. The section fully meets requirements of 1st class road – all the level crossings or direct access and exit roads have been abolished. There are 2 new grade separated junctions constructed in Vaida and Aruvalla. Also 12.7 km of collector-roads, 2.3 km of noise barriers, 4.8 km of foot- and cycleways and a 124 m long timber bridge for pedestrians have been built in connexion of the renovation works. The total costs of the mentioned project made up 508 million kroons. 50% of this sum costs were covered by the Cohesion Fund (CF) of EU.

A design-construction contract was signed in May 2008 to start the works on Mäo by-pass and crossing Pärnu-Rakvere road. Respectively to the contract, which total sum is 475 million kroons, a new 6.2 km long 1st class road section as the by-pass itself and a 2.3 km long new section on the crossing road will be constructed until the autumn of 2010 that will shorten the distance between Tallinn and Tartu 0.6 km.

#### Other projects in 2008 within the framework of CF technical assistance:

- Construction of the Puurmani grade separated junction (incl. repairs of the old Puurmani bridge) on Tallinn-Tartu-Luhamaa road was completed;
- Preliminary design of Aruvalla-Kose section (km 28.8-40.0 on Tallinn-Tartu-Luhamaa road) was finished and a tender announced for the public procurement of design-construction works;
- The works for design of Tallinn ringroad, Tallinn-Paldiski road, Pärnu and Tartu by-passes,
   Tartu-Elva road section and of Kose-Mäo road section were continued;
- Preliminary design of R\u00f3meda-Haljala section (Tallinn-Narva road) and Tartu northern bypass was started.

During 2008 in amount of 96 million knoons of the CF assistance was used for preparation of construction projects.

Drafting of the strategic document "Plan for the prospective organization of the carriage of passengers and cargo across the Suur Strait" and the strategic evaluation of the environmental impact arising from the implementation of that plan was started in July. The purpose of the mentioned plan is to compare different crossing facilities and clarify the most suitable traffic solution with the financing scheme. The plan is expected to be ready in the autumn 2009.







## Repairs of Other Roads (ERDF projects)

Using co-financing of ERDF the combined project "Restoration repair of the road No. 18 Niitvälja-Kulna km 0-4.7" and "Repair of the road No. 5 Kirna-Reopalu section km 84-88 with construction of a foot- and cycleway" was completed.

The works included restoration repair 8.1 km of road pavement and construction 3.4 km of lighted foot- and cycleway. Performers of the works were contractors AS KPK Teedeehitus and AS Teede REV-2.

The combined project with total expenditures 38 million kroons was financed in amount of 25% from the state budget and of 75% from the ERDF.

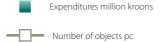
The works being executed, the special tablets of thanks to EU were set on the road section

### Construction and Repairs of Bridges

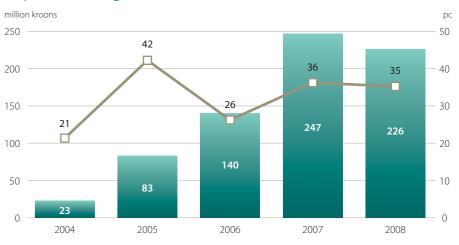
The most remarkable construction works in 2008 were prefabricated concrete viaducts in Vaida and Aruvalla, and Vaida timber-bridge for pedestrians. The last mentioned cable-stayed construction has the longest span (62m), bridged by timber in Estonia.

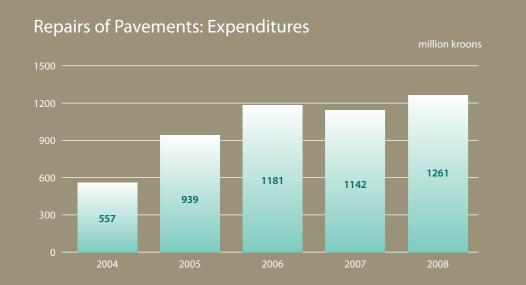
Construction of Rannu-Jõesuu arch bridge has been launched to get ready in the autumn of 2009.

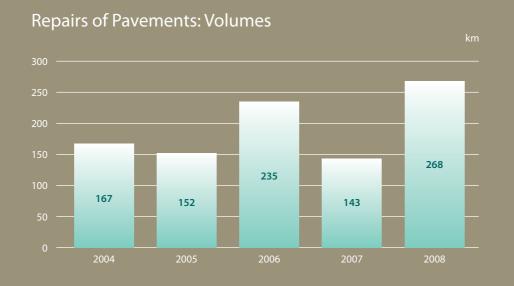
The total amount of financial resources used in 2008 was 93 million kroons for construction works and 133 million kroons for repairs.

