Annual Report 2009

Estonian Road Administration

Dear reader,

The passed year has been remarkable and full of transformations for the Estonian Road Administration. The present yearbook of the ERA gives you a thorough review of restructuring, usage of financial sources and definite results of activities that have taken place in 2009.

The draft Act initiated by the Ministry of Economic Affairs and Communications about joining the Motor Vehicle Registration Centre (ARK) and the Road Administration into a single authority – the Estonian Road Administration (ERA) on July 1, 2009 – was adopted by the parliament in May.

The former duties of the ARK were divided between the Road Administration and its local institutions. Restructuring road centres into local institutions of the ERA – regional road administrations – meant their former list of duties being supplemented with the right to exercise state supervision and with the activities of vehicle registration bureaus, including examination, vehicle registration and supervision over driving schools and vehicle review centres. By that the regions were given wider rights of decision making in problems of local importance, and certain cost effectiveness has been achieved via reduction of auxiliary operations.

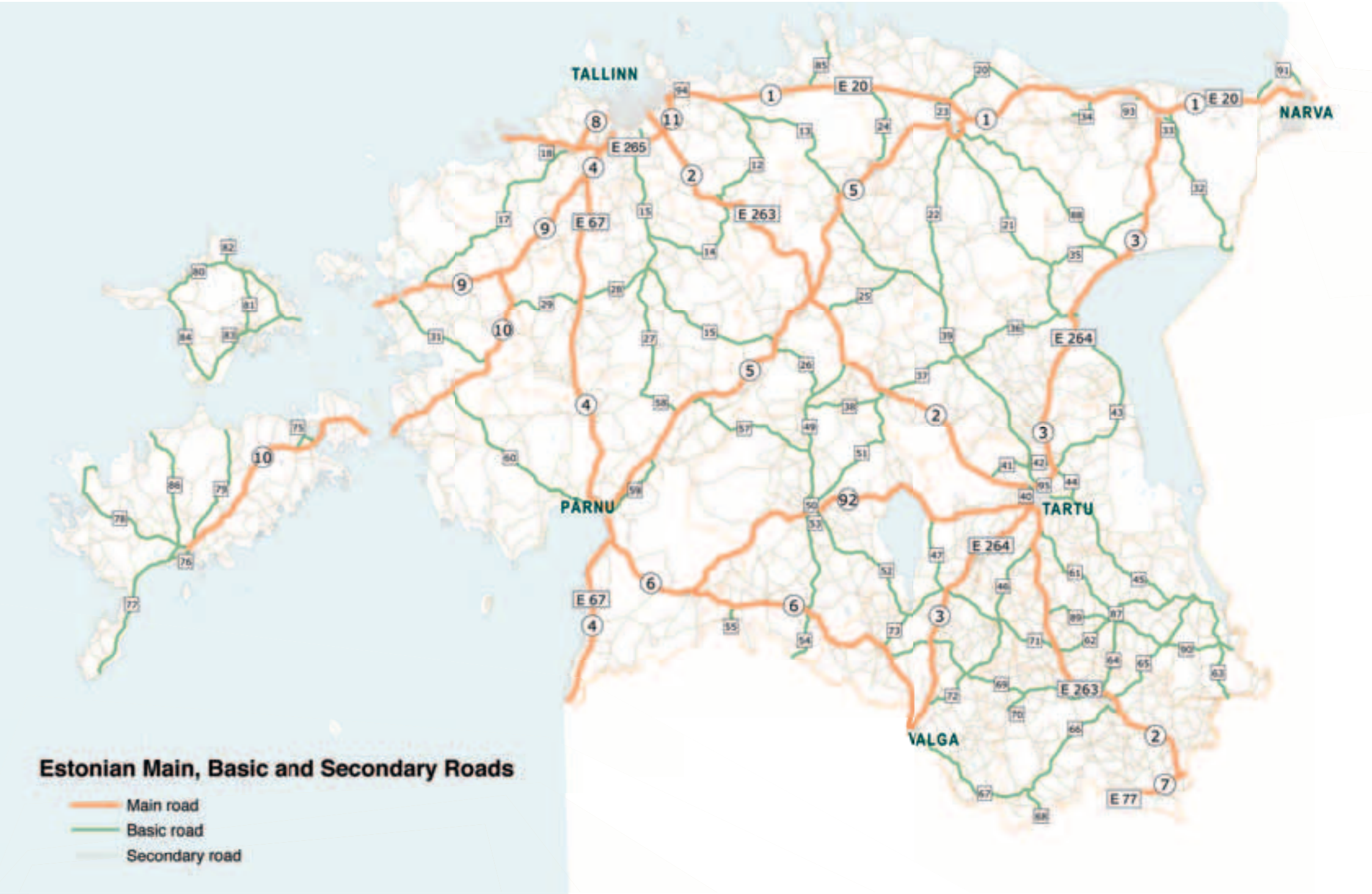
The changes connected with the joining are also felt by the users of our services. The new Road Administration is located in Tallinn, Pärnu Road 463a, but the Road Administration of the Northern Region has moved into the premises of the former ARK on Mäepealse 19. The Local Vehicle Register Bureau in Jõgeva has moved into the buildings owned by the road administration, and similar changes have been planned in Haapsalu and Kärdla.

Athough 2009 was a stressful year for all the institutions operating in the state sector, the ERA completed scheduled planning and costruction works despite a 300 million kroon budget reduction. No concessions were made regarding the quality of the basic activities. According to an inquiry among drivers road users were satisfied with the level of summer and winter road service.

Traffic safety has improved as well. The last year in traffic was better than ever expected, as the number of fatalities was two times smaller than in 2006. The number of fatalities is comparable to 1947, when the number of vehicles on our roads was a hundred times smaller. We can be grateful for such good results mainly to the traffic safety specialists and active work of the police.

The following pages will give
a more precise overview of our activities.
Enjoy the reading!

Sincerely
Tamur Tsäkko
Director General
of the Estonian Road Administration


TALLINN
NARVA
PÄRNU
TARTU
VALGA
E 20
E 265
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Estonian Main, Basic and Secondary Roads
Main road
Basic road
Secondary road

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Estonian Road Administration

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

The ERA carries out implementation of the state policy and development plans, management functions and state supervision within the scope of the duties prescribed by law; applies enforcement powers of the state in the area of road management, traffic safety, public transport and environmental safety of vehicles on the grounds and to the extent established by legislation.

The main functions of the Road Administration are:

1) road management and creating conditions for safe traffic on national roads;
2) increasing traffic safety and reducing harmful environmental impact of vehicles;
3) organization of traffic and public transport;
4) state and owner's supervision over road construction and road maintenance, road usage, the service level of roads and organizing state supervision over compliance with the requirements established by legislation regulating the ERA's area of activity and, where necessary, applying enforcement powers of the state;
5) keeping state registers of roads, vehicles and public transport; observing special requirements established by legislation for making registry entries;
6) participating in the development of the legislation regulating the ERA's area of activity and making recommendations for amending and supplementing the legislation; participating in working out the terminology connected with the ERA's area of activity;
7) participating in the elaboration of policies, strategies, and development plans in the ERA's area of activity; participating in the preparation and implementation of international projects in the ERA's area of activity.

Road Administration has the following local institutions:

1) Road Administration of the Northern Region
2) Road Administration of the Western Region
3) Road Administration of the Eastern Region
4) Road Administration of the Southern Region

Estonian Road Museum

The Estonian Road Museum, which was established in 2002, operates as a department of the Road Administration of the Southern Region. The museum is situated in the former Varbuse Post Station by a historic Tartu-Võru post road in Põlvamaa. The Estonian Road Museum displays a collection of data and research in connection with the history of Estonian roads with the aim of educating and entertaining the general public. Supported by the European RDF, new open-air areas offering new attractive educational and recreation facilities for visitors are being built on the museum territory and are expected to be ready in the summer of 2010.

Road Information Centre

Since 1997 the Road Administration supplies road users with information about road and traffic conditions via the Road Information Centre. The information includes current conditions on national roads, traffic restrictions and changes in traffic organization. Offering information services is based on contracts with private entrepreneurs. The Road Information Centre (tel. 1510) works round the clock.

Road Management Reform

When the last road offices completed their activities at the end of 2008, the privatization process launched in Põlva County in the year 2000 reached its end. Since January 1, 2009 the number of subordinate regional agencies administered by the ERA was reduced from 6 to 4. Besides the existing local institution – the Road Administration of the Northern Region three new agencies – the Southern Road Centre, the Western Road Centre and the Eastern Road Centre started to carry out regional road management.

The new agencies were established and called as follows:

1) Kagu Road Office joined Tartu Road Office and was renamed as the Southern Road Centre. Its operating area included Jõgeva, Põlva, Tartu, Valga and Võru Counties.
2) Saarte Road Office joined Pärnu Road Office and was renamed as the Western Road Centre. Its operating area included Hiiu, Lääne, Pärnu, Saare and Viljandi Counties.
3) Viru Road Office was renamed as the Eastern Road Centre. Its operating area included Ida-Viru and Lääne-Viru Counties.

During restructuring the number of official posts in the subordinate agencies was reduced from 322 to 210. That saved 23 million kroons of management costs for road maintenance per year.

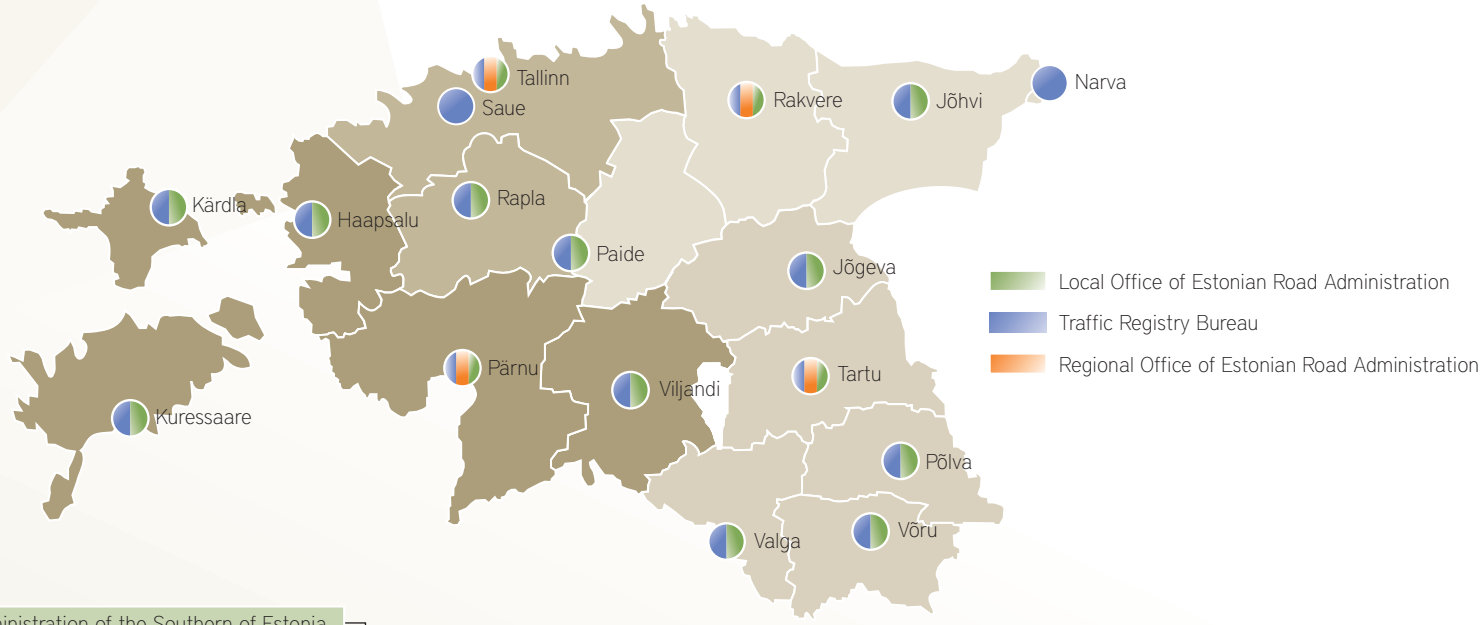
In connection with the plan of joining the ERA and the ARK, a scheme was worked out for restructuring the road centres into local institutions. The mentioned change came into being on July 1, 2009, when the reformed ERA started to work with four subordinate regional institutions – the Road Administrations of the Northern, Southern, Western and Eastern Regions. Former local vehicle register bureaus were joined with the regional RA-s.