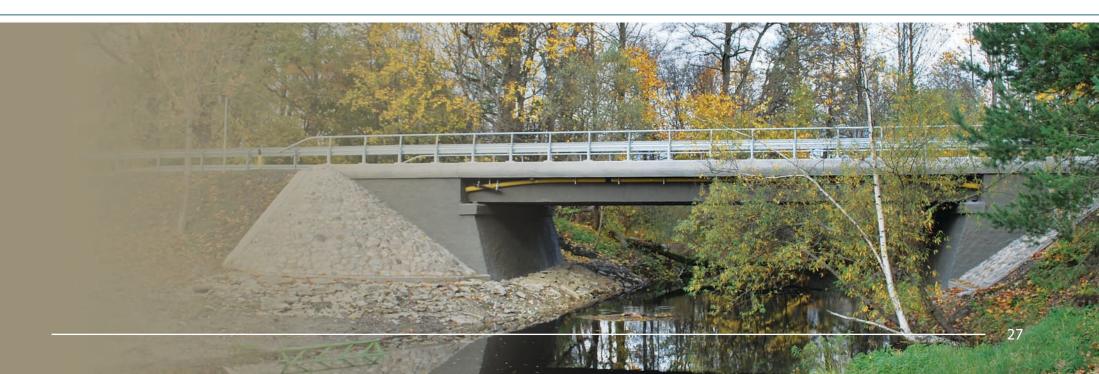


### Repairs of Bridges

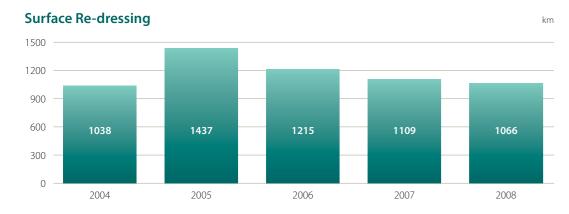


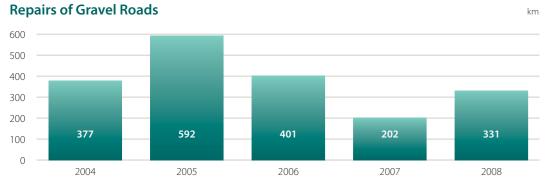


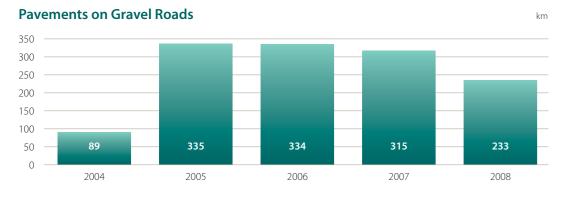












## Surface Re-dressing of Pavements and Repairs on Gravel Roads

The total budgetary funds for surface dressing and the repairs of gravel roads increased in 2008, but the amount of respective works was less compared to the previous year, as the increase of the prices of materials drove up the unit cost. Surface dressing was carried out on the total of 1,065.8 km of pavements.

The total of 330.9 km of gravel roads were repaired.

#### Pavements on Gravel Roads

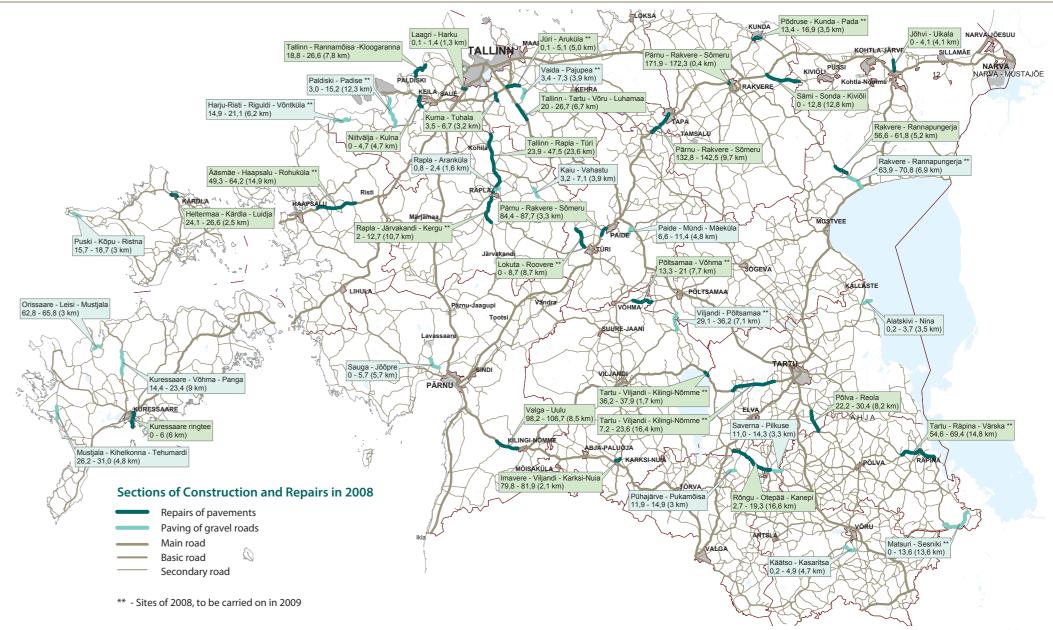
The total of 232.8 km of road sections in all counties were paved on roads between settlements and on other roads with considerable traffic load. The focus in paving works was on secondary roads and less on basic roads. Light and cheap solutions were mostly used (crushed black rubble obtained from repair works and double surface dressing of gravel roads).

The works on the largest object – on the basic road Rakvere-Rannapungerja were continued. Constructing of the first 18,6 km long section that had lasted several years was completed in 2008 while the next 6.9 km long section was started. Total expenditures on this road amounted 31 million kroons.

## By different technologies the next volumes of the works were executed:

- Asphalt concrete pavements 12.1 km
- Mixing in situ 132.2 km (incl. 92.9 km using RAP)
- Double surfice dressing 88.5 km

The most of pavements constructed using RAP were built in Põlva and Pärnu counties (for example Räpina-Aravu 13.3 km, Tõitoja-Häädemeeste 10.1 km, Ridala-Nigula 5,6 km etc.)



# ------ Road Maintenance Works ------



## Road Construction, Repairs and Operations on National Roads in 2008

Activities	Unit	Volume in total		Including				
Activities	Unit	volume in total	Main roads	Basic roads	Secondary road:			
1. Road construction	th. of kroons	737 627,0	220 288,4	147 534,0	369 804,6			
Including:								
a) Construction of paved roads	th. of kroons	709 048,6	220 288,4	147 534,0	341 226,2			
a) Construction of paved roads	km	264,2	20,8	15,1	228,3			
From this by the types of surfaces:								
- asphalt concrete	th. of kroons	536 229,0	220 240,1	124 245,9	191 743,0			
- asprian concrete	km	43,5	20,8	6,0	16,6			
- mix in plant and place	th. of kroons	124 844,3	48,3	21 220,8	103 575,2			
- Thix in plant and place	km	132,3			132,3			
a info and decoring of account and de	th. of kroons	47 975,3		2 067,3	45 908,0			
- surface dressing of gravel roads	km	88,5		9,1	79,4			
h) County ation of annual reads	th. of kroons	28 578,4	-	-	28 578,4			
b) Construction of gravel roads	km	13,6	-	-	13,6			
2. Construction and reconstruction of bridges	th. of kroons	92 889,1	54 132,6	11 978,8	26 777,7			
- reconstructed bridges	pc/m	13 /315	3/142	4/107	6/66			
- reconstructed overpasses	pc/m	3 /308	3/308					
3. Repairs of roads	th. of kroons	1 260 975,6	381 926,4	463 072,9	415 976,3			
A	th. of kroons	883 504,8	356 512,0	376 993,2	149 999,6			
a) repairs of pavements	km	268,5	81,2	106,4	80,9			
From this by the types of surfaces:								
	th. of kroons	856 947,0	356 512,0	365 513,3	134 921,7			
- asphalt concrete overlays	km	250,6	81,2	97,2	72,2			
	th. of kroons	26 557,8		11 479,9	15 077,9			
- mix in plant and place (bitumen-gravel, stabilization, macadam)	km	17,9		9,2	8,7			
	th. of kroons	130 848,2		2 810,1	128 038,1			
b) repairs of gravel roads	km	330,9		15,1	315,8			
	th. of kroons	246 622,6	25 414,4	83 269,6	137 938,6			
c) surface dressing	km	1065,8	89,3	297,8	678,7			
4. Repairs of bridges	th. of kroons	133 206,6	96 140,5	6 958,7	30 107,4			
- repaired bridges	pc/m	17 /279,4	1 /45,4	3 /40	13 /194			
- repaired overpasses	pc/m	2 / 262	2 /262					
5. Road operations	th. of kroons	590 235,4	156 028,7	131 174,2	303 032,5			
From this:		-			·			
- summer service	th. of kroons	407 923,1	91 510,7	82 381,8	234 030,6			
- winter service	th. of kroons	182 312,3	64 518,0	48 792,4	69 001,9			
Road construction, repairs and operations in total	th. of kroons	2 814 933,7	908 516,6	760 718,6	1 145 698,5			
Repairs of buildings	th. of kroons	3 845,2	700010/0	70071010	1 113 030,3			
			000 516 6	760 710 6	1 145 (00 5			
Construction, repairs and operations in total	th. of kroons	2 818 778,9	908 516,6	760 718,6	1 145 698,5			

## Road Construction, Repairs and Operations in 2004-2008

Activities		Expenditu	ıres thousands o	f kroons			Construction and		roads - km bridges - pc/m	
	2004	2005	2006	2007	2008	2004	2005	2006	2007	2008
1. Road construction	118 254	297 031	419 994	583 170	737 627					
Including:										
a) construction of paved roads	118 254	296 920	416 416	581 757	709 049	89,4	334,9	333,9	319,7	264,2
From this by the types of surfaces:										
- asphalt concrete	34 199	146 468	213 453	434 325	536 229	3,3	28,4	20,5	34,6	43,5
- mix in plant an place	70 605	96 648	143 481	109 120	124 845	48,9	181,4	208,1	200,5	132,2
- surface dressing of gravel roads	13 450	53 804	59 482	38 312	47 975	37,2	125,1	105,3	84,6	88,5
b) construction of gravel roads		111	3 578	1413	28578			10,9		13,6
2. Construction and reconstruction of bridges	19 600	43 760	95 494	204 720	92 889					
- reconstructed bridges						15/380,2	10/209,6	11/166,2	20/445,8	13/315
- reconstructed overpasses								3/15,0	3/123	3 /308
3. Repairs of roads	741 320	1 210 429	1 476 715	1 142 073	1 260 976					
Including:										
a) repairs of pavements	557 094	939 337	1 180 620	870 288	883 505	167,3	152,0	235,2	143,0	268,5
From this by the types of surfaces:										
- asphalt concrete	547 904	925 696	1 177 326	834 478	856 947	167,3	146,1	235,0	130,3	250,6
- mix in plant and place	9 190	13 641	3 294	35 810	26 558		5,9	0,2	12,7	17,9
b) repairs of gravel roads	75 637	98 717	76 301	60 166	130 848	377,4	591,8	401,2	202,4	330,9
c) surface dressing	108 589	172 375	219 794	211 619	246 623	1038,1	1436,7	1215,0	1108,8	1065,8
4. Repairs of bridges and overpasses	3 501	39 350	44 088	42 293	133 207					
- repaired bridges						6/95,7	21/587,4	12/536,5	15/286,6	17/ 279,4
- repaired overpasses							11/432,4		1/111	2/ 262
5. Road operations	351 680	393 051	436 468	506 254	590 235					
Including:										
- summer service	230 071	266 093	291 748	346 194	407 923					
- winter service	121 609	126 958	144 720	160 060	182 312					
Construction, repairs and operations in total	1 080 412	1 234 355	1 983 621	2 478 510	2 814 934					