Regional road administrations got an additional task of 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.

The former leader of the ARK Tamur Tsäkko became the director general of the restructured ERA. The former managers of the road centres remained directors of the new regional road administrations: Kuno Männik in the RA of the Southern Region, Eugen Õis in the RA of the Eastern Region and Enn Raadik in the RA of the Western Region. Erkki Mikenberg continued as director of the RA of the Northern Region.

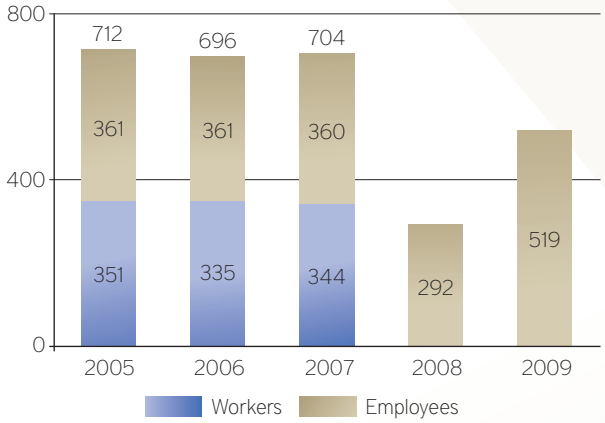
The new ERA organization got a chance to concentrate more on perspective planning, co-ordination of the activities of the whole system and finding new solutions. The regions were given more decision making power concerning problems of local importance. In addition, certain cost efficiency was achieved by sharing support services.

Photo: Lemminkäinen Eesti AS

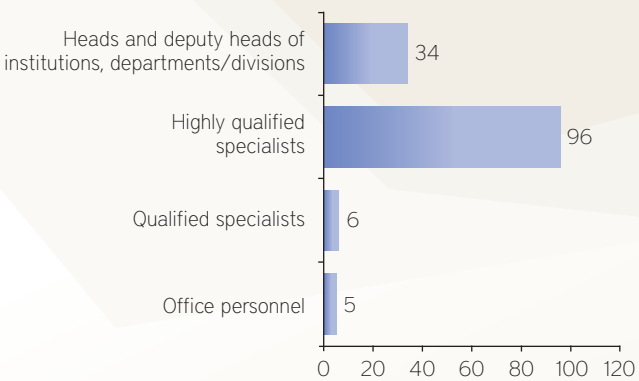


- Director of the Road Administration of the Southern of Estonia
- Director of the Road Administration of the Eastern of Estonia
- Director of the Road Administration of the Western of Estonia
- Director of the Road Administration of the Northern of Estonia
- **Director General**
  - Public Relations Department
  - Finance Department
    - Budget Division
    - Accounting Division
  - Internal Audit Department
  - Road Maintenance Counsellor
  - Traffic Safety Counsellor
  - Assistant to DG
  - Assistant Adviser
- **Debuty Director General** Road Maintenance
  - ROAD MAINTENANCE DEPARTMENT
    - Supervision Division
  - STRUCTURAL FUNDS DEPARTMENT
  - TRAFFIC MANAGEMENT DEPARTMENT
- **Debuty Director General** Construction
  - PLANNING DEPARTMENT
    - Land Division
  - CONSTRUCTION DEPARTMENT
- **Debuty Director General** Traffic Safety
  - TRAFFIC SAFETY DEPARTMENT
    - Traffic Education Division
    - Traffic Safety Program Division
  - EXAMINATION DEPARTMENT
- **Debuty Director General** Transport
  - REGISTRATION DEPARTMENT
  - TECHNICAL DEPARTMENT
    - Technical Inspection Division
    - Type-Approval and Certification Division
  - PUBLIC TRANSPORT DEPARTMENT
- **Debuty Director General** Administration
  - Chief Specialist
  - ADMINISTRATIVE DEPARTMENT
  - INFOTECHNOLOGY AND REGISTRY DEPARTMENT
    - Registry Division
  - PERSONNEL DEPARTMENT
  - LEGAL DEPARTMENT
    - Procurement Division

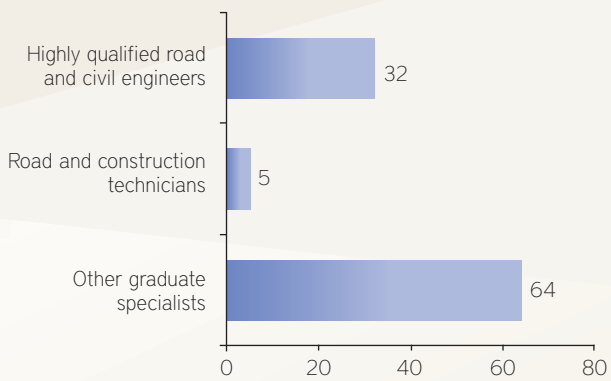
Number of personnel in 2005 - 2009



Positions (excluding regional offices)



Employees (excluding regional offices)



Personnel

On May 7, 2009 the Estonian parliament adopted a draft Act initiated by the Ministry of Economic Affairs and Communications about joining the Road Administration and the Motor Vehicle Registration Centre (ARK) into a single authority – the Estonian Road Administration (ERA) on the 1st of July, 2009. Since the same date other transformations took place – the regional road centres became local road administrations. The tasks of the former ARK were divided between the Road Administration and the local administrations, which included now also 18 vehicle register bureaus.
As a result of restructuring and changes in staff of the new institution, the Road Administration became an authority where civil servants are working under the Public Service Act and employees are working under the Employment Contracts Act.

Compared to the personnel of the Road Administration before the joining, after that leading officials and specialists acting in the field of examination, driving licences, vehicle registration and public transport were added to the staff. Apart from that, professionally trained attendants in vehicle register bureaus became part of the staff. The total number of employees of the new institution decreased by 30 on account of reducing auxiliary personnel.

As of 31.Dec. 2009 the personnel of the ERA was divided as follows:

- Road Administration – 172
- Road Administration of the Northern Region – 129
- Road Administration of the Southern Region – 125
- Road Administration of the Western Region – 98
- Road Administration of the Eastern Region – 76

Special trainings enhancing teamwork for top managers of the Road Administration and regional administrations as well as for middle managers of the administration have been carried out. One purpose of the seminars was finding and formulating the basic values of the new joint institution in order to create a new vision and mission. Developing common values, personnel policy and organizational culture as a key to successful operation has started.

Foreign Relations

The ERA is a member of many international organizations[1] with the right to vote in several directing bodies and representatives in their professional committees which deal with topical problems of road management. Besides, the ERA has a lot of co-operation partners[2] among other organizations.

The Baltic Road Association (BRA) is a regional international organization comprising road sectors of the Baltic countries. The BRA's main goal is co-ordination of activities and in case of need international representation of road specialists. XXVII Baltic Road Conference with 550 participants, 90 presentations and a professional exhibition was held in Riga in August 2009. Estonian road engineers made 16 conference presentations. With this conference the status of Latvia as the chairing country of the BRA during 2007-2009 was completed and the status was transferred to Lithuania.

The ERA's co-operation with the programme "Partners for Roads", initiated by the Netherlands will continue until the completion of the programme in 2010. In accordance with the programme, co-operation with the Norwegian Road Administration in the field of road databases management is carried out.

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, there are contacts with specialists concerning scientific and technical issues, training, etc. Information regarding road management has been exchanged and joint seminars have been arranged in framework of the project NORDBALT.

The Estonian Road Administration maintains the web page www.balticroads.net , which is a medium of the joint project between Finland, Estonia, Latvia, Lithuania and Russia to forward real-time road information via the Internet. Through the BRA the Road Administration is connected with the edition of "The Baltic Journal of Road and Bridge Engineering".

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1 IRF – International Road Federation;
PIARC – World Road Association;
CEDR – Conference of European Road Directors;
BRA – Baltic Road Association;
EReg – Association of European Vehicle and Driver Registration Authorities;
EUCARIS – European Car and Driving Licence Information System;
CITA – International Motor Vehicle Inspection Committee;
CORTE – Confederation of Organizations in Road Transport Enforcement;
CIECA – Commission Internationale des Examens de Conduite

2 SIRWEC – Standing International Road Weather Commission;
TachoNet – Telematic Network for the Exchange of Information Concerning the Issuing of Tachograph Cards;

The Estonian Road Administration represents Estonia in international projects related to the Pan-European Transport Corridor 1. Inclusion of Tallinn-Keila-Paldiski-Kapellskär road in the network of E-roads was applied for, and carried through in co-operation with Sweden. The mentioned road is indicated in the road register under number E-265 since January 1, 2010.

In the field of examination and driving licences, the Road Administration has actively participated in the activities of CIECA and CORTE working groups in 2009.

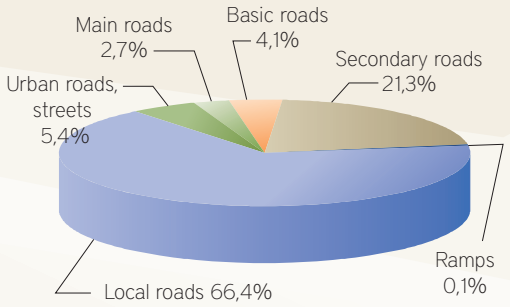
The Vehicle Register administered by the Road Administration is connected to several international information systems. In order to ensure safety, totality and authenticity of the digital tachographs (gauge) system, all EU institutions that issue tachograph cards exchange electronic information by the international system TachoNet. There are 28 countries in Europe, Estonia included, which have joined the mentioned system.

In order to prevent possible deceptions in the field of registration certificates and driving licences and avoid registration of stolen vehicles, the Vehicle Register has been interfaced both with Schengen and EUCARIS information systems, which allows to check the documents of other EU member states while a vehicle being registered or a driving licence is being exchanged.

The Association EReg operates as a roof organization whose working groups have a task to standardize activities of EU member states regarding various problems connected with registering of vehicles and issuing of driving licences.

In the field of technical requirements regarding the construction of vehicles, international co-operation is carried on in working groups of CITA, MWG and WP29.

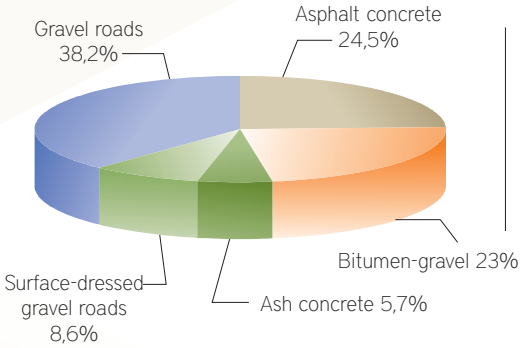
Road network



National roads	16 472 km
Main roads	1 602 km
Basic roads	2 391 km
Secondary roads	12 427 km
Ramps and connecting roads	52 km
Local and private roads	38 777 km
Urban roads and streets	3 134 km
Total:	58 383 km

Remark: Local, private and other roads and streets as of 01.01.2010 according to the Statistical Office of Estonia

Types of pavement on national roads



Asphalt concrete	4 039 km
Bitumen-gravel	3 780 km
Ash concrete	948 km
Surface-dressed gravel roads	1 420 km
Cobblestone surface	1 km
Gravel roads	6 284 km
Total:	16 472 km

Roads

The total length of national roads as of January 1, 2010 is 16,472 kilometres, i.e. 28.4% of the total length of the Estonian road network, which is 58,034 kilometres. The length of E-roads[1] in Estonia is 995 km. Compared to the previous year, the length of the national road network has decreased by 15.6 kilometres. Therefore, the length of main roads decreased by 0.2 kilometres, the length of basic roads remained the same, the length of secondary roads decreased by 16.8 kilometres and the length of ramps and connecting roads increased by 1.4 kilometres. The changes have been caused by reconstruction of roads and crossings and by transference of some national roads into the local road network.