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### Inquiries about Road Conditions

Getting feedback from road users is very important for the Road Administration in order to plan road maintenance activities. Special studies to investigate satisfaction of drivers and passengers have been arranged from 2002.

Investigations dealing with accessibility to road information and with assessment on driving conditions by road users were carried out by Emor AS in last summer and winter.

Winter road conditions were estimated as "good" or "excellent" by 65% of drivers. Timing of winter service works was estimated as "good" or "excellent" by 62% of drivers. Thereby the growth of the mentioned positive estimations was respectively 16% and 11% compared to the last study 2 years ago.

It is reasoned that summer road conditions are better than in wintertime. Still the estimations have become esentially higher than in summer 2006. Estimations "good" or "excellent" were

given by 79% of drivers regarding driving conditions, by 69% - regarding the arrangement of summer service works and by 70% regarding traffic organization at the time of road repairs. It means growth of estimations by 16% compared to the previous study.

Accessibility of road information was generally estimated as "good". Continuously the preferred sources to get information are radio (63% in winter and 48% in summer) and the web page of the Road Administration (about 20% both in winter and summer)

A conclusion can be made that the results of passed study are satisfactory, but it does not mean any allowance regarding the attention and exactingness towards road maintenance works.

#### **Environmental Measures**

**Vaida-Aruvalla road section** on Tallinn-Tartu road was completed considering special measures for mitigating of environmental impact. 2.4 km of noise barriers were built and a number of hedges and trees planted in order to protect roadside households. 3.3 km of directing fences were set up and a special tunnel constructed on tracks of wild animals.

Researches of natural risk factors were ordered for those road sections expected to be renovated by I class requirements in the future. Also thematical plannings will be prepared in order to specify dislocation of road alignments. At the same time strategic evaluation of the environmental impact will be arranged using the existing natural researches as source material

Natural risk factors were investigated by the experts of Hendrikson & Ko OÜ on the next road sections:

- No. 2 (E263) km 92-180 Mäo-Tiksoja
- No. 4 (E67) km 13-142 Ääsmäe-Uulu

The greenery project of shore paths near highway bridges makes possible for wild animals to cross the road under a bridge. Respective solutions were worked out by the landscape architectors of Artes Terrae OÜ for the shore paths of Jägala and Valgejõe bridges on Tallinn-Narva road and of Põrvetu and Kobratu bridges on Jõhvi-Tartu road. The greenery projects include design of the area under bridges, both shores and environs using proper species of plants.

**Project of places for return** completed by K&H AS in the end of 2008 deals with passes in animal fences that could be used by a wild animal, if it has accidentally come upon road area, to get back onto safe territory. The project has been made for the region of Jägala traffic junction on Tallinn-Narva road.



## ------ Road Traffic ------





#### Traffic Count in 2008

Traffic count is the basis for road design, for determination of service levels and for applying several traffic safety measures. Though traffic count has been handled long time, it is possible to speak about up-to-date count only from 90-ties of the last century when the first automatic counters were set on roads.

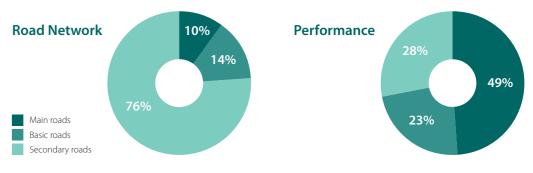
The renovation of stationary counting points was started in the last summer. There were 55 counting points that round-the-clock measured number of passing vehicles and their speed in Estonia by the end of 2008.

Changes in economy reflect directly in traffic count. Consequently in 2008 the traffic flow decreased on main roads by 3.9% and on basic roads 10.9% compared to 2007.

The overall highest density (AADT 43,661) was fixed on the section km 0.0-0.1 of Viimsi-Randvere secondary road. The highest density on main roads (AADT 31,967) was fixed on the section 10.4-11.2 of Tallinn-Narva road. The biggest reduction of AADT on main roads was measured on Viljandi – Kilingi-Nõmme road section (21.9%) and on basic roads on access to Lehtma port (29%).

The reorganization of the traffic count system continues in 2009 with the main goal to perform count data on specific web site. Further objectives are to introduce traffic modelling and by means of special computer programmes to assure the adequate results using less number of counts.