The length of paved roads increased by 265 km compared to the previous year and is currently 10,188 km, i.e. 61.8% of the total length of the national roads. Most of this increase happened on account of paving gravel roads.

The density of national roads is 364 km per 1,000 km2 and the density of the entire registered road network is 1,290 km per 1,000 km2 of the territory.

There are 926 bridges on national roads with the total length of 21,286 m, including three wooden bridges with the total length of 37 m.

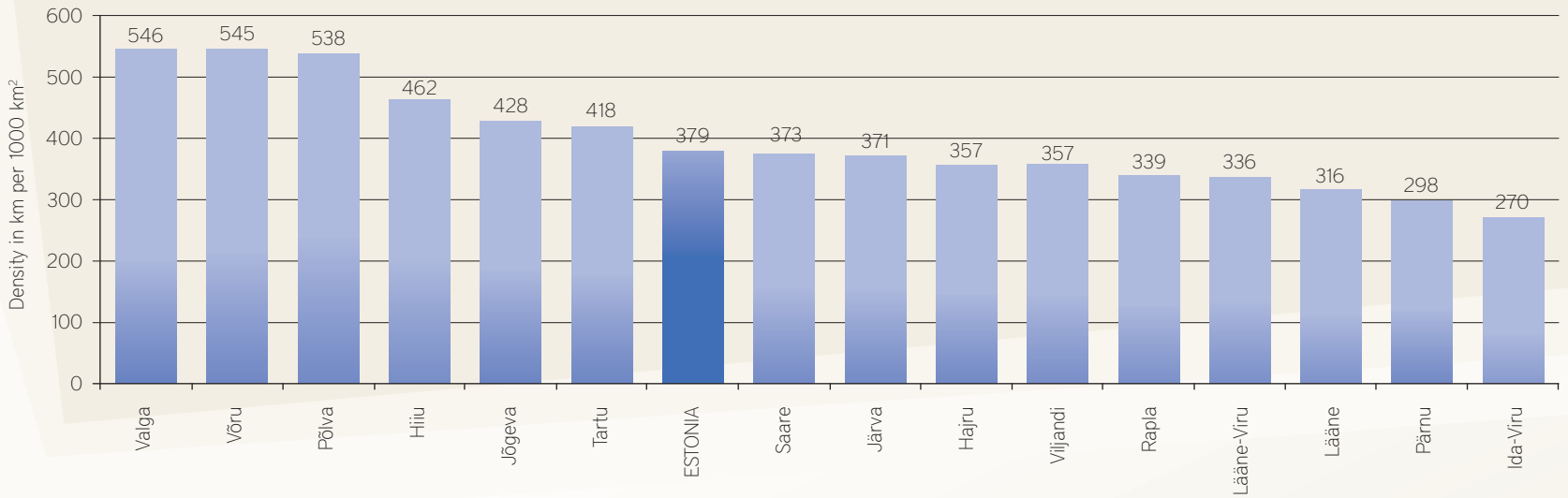
The national road register is a web based database providing information on both national roads and other public roads. The register is publicly available. The Road Administration is the authorized processor of the register and responsible for it. Since 2006 the program of the register has constantly been improved in order to insert the newest data on all public roads. A future goal is to enter the data on all other (non-public) roads in the register as well.

The data collection and adding of new data in the road register is carried out on the basis of acceptance of certificates of road works, and additional inventories. Based on the basic map of Estonia, a new special layer for national roads was applied in co-operation with the Land Board during the last two years. Making of an analogous map-layer for local roads is going on. In order to visualize the data, there is a map interface of the road register in the geodetic portal of the Land Board. The interface currently allows to see the data on national roads.

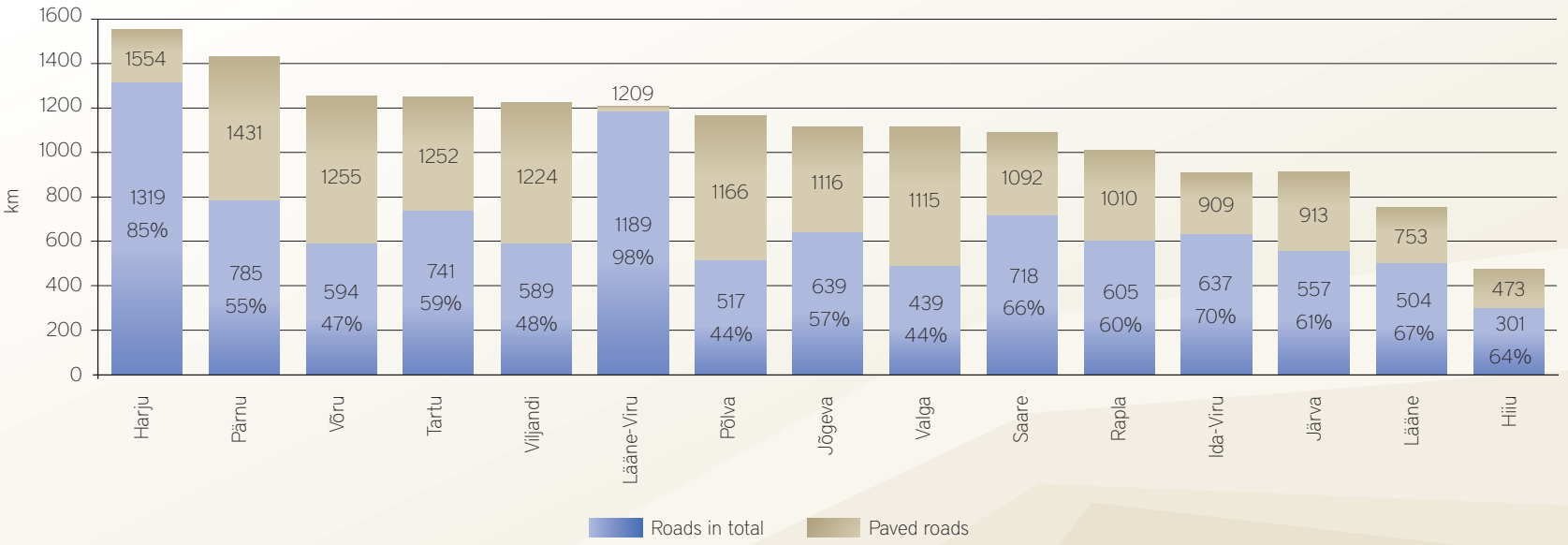
Since the beginning of the Agrarian Reform 29,000 ha (i.e. 99%) of all the land under national roads has been left in state property. The road land of 685 ha was entered into the land cadastre and 893 ha into the state assets register in 2009. The process will soon be entirely completed, as 98% of the national roads have already been entered into the land cadastre and 97% registered in the state assets register.

1 E-roads – part of European international roads accepted and systematized by UNECE (United Nations Economic Comission for Europe) provided with symbol E and a special number

Density of national roads by counties



Share of paved national roads by counties in 2009



Types of national roads pavements by administrative territories as of January 1, 2010

km

County	TOTAL	Including								Paved roads			
										January 1, 2009		January 1, 2010	
		Concrete	Asphalt concrete	Bitumen-gravel	Ash concrete	Surface-dressed gravel roads	Gobblestone surface	Gravel roads	Unsurfaced road	km	%	km	%
Harju	1,554.617	3.725	578.900	441.400	103.765	191.406	0.000	235.421	0.000	1288.085	83.1	1319.196	84.9
Hiiu	473.006	0.000	33.180	214.961	0.000	52.661	0.000	172.204	0.000	292.245	61.8	300.802	63.6
Ida-Viru	908.773	0.000	417.130	81.011	47.933	90.710	0.000	271.376	0.613	636.786	69.5	636.784	70.1
Jõgeva	1,115.611	0.000	131.749	327.844	93.681	85.426	0.000	476.911	0.000	611.676	54.8	638.700	57.3
Järva	912.657	0.000	308.078	71.895	59.152	117.963	0.000	355.569	0.000	543.893	59.6	557.088	61.0
Lääne	752.863	0.000	171.445	152.017	9.809	170.256	0.445	248.891	0.000	464.666	61.7	503.972	66.9
Lääne-Viru	1,208.826	0.000	587.214	202.872	355.459	43.732	0.000	19.549	0.000	1186.08	97.2	1189.277	98.4
Põlva	1,165.617	0.000	118.364	356.817	5.287	36.319	0.000	648.830	0.000	497.708	42.7	516.787	44.3
Pärnu	1,430.761	0.000	361.091	269.914	28.932	124.840	0.000	645.299	0.685	761.578	53.1	784.777	54.9
Rapla	1,010.487	0.000	247.249	195.773	88.588	72.885	0.110	405.882	0.000	587.917	58.3	604.605	59.8
Saare	1,091.653	0.000	68.998	451.496	0.000	198.002	0.000	373.157	0.000	677.806	62.1	718.496	65.8
Tartu	1,252.488	0.000	332.623	309.847	17.433	81.381	0.000	502.963	8.241	725.729	57.9	741.284	59.2
Valga	1,115.198	0.000	159.883	262.741	43.500	26.613	0.000	604.819	17.642	493.207	44.2	492.737	44.2
Viljandi	1,223.993	0.000	194.060	288.697	13.842	92.334	0.000	635.060	0.000	566.064	46.3	588.933	48.1
Võru	1,255.073	0.000	325.295	152.263	81.043	35.488	0.000	660.984	0.000	588.768	46.9	594.089	47.3
TOTAL:	**16,471.623**	**3.725**	**4,035.259**	**3,779.548**	**948.424**	**1420.016**	**0.555**	**6256.915**	**27.181**	**9922.208**	**60.2**	**10187.527**	**61.8**
including ramps and connecting roads	51.74	0	44.939	5.573	0.221	0.109	0	0.898	0	49.486	98.2	50.842	98.3

Types of main roads pavements by administrative territories as of January 1, 2010

km

County	TOTAL	Including								Paved roads			
										January 1, 2009		January 1, 2010	
		Concrete	Asphalt concrete	Bitumen-gravel	Ash concrete	Surface-dressed gravel roads	Gobblestone surface	Gravel roads	Unsurfaced road	km	%	km	%
Harju	251.707	3.725	238.141	9.841	0.000	0.000	0.000	0.000	0.000	251.743	100.0	251.707	100.0
Hiiu	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0	0.000	
Ida-Viru	150.954	0.000	148.466	2.488	0.000	0.000	0.000	0.000	0.000	150.954	100.0	150.954	100.0
Jõgeva	78.793	0.000	73.791	5.002	0.000	0.000	0.000	0.000	0.000	78.793	100.0	78.793	100.0
Järva	127.332	0.000	127.332	0.000	0.000	0.000	0.000	0.000	0.000	127.382	100.0	127.332	100.0
Lääne	106.692	0.000	100.090	6.602	0.000	0.000	0.000	0.000	0.000	106.692	100.0	106.692	100.0
Lääne-Viru	110.476	0.000	110.476	0.000	0.000	0.000	0.000	0.000	0.000	110.476	100.0	110.476	100.0
Põlva	31.029	0.000	31.029	0.000	0.000	0.000	0.000	0.000	0.000	31.029	100.0	31.029	100.0
Pärnu	217.320	0.000	208.987	8.333	0.000	0.000	0.000	0.000	0.000	217.248	100.0	217.320	100.0
Rapla	48.070	0.000	48.070	0.000	0.000	0.000	0.000	0.000	0.000	48.070	100.0	48.070	100.0
Saare	73.338	0.000	48.700	24.638	0.000	0.000	0.000	0.000	0.000	73.338	100.0	73.338	100.0
Tartu	150.998	0.000	136.998	14.000	0.000	0.000	0.000	0.000	0.000	151.146	100.0	150.998	100.0
Valga	87.910	0.000	87.910	0.000	0.000	0.000	0.000	0.000	0.000	87.910	100.0	87.910	100.0
Viljandi	96.353	0.000	69.483	26.870	0.000	0.000	0.000	0.000	0.000	96.396	100.0	96.353	100.0
Võru	71.233	0.000	71.233	0.000	0.000	0.000	0.000	0.000	0.000	71.233	100.0	71.233	100.0
TOTAL:	**1,602.205**	**3.725**	**1,500.706**	**97.774**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**1,602.410**	**100.0**	**1,602.205**	**100.0**