#### Traffic Performance on National Roads in 2008

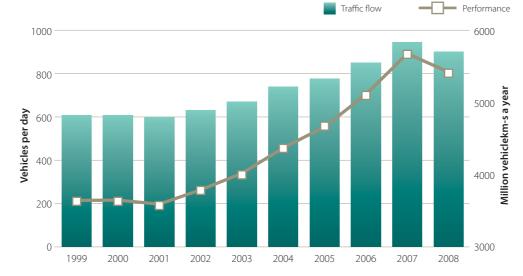


# ------ Road Traffic ------



## Average Traffic Flow and Overall Traffic Performance on National Roads in 1999-2008

		Performance			
Year	Main roads	Basic roads	Secondary roads	National roads on average	Million vehiclekm-s a year
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	4 019
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
2007	4 741	1 589	334	945	5 676
2008	4 552	1 418	334	901	5 422



## Number of Vehicles

Year	Number in total —		Including	Vehicles per 1000 inhabitants		
		Lorries	Buses	Cars	Vehicles in total	Cars
1992	354606	62728	8409	283469	235	188
1993	389059	62971	8663	317425	263	215
1994	440198	61124	6918	372156	304	257
1995	456051	65598	7009	383444	320	269
1996	484731	71304	6829	406598	345	289
1997	510740	76605	6457	427678	367	307
1998	537877	80617	6306	450954	390	327
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	486	413
2007	608356	80280	4310	523766	454	391
2008	639472	83350	4292	551830	477	412

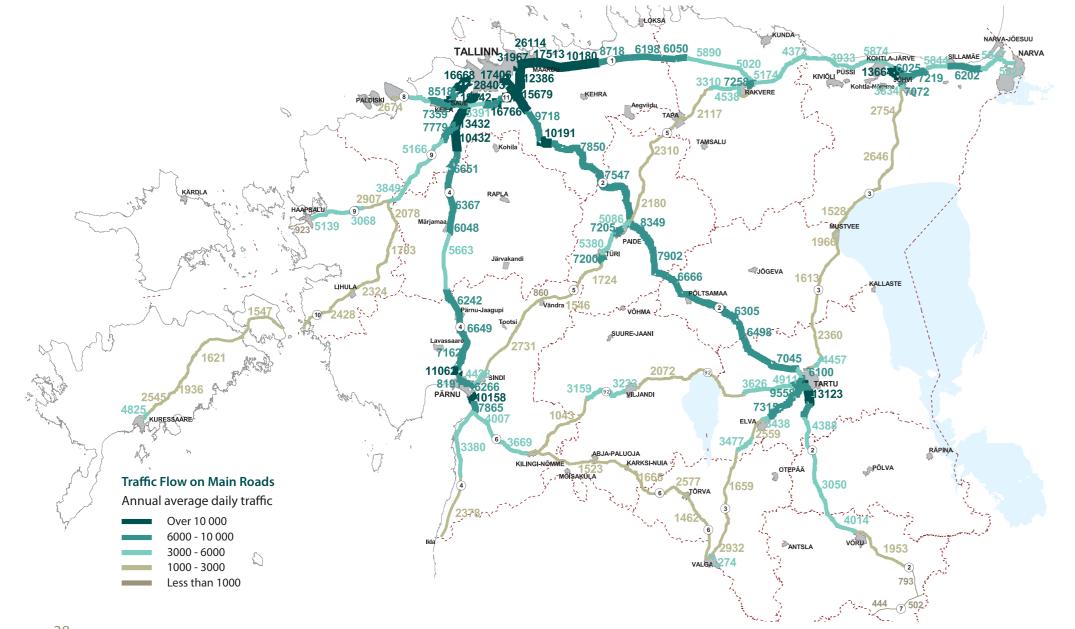


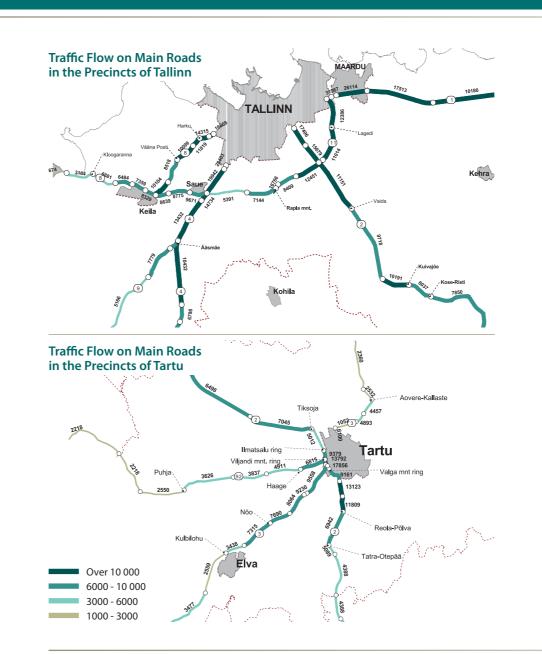
In 2008 the traffic flow on national roads decreased by 4.1%.