Types of basic roads pavements by administrative territories as of January 1, 2010

km

County	TOTAL	Including								Paved roads			
										January 1, 2009		January 1, 2010	
		Concrete	Asphalt concrete	Bitumen-gravel	Ash concrete	Surface-dressed gravel roads	Gobblestone surface	Gravel roads	Unsurfaced road	km	%	km	%
Harju	164.909	0.000	98.378	53.986	12.545	0.000	0.000	0.000	0.000	164.909	100.0	164.909	100.0
Hiiu	139.980	0.000	29.228	107.173	0.000	3.579	0.000	0.000	0.000	139.980	100.0	139.980	100.0
Ida-Viru	148.881	0.000	69.794	30.211	27.764	10.949	0.000	10.163	0.000	138.718	93.2	138.718	93.2
Jõgeva	158.426	0.000	40.129	118.297	0.000	0.000	0.000	0.000	0.000	158.426	100.0	158.426	100.0
Järva	114.683	0.000	106.636	6.683	0.016	1.348	0.000	0.000	0.000	114.683	100.0	114.683	100.0
Lääne	74.807	0.000	29.585	40.428	4.794	0.000	0.000	0.000	0.000	74.807	100.0	74.807	100.0
L-Viru	211.864	0.000	182.904	22.100	6.860	0.000	0.000	0.000	0.000	211.864	100.0	211.864	100.0
Põlva	252.869	0.000	66.788	181.465	4.616	0.000	0.000	0.000	0.000	252.830	100.0	252.869	100.0
Pärnu	108.538	0.000	60.853	47.685	0.000	0.000	0.000	0.000	0.000	108.538	100.0	108.538	100.0
Rapla	163.418	0.000	123.455	29.697	10.266	0.000	0.000	0.000	0.000	163.432	100.0	163.418	100.0
Saare	185.519	0.000	8.692	134.910	0.000	24.783	0.000	17.134	0.000	168.374	90.8	168.385	90.8
Tartu	174.784	0.000	104.194	70.590	0.000	0.000	0.000	0.000	0.000	174.784	100.0	174.784	100.0
Valga	164.428	0.000	32.400	128.828	3.200	0.000	0.000	0.000	0.000	164.476	100.0	164.428	100.0
Viljandi	206.850	0.000	50.862	140.131	0.000	1.882	0.000	13.975	0.000	186.086	90.0	192.875	93.2
Võru	120.554	0.000	98.546	22.008	0.000	0.000	0.000	0.000	0.000	120.554	100.0	120.554	100.0
TOTAL:	**2,390.510**	**0.000**	**1102.444**	**1,134.192**	**70.061**	**42.541**	**0.000**	**41.272**	**0.000**	**2342.461**	**97.3**	**2,349.238**	**98.3**

Types of secondary roads pavements by administrative territories as of January 1, 2010

km

County	TOTAL	Including								Paved roads			
										January 1, 2009		January 1, 2010	
		Concrete	Asphalt concrete	Bitumen-gravel	Ash concrete	Surface-dressed gravel roads	Gobblestone surface	Gravel roads	Unsurfaced road	km	%	km	%
Harju	1,105.318	0.000	211.150	376.121	91.220	191.406	0.000	235.421	0.000	839.004	76.2	869.897	78.7
Hiiu	332.983	0.000	3.909	107.788	0.000	49.082	0.000	172.204	0.000	152.265	45.7	160.779	48.3
Ida-Viru	607.601	0.000	198.540	48.312	20.169	79.652	0.000	260.315	0.613	346.675	56.3	346.673	57.1
Jõgeva	875.255	0.000	15.749	203.488	93.681	85.426	0.000	476.911	0.000	371.320	42.4	398.344	45.5
Järva	670.481	0.000	73.949	65.212	59.136	116.615	0.000	355.569	0.000	301.828	45.0	314.912	47.0
Lääne	571.364	0.000	41.770	104.987	5.015	170.256	0.445	248.891	0.000	283.167	49.6	322.473	56.4
L-Viru	884.143	0.000	291.829	180.655	348.378	43.732	0.000	19.549	0.000	861.397	96.2	864.594	97.8
Põlva	880.566	0.000	20.430	174.316	0.671	36.319	0.000	648.830	0.000	212.730	24.2	231.736	26.3
Pärnu	1,102.416	0.000	89.164	213.496	28.932	124.840	0.000	645.299	0.685	433.305	39.2	456.432	41.4
Rapla	798.657	0.000	75.466	165.992	78.322	72.885	0.110	405.882	0.000	376.415	47.2	392.775	49.2
Saare	831.963	0.000	11.184	291.537	0.000	173.219	0.000	356.023	0.000	435.683	52.4	475.940	57.2
Tartu	922.028	0.000	86.903	225.107	17.433	81.381	0.000	502.963	8.241	395.141	42.8	410.824	44.6
Valga	862.860	0.000	39.573	133.913	40.300	26.613	0.000	604.819	17.642	240.821	27.9	240.399	27.9
Viljandi	918.527	0.000	72.318	120.830	13.842	90.452	0.000	621.085	0.000	281.399	30.7	297.442	32.4
Võru	1,063.006	0.000	155.236	130.255	81.043	35.488	0.000	660.984	0.000	396.701	37.3	402.022	37.8
TOTAL:	**12,427.168**	**0.000**	**1,387.170**	**2,542.009**	**878.142**	**1,377.366**	**0.555**	**6,214.745**	**27.181**	**5,927.851**	**45.9**	**6,185.242**	**49.8**

Types of pavements on national roads in 2005-2009

Year	2005		2006		2007		2008		2009	
Pavement	km	%	km	%	km	%	km	%	km	%
Asphalt concrete	3482.00	21.13	3661.00	22.23	3753.15	22.76	3900.00	23.66	4039.00	24.52
Bitumen-gravel	3957.00	24.01	3906.00	23.72	3906.56	23.70	3854.87	23.38	3780.00	22.95
Ash-concrete	926.00	5.62	932.00	5.66	935.79	5.68	928.94	5.63	948.00	5.76
Surface-dressed gravel roads	663.00	4.02	869.00	5.28	1083.75	6.57	1237.74	7.51	1420.00	8.62
Stone roads									1.00	0.01
Total paved roads	**9028.00**	**54.78**	**9368.00**	**56.90**	**9679.25**	**58.71**	**9921.54**	**60.18**	**10188.00**	**61.90**
Gravel roads	7442.00	45.16	7111.00	43.19	6786.13	41.16	6565.02	39.82	6284.00	38.15
TOTAL:	**16470.00**	**100.00**	**16479.00**	**100.00**	**16465.38**	**100.00**	**16486.56**	**100.00**	**16472.00**	**100.00**

Share of bridges by counties as of January 1, 2010-04-23

County	Including								Including wooden bridges	
	Total		Main roads		Basic roads		Secondary roads		(secondary roads)	
	Q	length (m)	Q	length (m)	Q	length (m)	Q	length (m)	Q	length (m)
Harju	142	4,498	59	2,395	11	305	72	1,798	1	7
Hiiu	16	124			11	96	5	28		
Ida-Viru	58	1,201	18	430	12	286	28	485		
Jõgeva	53	1,445	10	357	8	414	35	674		
Järva	40	646	13	231	6	70	21	345		
Lääne	40	1,097	8	388	9	93	23	616	1	13
Lääne-Viru	50	1,136	11	406	14	267	25	463		
Põlva	56	1,105			18	440	38	665		
Pärnu	115	2,675	15	590	12	456	88	1,629		
Rapla	66	1,664	5	177	11	288	50	1,199		
Saare	38	300	4	31	7	70	27	199		
Tartu	47	1,393	11	849	12	179	24	365		
Valga	56	1,029	7	108	16	301	33	620	1	17
Viljandi	71	1,312	13	256	13	298	45	758		
Võru	72	1,658	7	220	14	443	51	995		
TOTAL:	**920**	**21283**	**181**	**6438**	**174**	**4006**	**565**	**10839**	**3**	**37**

Condition of Road Surfaces

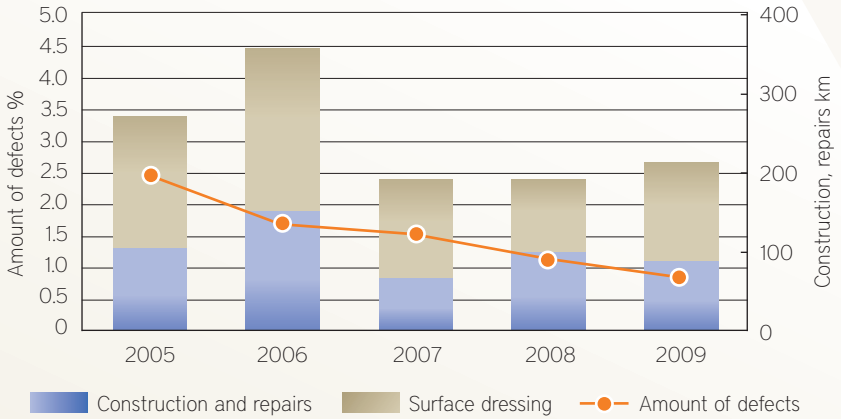
Measurements of the road surface roughness index IRI (International Roughness Index) and inventorying of defects on paved roads have been performed since 1995. Load bearing capacity (FWD) has been measured since 1996 and rut depth since 2001. These four indicators of road surface condition and in addition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

As the data about the condition of road comprise a part of the state road register, it is also publicly available to everyone. Two kinds of software – EPMS and HDM-4 – are used to analyse the mentioned data. EPMS is a special software developed in Estonia in order to analyse the condition of road surfaces. HDM-4 is an international software for feasibility studies.

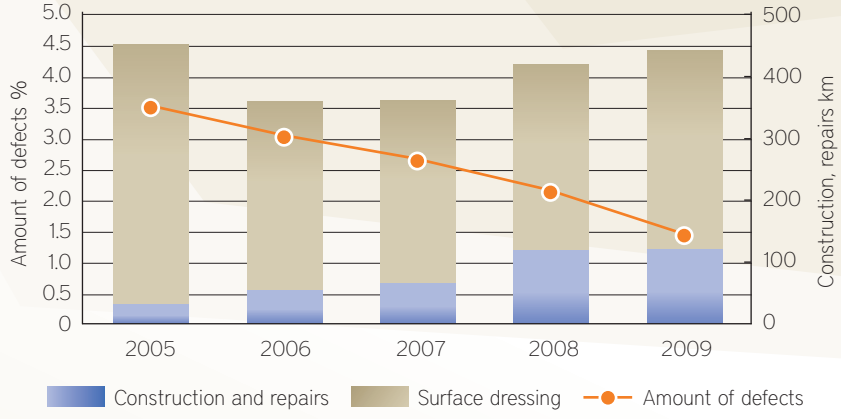
When studying the diagrams of changes in the number of defects, a constant decrease can be observed, which reflects a positive impact of the totally executed volume of road works. This decrease has been caused by construction of new pavements on the main roads, where most of the resources were used in previous years, and by regular surface dressing on basic and secondary roads. Improvement of evenness can be observed on all road types. The average IRI value of the entire national roads network has improved as a result of permanent financing of the construction, repair and maintenance works and rational choice of objects in the period 2005-2009. The average evenness value on the main roads is acceptable, but the same index on basic and secondary roads has not improved so fast as expected. It means less driving comfort and bigger indirect costs for users on those roads.

Construction, repairs and surface dressing of pavements carried out in 2005-2009 and the change of the amount of defects proceeding from this

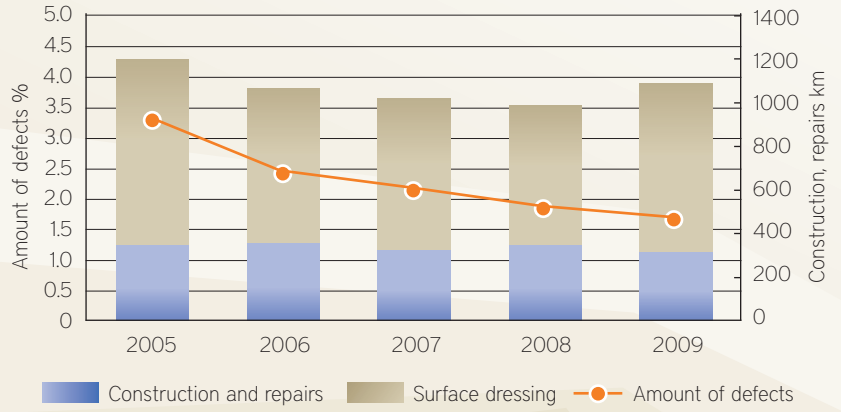
Main roads



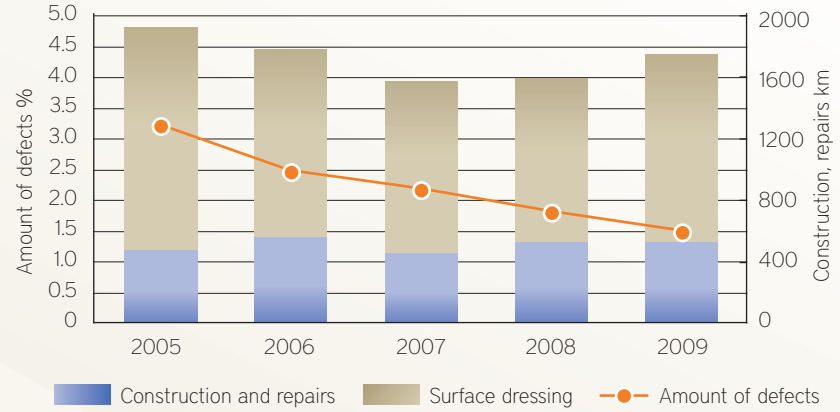
Basic roads



Secondary roads

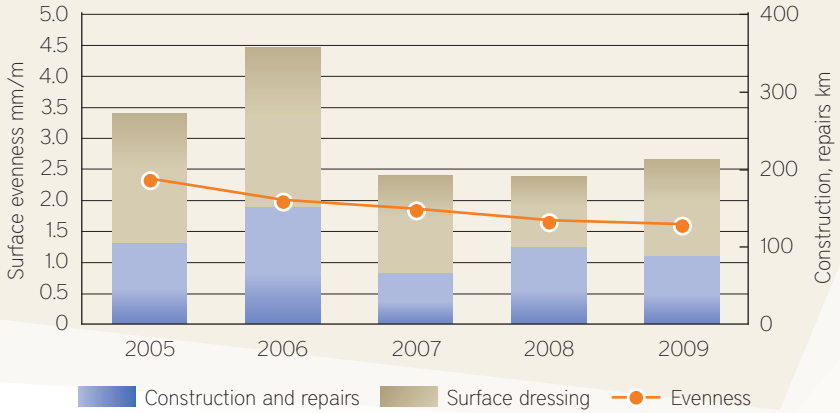


Total

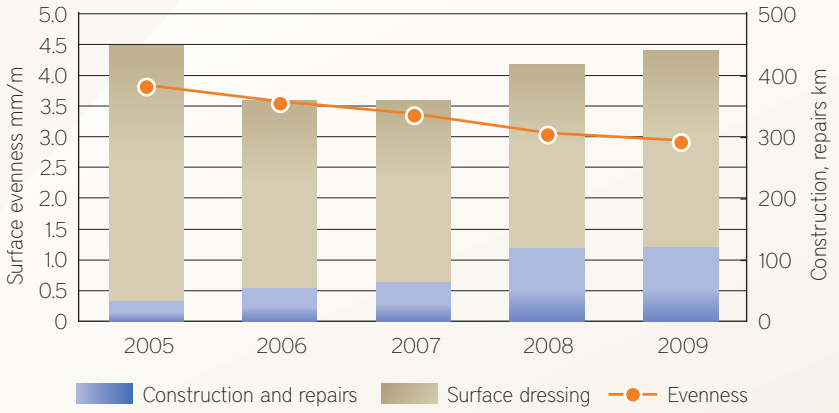


Construction, repairs and surface dressing of pavements carried out in 2005-2009 and the change of the surface evenness proceeding from this

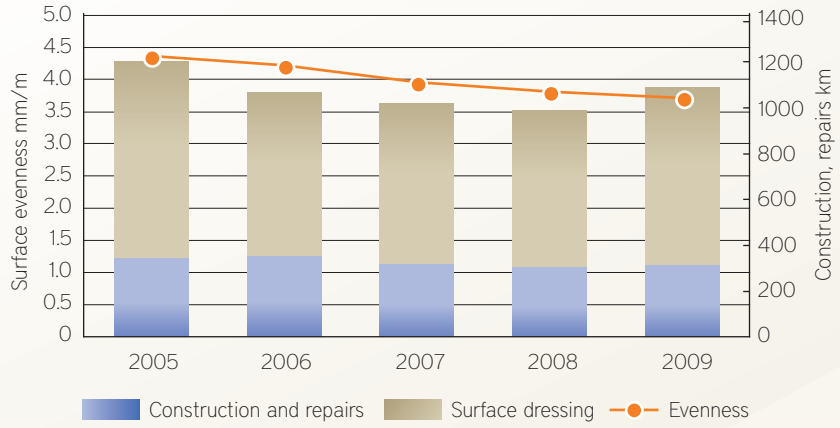
Main roads



Basic roads



Secondary roads



Total

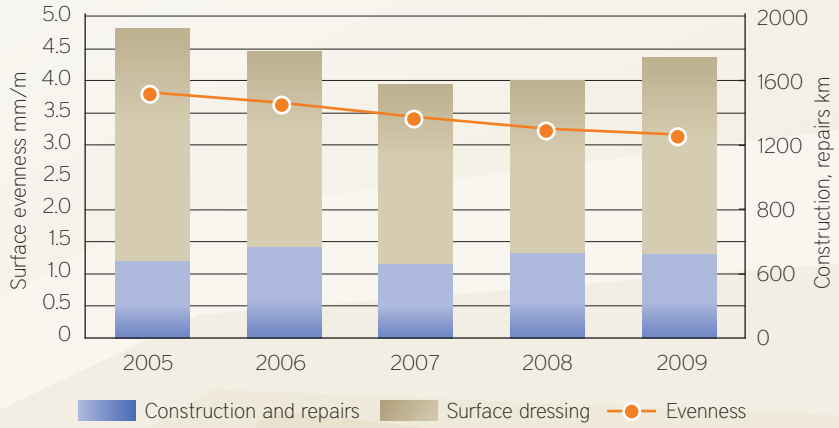


Photo: Lemminkäinen Eesti AS

Financing of Road Management

The funding for road management is allocated in a total sum equivalent to 75% of the fuel excise tax (with the exception of fuels with fiscal marking) and 25% of the excise tax imposed on fuels with fiscal marking. Distribution of the funding between national and local roads is determined under the Roads Act. Since 2003, the state budget has been composed on the principle that all sources of financing – public revenue and foreign assistance have been included within the equivalent rate of the fuel excise tax. In fact foreign assistance may also be used in excess of the equivalent rate. Since 2009, the profit from services rendered by regional road administrations to other institutions is considered as an additional source to the equivalent rate, and is allowed to be used for managing costs.

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

With the help of the Cohesion Fund it is possible to finance the development of those 6 roads (6% of the total length of the Estonian national road network) which belong to the trans-European transport network TEN-T:
Tallinn-Narva (E20)
Tallinn-Pärnu-Ikla (E67)
Tallinn-Tartu-Luhamaa (E263)
Jõhvi-Tartu-Valga (E264)
Tallinn-Paldiski (No. 8)
Tallinn ringroad (No. 11)

With the help of the Regional Development Fund it is possible to finance the development of all other national roads. The share of the INTERREG instrument is marginal compared to

other funds. Using the INTERREG is limited to 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 the 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 roads and bridges, construction of grade separations etc) and for road repairs, aimed at restoring the road quality that has dropped due to the wear and tear, and damage to single road elements.

According to the principles of distributing road management resources, funds for financing road projects of 2009 with the engagement of EU assistance or funds for other essential main roads are at the disposal of the ERA. Distribution of the rest of resources for repairing other main, basic and secondary roads (including road operations) are within the capacity of the regional road administrations.

351 million kroons of the allocated resources (including 320 million kroons of EU assistance) were not utilized in 2009. Non-utilized EU assistance also involves 71 million kroons for the local governments projects which are financed via the ERA as an implementation unit.?

Evolution of the road management budget for 2009[1]

Basic documents, articles and changes	Total sum of the budget (million kroons)
- State Budget Act 2009, 10.12.2008 - Order of the Government , 21.01.2009, No.14 – Preliminary allocation of resources (including EU assistance)	3247
- Order of the Government, 12.03.2009, No.87 – Supplementary minus-budget (7%-cut of operational costs) - Directive of the Minister of EAC, 19.05.2009, No.142 – Allocation of assistance from ERDF	3167
- Second Supplementary Budget act 2009, 18.06.2009 – (cut of 29 million kroons) - Order of the Government, 9.07.2009, No.297 – reallocation of resources connected to the joining ERA and ARK (supplement of 34 million kroons)	3172
- State Budget Changing Act 2009, 26.11.2009 – (cut of 3 million kroons) (incl. EU assistance-881, local gov.-106 and ownwer's income-8)	3169

1 More detail distribution, disposal and utilization of financial resources by expense items look at the tables on the following pages

Road management funds of 2009

thousand kroons

	Planned funds	Received funds (cash expenditure)	%
ASSIGNMENTS IN TOTAL	**3,222,684**	**2,929,721**	**90.9**
including:			
from the state budget of 2009	**3,168,537**	**2,883,109**	**91.0**
revenue of the state budget	2,138,930	2,110,391	98.7
owner's income	8,401	35,934	427.7
EU assistance	881,398	632,361	71.7
local government partnership	106,000	38,605	36.4
domestic co-finance		30,244	
share of ARK (II half year)	33,807	35,572	105.2
funds transferred from 2008	**54,146**	**46,611**	**86.1**
revenue of the state budget	46,983	39,448	84.0
owner's income	7,163	7,163	100.0
FOR THE EXPENDITURES IN TOTAL	**3,222,684**	**2,929,721**	**90.9**
including:			
1. In the use of ENRA state institutions in total	**1,864,477**	**1,918,000**	**102.9**
including:			
1.1.From the state budget in total	1,854,599	1,908,122	102.9
including:			
- staff costs	83,855	83,855	100.0
- administration costs	635,464	634,628	99.9
- investments	1,093,687	1,094,923	100.1
repairs of roads	1,089,097	1,089,902	100.1
acquisition of machinery and equipment	1,950	1,950	100.0
acquisition of information technology	522	521	99.8
buildings	2,118	2,549	120.3
- owner's income	7,001	30,510	435.8
- domestic co-finance		27,854	
- other sources	783	776	99.2
1.1.1. State agencies in total	1,820,792	1,872,549	102.8
including:			
Road Administration of Northern Region	416,906	420,193	100.8
Road Administration of Eastern Region	279,715	285,256	102.0
Road Administration of Southern Region	589,429	621,021	105.4

thousand kroons

	Planned funds	Received funds (cash expenditure)	%
Road Administration of Western Region	534,740	546,078	102.1
1.2. Funds transferred from 2008	9,878	9,878	100.0
revenues of the state budget	2,714	2,714	100.0
owner's income	7,163	7,163	100.0
2. In the use of the ENRA's Central Office in total	**1,358,206**	**1,011,720**	**74.5**
including:			
2.1. Investments in total	1,130,353	859,564	76.0
including:			
for the construction and reconstruction of roads	1,065,289	812,997	76.3
purchase of land	49,000	33,015	67.4
acquisition of IT software and hardware	15,670	13,157	84.0
acquisition of vehicles	393	393	100.0
2.2. Staff costs	35,976	31,275	86.9
2.3. Administration costs	39,493	39,403	99.8
2.4. Earmarking (membership fee)	715	714	100.0
2.5. Owner's income	1,400	5,423	387.4
2.6. ARK II half year	33,807	35,572	105.2
2.7. local government partnership	106,000	38,605	36.4
2.8. Funds transferred from 2008	44,268	36,733	83.0
including:			
- land consolidation	3,280	3,280	100.0
- for construction and reconstruction of roads	28,192	20,657	73.3
- automatic speed control system	10,000	10,000	100.0
- Staff and administration costs	2,795	2,795	100.0