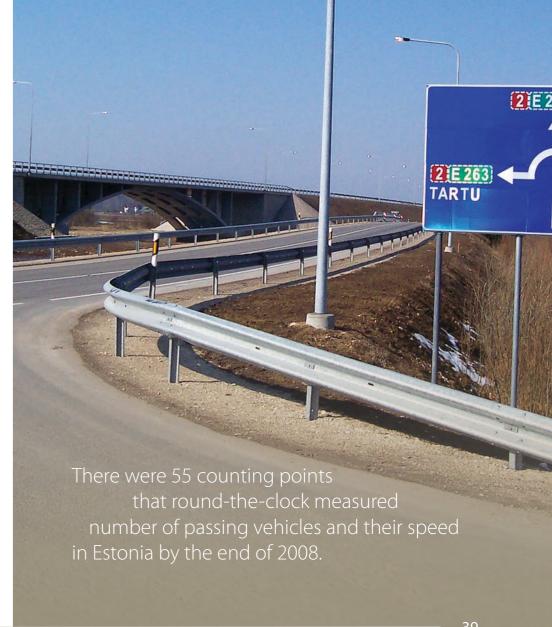


# ------ Road Traffic ------









# ----- Traffic Safety ------

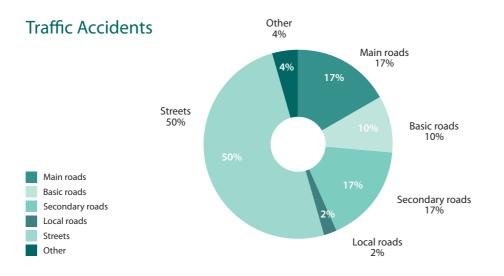


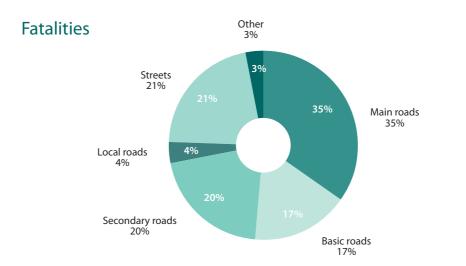


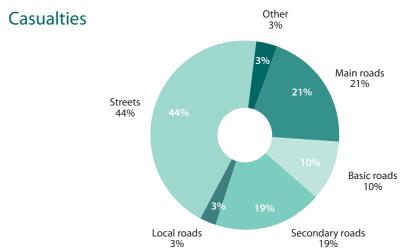
### **Traffic Accidents**

2008 was the sixth year when the ground of traffic safety management was the Estonian National Traffic Safety Programme. When before launching the programme in 2002 the number of traffic fatalities registered in Estonia was 223, then in 2008 – 132. The main objective of the traffic safety programme is to reduce the number of fatalities by 10...15 victims annually and achieve the level of 100 fatalities in 2015. Still the situation has not been stable all the time. Though the number of fatalities was reduced by a quarter in 2003 and then kept during a short time, the number of deaths in traffic grew up to the level of 200 in 2006-2007, and several goals of the programme were not met. The change towards improving took place in 2008 when overall traffic flow the first time in ten last years decreased a bit. The number of fatalities was reduced by a third compared to 2007.

In total, 1,863 (2,450 in 2007) traffic accidents with casualties were registered in 2008, with 132 (196) people killed and 2,393 (3,247) people injured. At the moment the situation in Estonia could be compared with Italy, Spain and Belgium, for example, but our indicators still continue to be lower than the average level of EU.

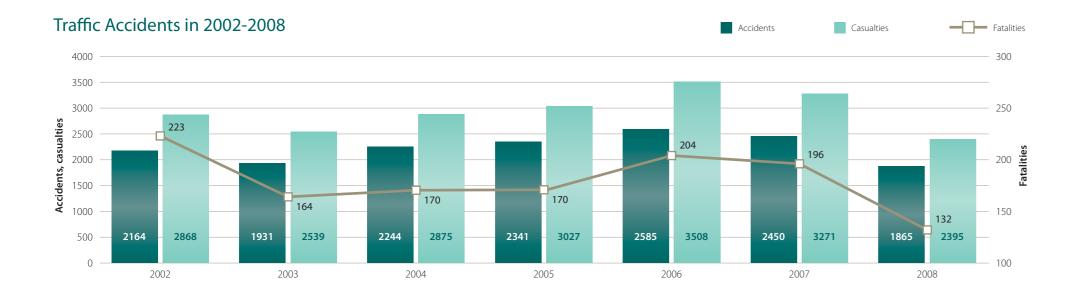


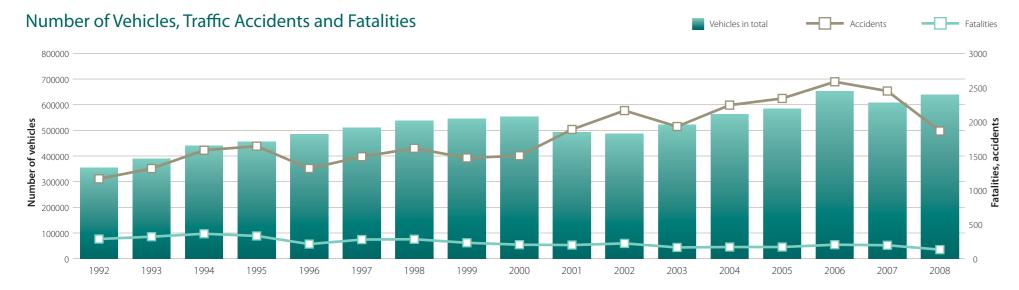




# Traffic Safety







## Ratios of Traffic Safety in 1998-2008

		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total traffic accidents		1613	1472	1504	1888	2164	1931	2244	2341	2585	2450	1865
	1996=100%	100,0	91,3	93,2	117,0	134,2	119,7	139,1	145,1	160,3	151,9	115,6
Traffic accidents per 10 000 vehicles		30,0	27,0	27,2	38,3	44,5	36,9	39,9	40,0	39,6	40,3	29,2
Traffic accidents per 100 000 inhabitants		116,9	107,3	110,0	138,7	159,6	142,9	166,5	174,1	192,6	182,7	139,1
Fatalities		284	232	204	199	223	164	170	170	204	196	132
	1996=100%	100,0	81,7	71,8	70,1	78,5	57,7	59,9	59,9	71,8	69,0	46,5
Fatalities per 10 000 vehicles		5,3	4,2	3,7	4,0	4,6	3,1	3,0	2,9	3,1	3,2	2,1
Fatalities per 100 000 inhabitants		20,6	16,9	14,9	14,6	16,4	12,1	12,6	12,6	15,2	14,6	9,8
Fatalities per 100 accidents		17,6	15,8	13,6	10,5	10,3	8,5	7,6	7,3	7,9	8,0	7,1
Fatalities per 100 injuries		14,3	13,7	11,1	8,1	7,8	6,5	5,9	5,6	5,8	6,0	5,5
Casualties		1990	1691	1843	2443	2868	2539	2875	3027	3508	3271	2395
	1996=100%	100,0	85,0	92,6	122,8	144,1	127,6	144,5	152,1	176,3	164,4	120,4
Traffic accidents caused by drunken drivers		423	322	318	393	495	394	398	431	518	521	347
•	1996=100%	100,0	76,1	75,2	92,9	117,0	93,1	94,1	101,9	122,5	123,2	82,0

## Types of Traffic Accidents

The human injury traffic accidents could conventionally be divided into three main groups:

- Running down of pedestrians
- One-vehicle accidents (run-off-road)
- Collisions of moving vehicles

All the other kinds of traffic accidents make up less than a tenth of the total volume.

Reducing of one-vehicle accidents in 2008 was the most essential factor why also the situation in general was improved as the number of killed in one-vehicle accidents decreased by 49 (total decrease 64). The reducing is probably linked to strenghthening of traffic inspection on main and basic

roads, due to what the usual reasons of one-vehicle accidents – non-adequate speed, drunken driving and carelessness of beginners or inexperienced drivers – were partially eliminated.

Reduction of collisions between motor vehicles has been more modest (as result just 10 fatalities less than in 2007). Continuously every second collision that happens on main and basic roads takes place on some crossing where the driver coming from minor road cannot evaluate the speed of those vehicles driving on the primary direction, or disregards the traffic rules. The other problem connected to highways is different, sometimes even wrong understanding of drivers about fluent and safe traffic. Especially a lot of drivers

lack the habits to keep proper distance and to avoid risky driving past.

A problem among children is accidents with cyclists having non-sufficient experience for driving on their own. The children of secondary school age (7-16 years old) make 20% of the total number of cyclists injured in traffic accidents. Children younger than 10 years are allowed to cycle only on footways and in courtyards. Nevertheless they are year by year met on carriageways of roads where the youngest hurted cyclist in 2008 was just 3 years old.

The children 14-16 years old makes a quarter of the total number moped drivers injured in traffic accidents. The rea-

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son is lack of experience. Though the special driving licence is required from 14-15 years old mopedists, just a few of those got into accidents have had the respective licence.

There were no changes in statistics of cycle- and mopedaccidents as a whole in 2008. Nevertheless the growing share of elderly cyclists and moped drivers fallen in traffic accidents makes to worry. The faults occurring more often are forgetting required signal of direction before maneuvers and unwillingness of car-drivers to give the way on crossings to the cyclists that have privileges. On the background of reduction of the total number of victims there were no improvements concerning pedestrian accidents. The 1st and 4th quarters of 2008 were especially tragic when respectively 14 and 13 pedestrians were killed in the dark hours. Just two of them wore reflector while using of reflector gets more and more popular in a whole. When the middleaged make up the risk group in rural regions, then in bigger towns the underaged pedestrians are in more danger. The educational work in primary school classes has improved traffic safety of the youngest schoolchildren, but problems

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appear anew among teenagers, who often ignore traffic lights and does not use the most safe ways and facilities to cross streets.

The total number of young (up to 30 years old) car- and motorbike-drivers involved in personal injury accidents is decreased in 2008 by one third, and the total number of fatalities in such accidents was less by 49 than in 2007. Still the risk of 20-30 years aged drivers to be involved in traffic accidents is continuously bigger than of older drivers.