Utilization of the funds allocated for the management

thousand kroons

	Funds in total			incl. Road Offices		
	Planned funds	Utilization	Share %	Planned funds	Utilization	Share %
USED FUNDS IN TOTAL	**3,222,608**	**2,926,618**	**100**	**1,830,670**	**1,890,149**	**100.0**
including:						
1. ROADS	**2,700,524**	**2,469,926**	**84**	**1,671,587**	**1,720,205**	**91.0**
1.1. Road operation	**604,886**	**612,661**	**21**	**604,886**	**612,661**	**32.4**
including:						
- summer service of paved roads	0	266,653			266,653	
- summer service of gravel roads	0	137,208			137,208	
- upkeep of road structures	0	10,205			10,205	
- winter service	0	198,595			198,595	
1.2. Rehabilitation repairs	**602,929**	**594,269**	**20.3**	**602,929**	**594,269**	**31.4**
including:						
- repairs of paved roads	198,958.0	189,312.0		198,958.0	189,312.0	
- surface re-dressing	210,954.0	211,478.0		210,954.0	211,478.0	
- repairs of gravel roads	141,287.0	142,265.0		141,287.0	142,265.0	
- repairs of road structures	51,730.0	51,214.0		51,730.0	51,214.0	
1.3. Construction and reconstruction	**1,492,709**	**1,262,996**	**43.2**	**463,772**	**513,275**	**27.2**
including:						
- roads	1,452,887.0	1,121,846.0		435,950.0	485,217.0	
- road structures	39,822.0	141,150.0		27,822.0	28,058.0	
2. BUILDINGS	**2,118.0**	**2,668.0**	**0.1**	**2,118.0**	**2,668.0**	**0.1**
including:						
- repairs in road master areas and centres	700	772		700	772	
- construction and reconstruction	1,418	1,896		1,418	1,896.0	
3. ACQUISITION	**28,547.0**	**26,034.0**	**0.9**	**2,483.0**	**2,482.0**	**0.1**
- machinery and vehicles	2,348	2,348		1,954	1,954	
- information technology	1,427	1,073		227	226	
- inventory	302	302		302	302	
- acquisition of road and weather information system	24,470	22,311				
4. PROJECTON	**89,618**	**85,672**	**2.9**	**25,073**	**24,997**	**1.3**
5. LAND CONSOLIDATION	**52,280**	**36,296**	**1.2**			
6. TRAFFIC EDUCATION	**14,295**	**14,305**	**0.5**	**1,821**	**1,794**	**0.1**
7. OTHER EXPENDITURE (maintaining, designing, etc.)	**178,615**	**177,714**	**6.1**	**112,823**	**104,239**	**5.5**

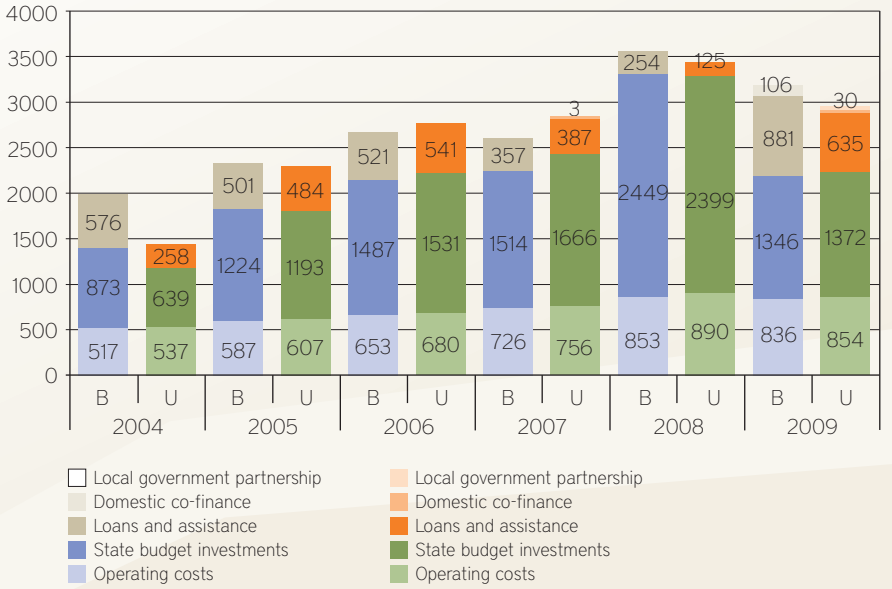
thousand kroons

	Funds in total			incl. Road Offices		
	Planned funds	Utilization	Share %	Planned funds	Utilization	Share %
8.FOR TRANSFER OF LAND FROM RESERVE FUND INTO STATE OWNERSHIP	2	2	0.0	2	2	0.0
9. OWN FUNDS	15,565	38,594	1.3	14,165	33,171	1.8
10. Earmarking	1,313	1,306	0.0	598	591	0.0
11. ARK II half year	33,731	35,496	1.2			
12. Local government partnership	106,000	38,605	1.3			

Notes:
1. 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 2004 - 2009

Year	Budget		Utilization					
	Total	Including loans and assistance	Total	From this				
				Operating costs	Investments			
					State budget	Loans and assistance	Domestic co-finance	Local government partnership
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	254	3,426	890	2,399	125		12
2009	3,169	971	2,930	854	1,372	635	30	39



B - budget, U - utilization

National Road Operations

Road operations are conducted in accordance with the requirements for the state of roads established by Regulation No. 45 of the Minister of Economic Affairs and Communications (2002). No changes have been made in these requirements so far.

The shares of the state enterprise Vooremaa Teed were bought by a private limited company Tallinna Teed AS.
Preparations for the sale of the shares of the state companies Tartumaa Teed, Pärnumaa Teed, Virumaa Teed, Saaremaa Teed and Võrumaa Teed have been started.
In 2009 a state procurement of road service operations was arranged in Põlva County and in Kuusalu and Keila road master areas in Harju County.

Most of the state property, not yet expropriated, was transferred to the RKAS (State Real Estate Ltd.).

Distribution of the roads between the performers of road operations is the following:

- AS TREV-2 Grupp – 3296 km (20%). Road works are executed by the subsidiaries OÜ Rapla Teed in Rapla County, AS Põlva Teed in Põlva County and OÜ Valga Teed in Valga County;
- Lemminkäinen Eesti AS (former AS TALTER) – 925 km (5.6%). Road works in Ida-Viru County are executed by Virumaa department;
- OÜ Sakala Teed – 1245 km (7.6%). The company operates in Viljandi County;
- Nordecon Infra AS (former AS ASPI) – 2078 km (12.6%). The road works are executed by Keila department in Harju County (Keila road master area) and by the the subsidiaries OÜ Hiiu Teed in Hiiu County, and AS Järva Teed in Järva County;
- AS Vooremaa Teed – 1111 km (6.7%). The company operates in Jõgeva County;

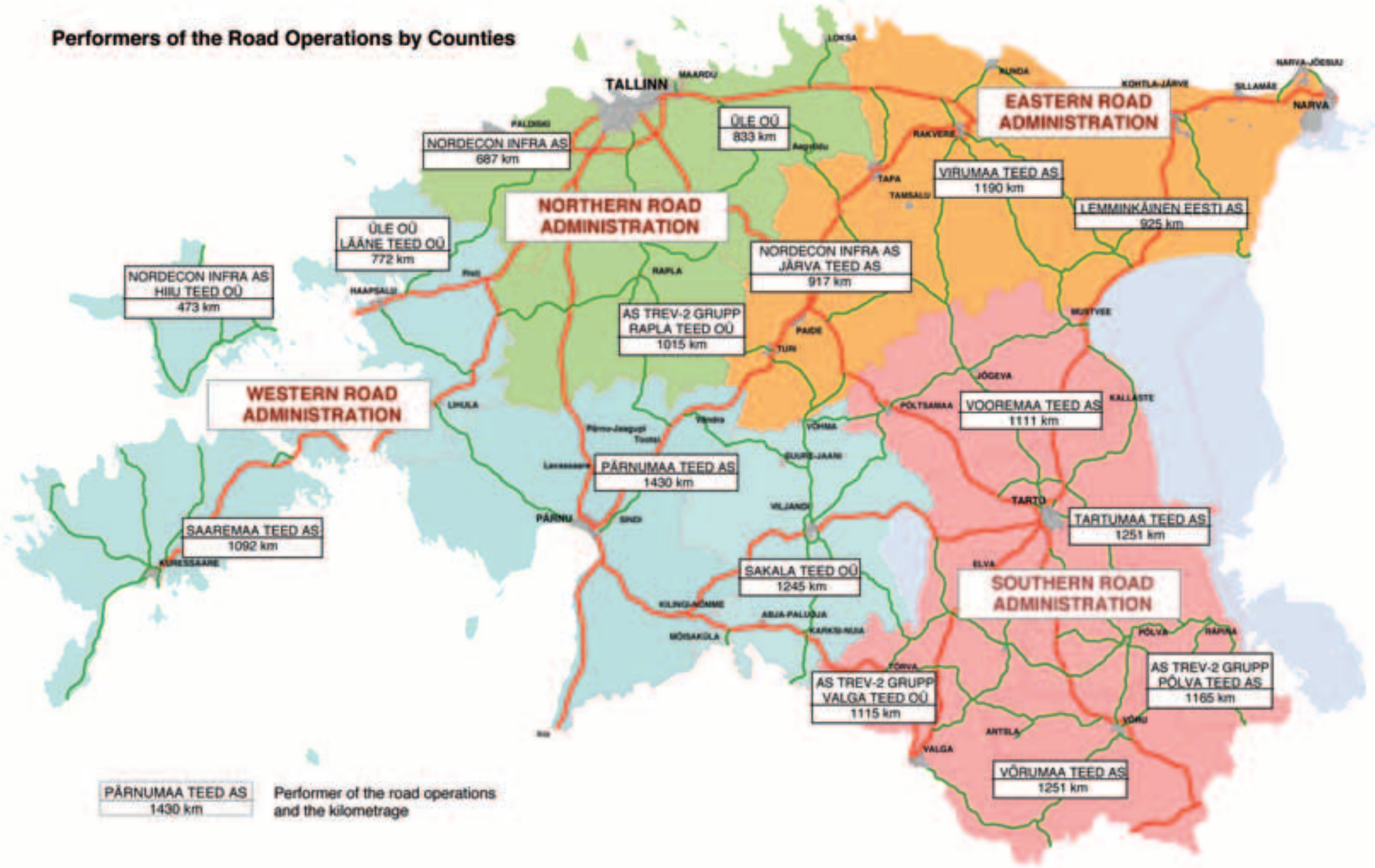
- AS Üle – 1605 km (9.8%). The company operates in Harju County (Kuusalu and Kose road master areas) and its subsidiary OÜ Lääne Teed in Lääne County;
- AS Võrumaa Teed – 1251 km (7.6%). The company operates in Võru County;
- AS Pärnumaa Teed – 1430 km (8.7%). The company operates in Pärnu County;
- AS Saaremaa Teed – 1092 km (6.6%). The company operates in Saare County;
- AS Tartumaa Teed – 1251 km (7.6%). The company operates in Tartu County;
- AS Virumaa Teed – 1190 km (7.2%). The company operates in Lääne-Viru County.

612.7 million kroons have been used for road operations in total, including 198.6 million kroons for winter service and 414.1 million kroons for summer service.

Road operations costs per 1 road kilometre amounted to 37.2 thousand kroons (35.8 thousand kroons in 2008; 30.7 thousand kroons in 2006).

The system of road weather stations was improved by adding seven new cameras and by founding Kangru testing station for counting equipment, transducers of weather stations and road cameras.

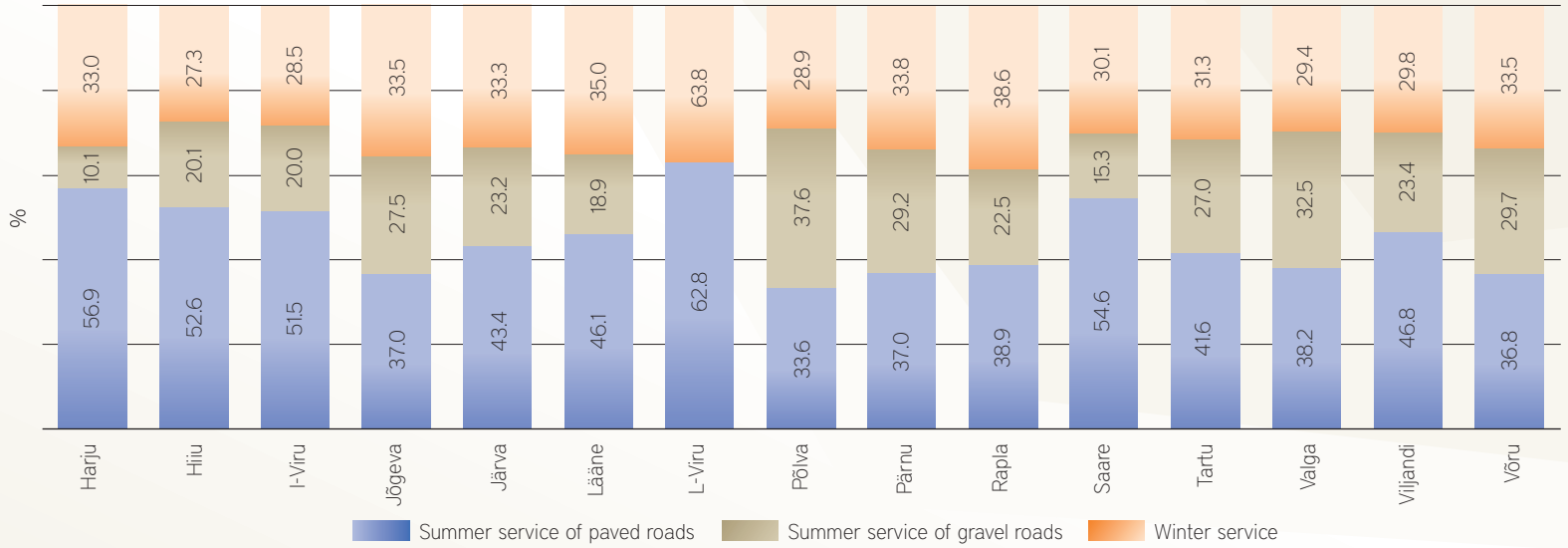
Performers of the Road Operations by Counties



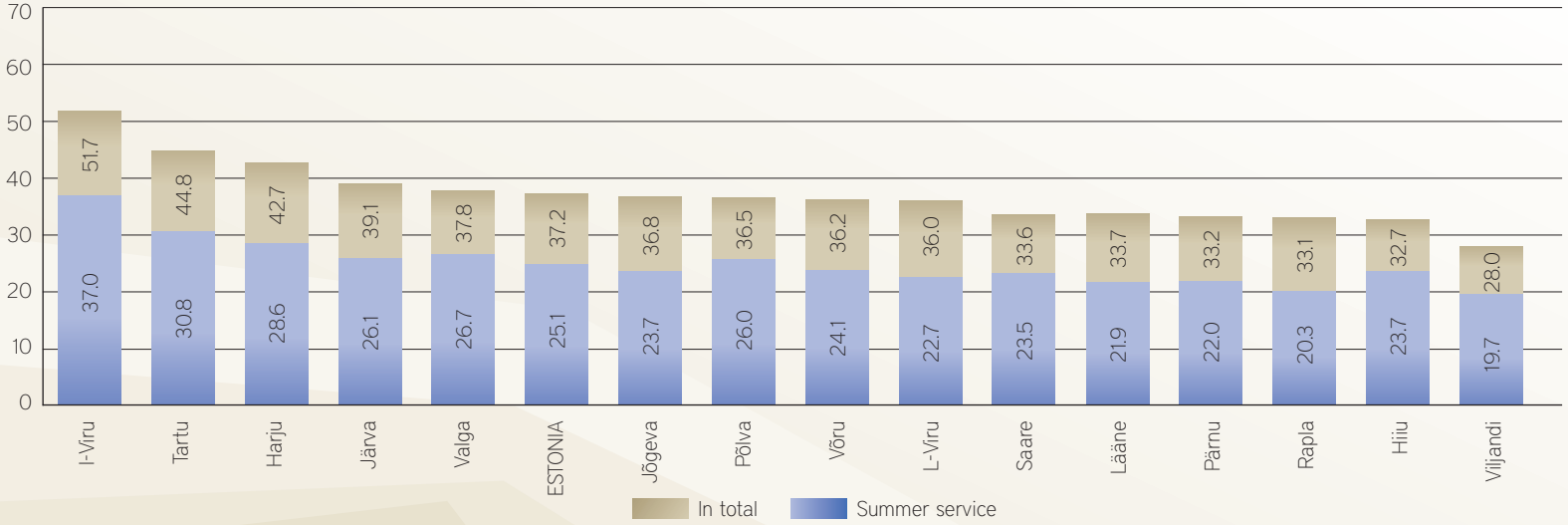
National roads by performers of the road operations

Administering Road Institution Peformers of the road operations	Roads in total	Including				From this								
		Main roads	Basic roads	Ramps	Secondary roads	Paved roads					Gravel roads			
						Total	Including				Total	Including		
							Main roads	Basic roads	Ramps	Secondary roads		Basic roads	Ramps	Secondary roads
Administered by Road Administration of Northern Region	**2,535.273**	**270.278**	**329.591**	**33.025**	**1,902.379**	**1,895.676**	**270.278**	**329.591**	**33.025**	**1,262.782**	**639.597**	**0.000**	**0.000**	**639.597**
MORDECON INFRA AS in Harju county	687.464	112.499	55.456	10.938	508.571	556.625	112.499	55.456	10.938	377.732	130.839	0.000	0.000	130.839
OÜ Rapla Teed in Rapla county	1,014.794	48.070	165.245	0.342	801.137	605.755	48.070	165.245	0.342	392.098	409.039	0.000	0.000	409.039
OÜ ÜLE in Harju county	833.015	109.709	108.890	21.745	592.671	733.296	109.709	108.890	21.745	492.952	99.719	0.000	0.000	99.719
Administered by Road Administration of Western Region	**5,010.565**	**513.661**	**732.075**	**5.626**	**3,759.203**	**2,934.339**	**513.661**	**700.966**	**5.626**	**1,714.086**	**2,076.226**	**31.109**	**0.000**	**2,045.117**
AS Pärnumaa Teed in Pärnu county	1,429.636	217.320	108.538	2.487	1,101.291	784.777	217.320	108.538	2.487	456.432	644.859	0.000	0.000	644.859
AS Saaremaa Teed in Saare county	1,091.653	73.338	185.519	0.833	831.963	718.496	73.338	168.385	0.833	475.940	373.157	17.134	0.000	356.023
OÜ Hiiu Teed in Hiiu county	473.006	0.000	139.980	0.043	332.983	300.802	0.000	139.980	0.043	160.779	172.204	0.000	0.000	172.204
OÜ Lääne Teed in Lääne county	771.601	126.650	73.587	0.000	571.364	522.710	126.650	73.587	0.000	322.473	248.891	0.000	0.000	248.891
OÜ Sakala Teed in Viljandi county	1,244.669	96.353	224.451	2.263	921.602	607.554	96.353	210.476	2.263	298.462	637.115	13.975	0.000	623.140
Administered by Road Administration of Southern Region	**5,894.007**	**419.963**	**865.850**	**9.248**	**4,598.946**	**2,974.547**	**419.963**	**865.850**	**9.248**	**1,679.486**	**2,919.460**	**0.000**	**0.000**	**2,919.460**
AS Tartumaa Teed in Tartu county	1,251.054	149.739	173.322	4.678	923.315	740.446	149.739	173.322	4.678	412.707	510.608	0.000	0.000	510.608
AS Võrumaa Teed in Võru county	1,250.968	71.233	120.554	0.280	1,058.901	594.854	71.233	120.554	0.280	402.787	656.114	0.000	0.000	656.114
AS Põlva Teed in Põlva county	1,165.243	31.029	252.869	1.153	880.192	509.546	31.029	252.869	1.153	224.495	655.697	0.000	0.000	655.697
OÜ Valga Teed in Valga county	1,115.480	87.910	164.428	0.000	863.142	493.339	87.910	164.428	0.000	241.001	622.141	0.000	0.000	622.141
AS Vooremaa Teed in Jõgeva county	1,111.262	80.052	154.677	3.137	873.396	636.362	80.052	154.677	3.137	398.496	474.900	0.000	0.000	474.900
Administered by Road Administration of Eastern Region	**3,031.778**	**398.303**	**462.994**	**3.841**	**2,166.640**	**2,382.965**	**398.303**	**452.831**	**2.943**	**1,528.888**	**648.813**	**10.163**	**0.898**	**637.752**
Viru Road Office in Lääne-Viru county	1,189.714	110.476	203.131	2.343	873.764	1,180.705	110.476	203.131	2.343	864.755	9.009	0.000	0.000	9.009
AS Järva Teed in Järva county	917.473	136.873	103.807	0.161	676.632	556.101	136.873	103.807	0.161	315.260	361.372	0.000	0.000	361.372
LEMMINKÄINEN EESTI AS in Ida-Viru county	924.514	150.877	156.056	1.337	616.244	646.082	150.877	145.893	0.439	348.873	278.432	10.163	0.898	267.371
TOTAL:	**16,471.623**	**1,602.205**	**2,390.510**	**51.740**	**12,427.168**	**10,187.527**	**1,602.205**	**2,349.238**	**50.842**	**6,185.242**	**6,284.096**	**41.272**	**0.898**	**6,241.926**