### Indicators of Traffic Safety by Roads and by Types of Accidents in 2008

	Traffic accidents					Fatalities					Casualties				
		Including				Including				Including					
	Total	National roads	Local roads		Other places	Total	National roads	Local roads		Other places	Total	National roads	Local roads		Other places
TOTAL	1865	809	45	931	80	132	95	5	28	4	2395	1188	69	1056	82
incl. in daytime	1696	793	50	816	37	120	89	3	27	1	2243	1192	77	931	43
at night	169	16	-5	115	43	12	6	2	1	3	152	-4	-8	125	39
By types															
Collision of motor vehicles with moving vehicles	1024	436	24	556	8	67	57	0	10	0	1438	696	40	690	12
ncl. with motor vehicle	722	336	14	371	1	50	41	0	9	0	1115	594	25	494	2
with motor/bycicle	302	100	10	185	7	17	16	0	1	0	323	102	15	196	10
Collision of motor vehicles with obstacle	78	47	2	27	2	5	5	0	0	0	98	62	2	32	2
incl. with standing vehicle	29	10	0	18	1	1	1	0	0	0	40	16	0	23	1
Collision with pedestrian	513	77	3	398	35	35	17	0	18	0	507	71	6	394	36
One-vehicle accident	756	586	33	124	13	80	62	3	13	2	1123	893	46	168	16
Other accidents	-506	-337	-17	-174	22	-55	-46	2	-13	2	-771	-534	-25	-228	16

## Accidents on Highways

Main national roads make up about 3% of the whole Estonian road network while a fifth part of the all personal injury accidents and a third of the all fatalities were registered on main roads.

	2008	2007
Traffic accidents on main roads	314	455
Killed	46	72
Injuried	493	715

Due to high speeds the results of accidents on highways are more severe, especially regarding pedestrians and cyclists. Every fourth victim killed on main roads was pedestrian or cyclist.

Despite the place, where an accident happens, the course of events is most of all affected by the skills, abilities and health of road user itself. 91 fatalities of the overall 132 in 2008 happened either as result of mistakes and carelessness of victims or due to breaking traffic regulations or driving consciously in the car of a drunken driver.

#### **Drunken Drivers**

The share of drunken drivers among those involved in traffic accidents registered in towns and on major roads has decreased.

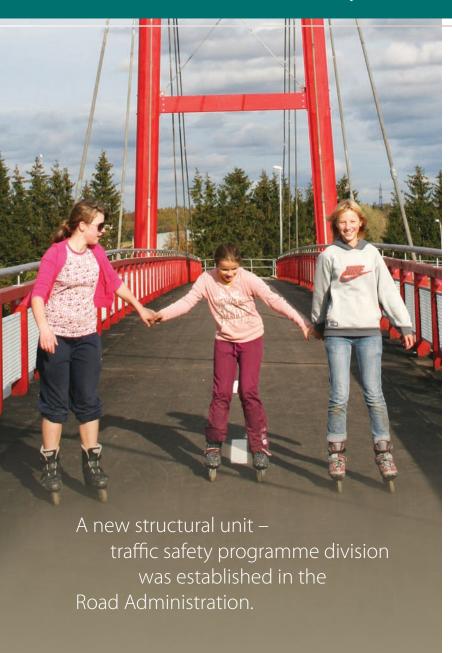
Situation on secondary roads, where traffic supervisory is more modest, has not improved. Drunken driving has directly or indirectly caused death of 54 persons in total. 27 drivers killed himself, 15 passengers died in the car of drunken driver, 3 people were killed in collision with the car of drunken driver and 9 killed pedestrians were drunken.

Based on the data of traffic police the share of drunken drivers among the overall amount of controlled drivers is 0.74% and the share of those with remains of drunkenness – 0.35%. The youngest drunken driver, who caused a traffic accident with casualty, was a 14 years old schoolboy from Põlva county.



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### **Traffic Safety Programme**

The application plan of the National Traffic Safety Programme for 2008-2011 deals with such working fields as legislation, traffic safety management, traffic education, media campaigns, traffic inspection, mitigation of the results of accidents and traffic environment.

One of the more serious challenges in 2008 was drafting of changes in legislation that, for example, will make available electronic traffic inspection.

A new structural unit – traffic safety programme division was established in the Road Administration. On governmental level – activities of the Road Traffic Committee were launched. The committee includes certain members of the Government, representatives of municipalities and traffic safety top-specialists from different fields.

#### On the field of traffic safety research the next activities were implemented or continued:

- Large monitoring of traffic behaviour
- Determination of traffic performance in 2007
- Investigation of the places on main and basic roads where traffic accidents concentrate
- Analyse of the problems connected to truck traffic on Tallinn-Tartu road
- Assessment of public attitude towards special traffic safety measures (personal reflectors, cycling helmets, zebra crossings etc.)
- Automatic speed inspection
- Activities of the expert committee for determining the causes of traffic accidents with severe consequences.

#### **Traffic Education**

The mission of traffic education has been to value traffic safety with respective studies and trainings connected to it.

Over 200 teachers of secondary schools and kindergartens have passed professional training on traffic safety in 2008. Everybody of those has also passed practical training how to guide a group of children on street.

During the last year traffic education has become a theme of diploma works in some high schools, and the speciality of traffic safety was opened in Haapsalu College of Tallinn University.

The traffic education division of the Road Administration has operated 13 years already. It has prepared, ordered and spread free of charge a lot of study material and aid on the subject of traffic organization and traffic safety incuding small books, cartoons and every year special traffic calendar for children. Very popular is annual traffic safety contest for children "Vigurivänt" ("tricksy biker") that celibrated its 10<sup>th</sup> anniversary in 2008.

Also consistent spreading information and special media campaigns (using seat belts, wearing the reflector for pedestrian, observance speed limits in settlements etc.) were continued.