Expenditures for road operations by counties



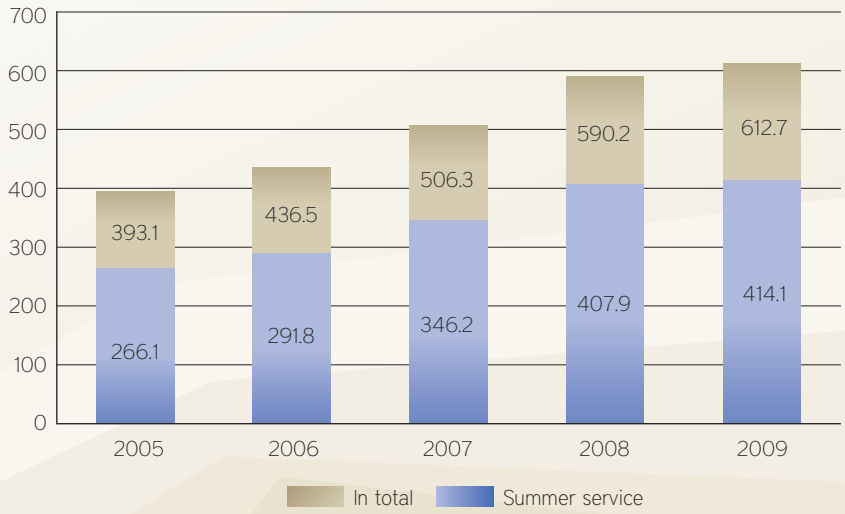
Expenditures per 1 road kilometre

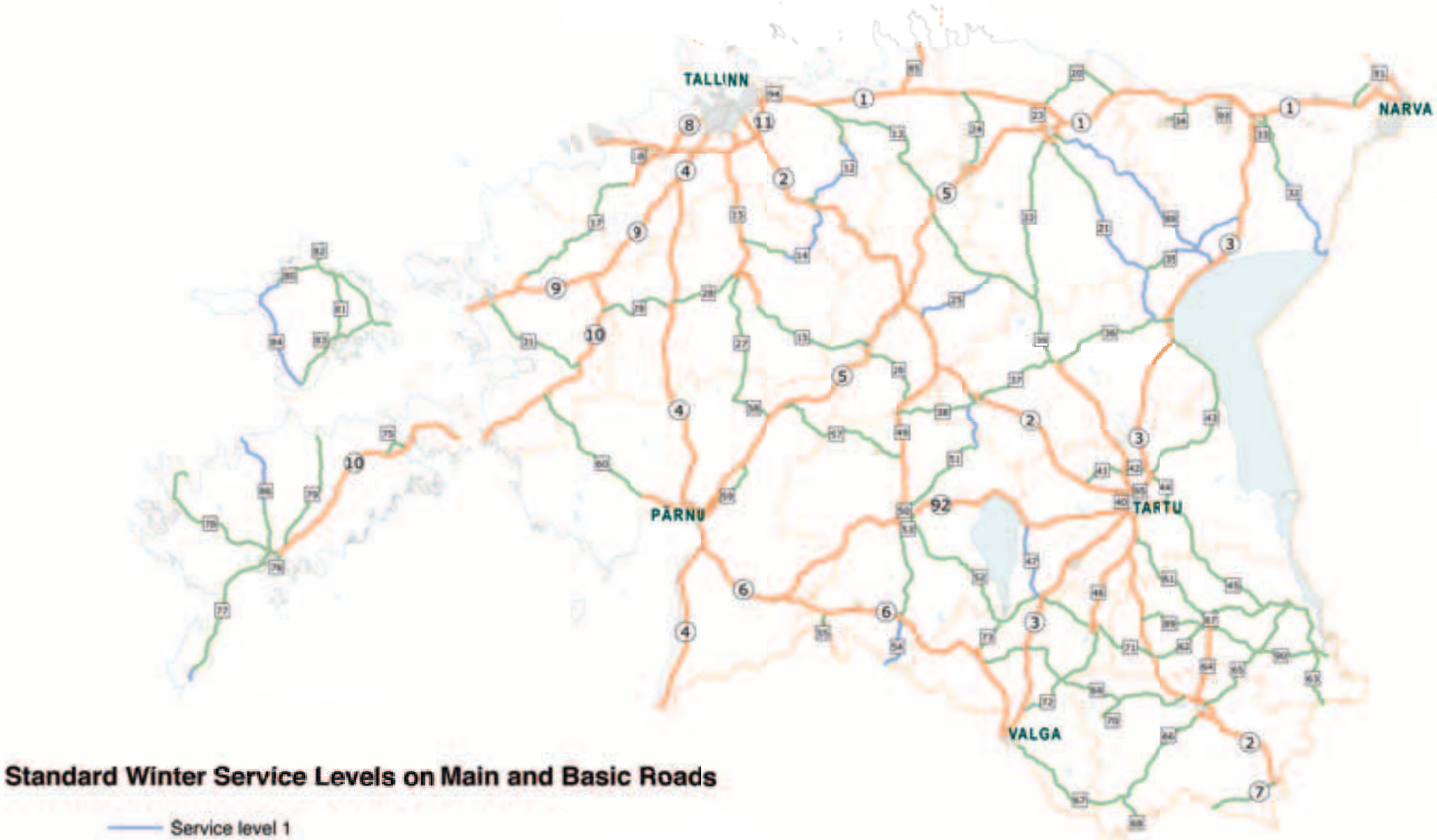


Expenditures for road operations in 2005-2009

	Expenditures (million kroons)				
	2005	2006	2007	2008	2009
In total	**393.1**	**436.5**	**506.3**	**590.2**	**612.7**
Including:					
Summer service					
million kroons	**266.1**	**291.8**	**346.2**	**407.9**	**414.1**
%	67.7	66.8	68.4	69.1	67.6
Winter service					
million kroons	**127.0**	**144.7**	**160.1**	**182.3**	**198.6**
%	32.3	33.2	31.6	30.9	32.4

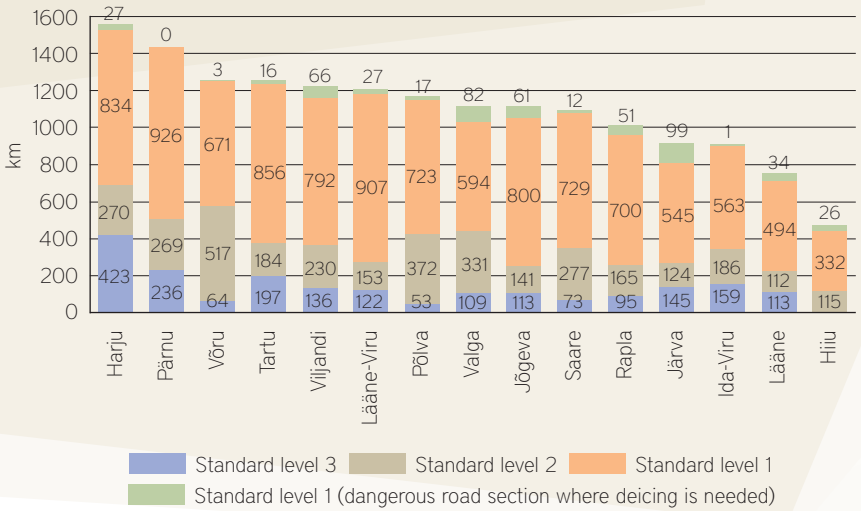
Remark:
From the total amount of 612,7million kroons in 2009 road operation works in amount of 559,3 million kroons (97.8%) have been performed by contracts




TALLINN
NARVA
PÄRNU
TARTU
VALGA
Standard Winter Service Levels on Main and Basic Roads
Service level 1
Service level 2
Service level 3

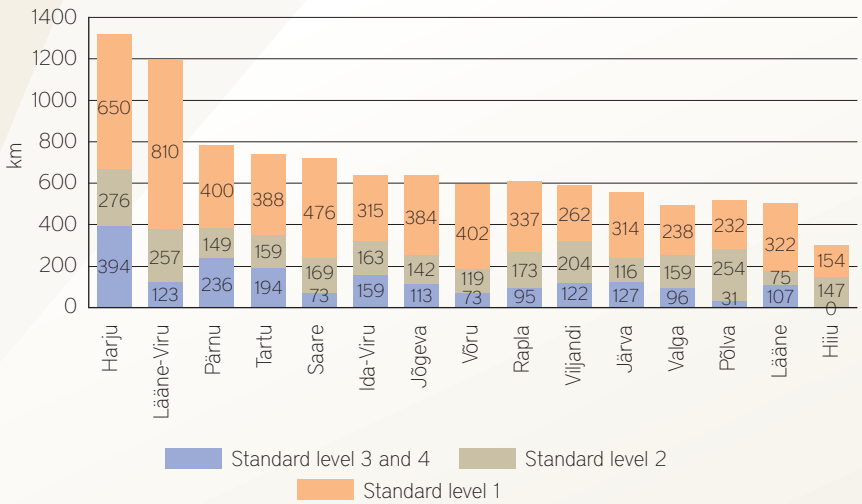
Amount of roads in counties by service levels

Winter service



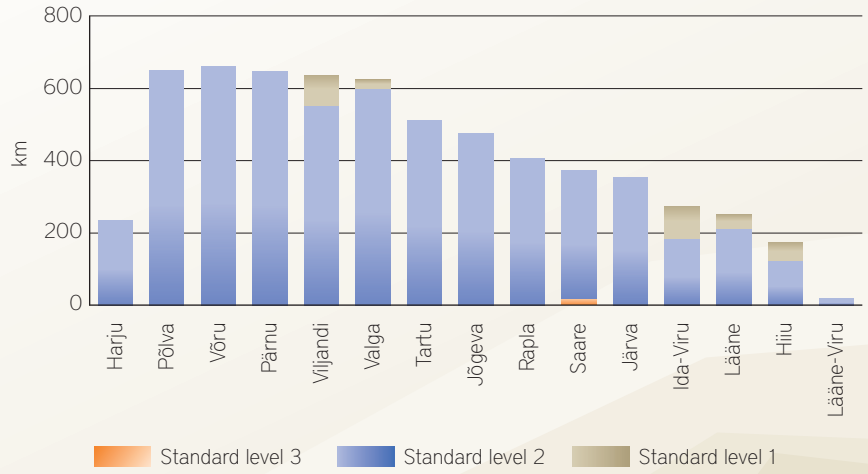
Total amount by service levels: Standard level 3 - 2,038 km;
Standard level 2 - 3,448 km; Standard level 1 - 10,995 km

Summer service of paved roads



Total amount by service levels: Standard level 3 - 1,943 km; Standard level 2 - 2,561 km; Standard level 1 - 5,684 km

Summer service of gravel roads



Total amount by service levels: Standard level 3 - 17 km; Standard level 2 - 5,987 km; Standard level 1 - 290 km
Remark: The standard service level 4 is defined as the highest level of the state of roads.

Inquiries about Road Conditions in 2009

Getting feedback from drivers is essential for the Road Administration as its activities are directed to the clients – road users. Special inquiries to investigate the satisfaction of drivers have been arranged since 2002 in order to receive their opinions about driving conditions on national roads. The need to ensure the growth of road users' satisfaction has also been fixed in the strategy of the Road Administration for the coming years.

In 2009 the Road Administration arranged two inquiries about road conditions. At the end of February drivers' opinion was asked about winter driving conditions and in September about summer driving conditions.

Winter road conditions were considered "good" or "excellent" by 66% of the respondents, whereas they were more satisfied with the conditions on bigger roads. The driving conditions on most of the main and basic roads were considered "good" or "excellent" even by 72% of respondents. The conditions of smaller roads and satisfaction with them are not so good. As the winter started with a storm in November, the drivers were asked how they estimated the road operations during the stormy weather. The replies showed that although there was some confusion on the roads, road operations were executed well enough. The share of "good" and "excellent" in that case was 34%, which is lower than the usual estimation, but still considerable in extraordinary conditions. Distribution of road information was considered "good" or "excellent" by 64%, which is a high rating. Besides, the respondents were asked to express their opinion about the main reasons for winter road accidents. Inappropriate speed (48%), careless driving (27%) lack of skills (18%), insufficient road service (2%) and bad tires (1%) were considered the main reasons by the respondents.

The summer inquiry gave similar results in principle. The driving conditions were considered "good" or "excellent" on national roads in general by 83%, on bigger roads by 76% (incl. main roads by 79%), and on smaller roads by 54% of respondents. The conditions were considered "very bad" only by 1% of drivers. They explained their rating by declaring that roads were full of holes and not repaired. Summer road service was generally considered "good" by 68% of respondents. Road users were also satisfied with the distribution of information about road conditions, repairs and detours (70%). Mostly radio was used to get information about driving conditions. Also the maps of road repairs and other informative booklets were considered to be necessary and expected to be distributed in petrol stations.

The summer inquiry also consisted of questions dealing with the technical state and passing of the technical check-up of the respondents` own vehicle. Drivers' estimations were very optimistic: the vehicle is in excellent order – 41% of cases, in good order with some minor errors – 44%. 73% of the drivers realised a clear connection between the technical state of the vehicle and being involved in a road accident. 54% of the respondents thought that a vehicle which is out of order causes unwillingness of the driver to pass formal technical check-up. However, 63% of drivers were not anxious to look for some far away technical check-up place in order to pass the regular check-up more easily.

Traffic behaviour on Estonian roads was a separate question during the summer inquiry. The opinions were rather negative. Nobody of the respondents considered the driving habits excellent. 53% of them considered the situation bad or very bad. Lack of consideration towards other road users, impoliteness, exceeding reasonable speed, dangerous manoeuvres and overtaking were the main shortcomings brought out by the respondents.

Although the satisfaction level of road users is relatively high at present, it does not mean that the Road Administration should make any concessions concerning the quality of road service works. Regardless the need to economize and possible changes in financing of road management, the driving conditions on our roads must not get worse.

Thematical Planning

In connection with the need to specify the long term development plans of the main roads, county governments have initiated thematical planning on the proposal of the Road Administration in order to specify together with the development plans of the main roads the planning of the whole county.

The main goal of thematical planning is to bring the main roads in accordance with the requirements for 1st class roads. Considering national and local development, the need for and the optimal location of interchanges, crossings, pedestrian walkways, cycleways and collector roads will be specified in the planning. Also strategic assessment of environmental impact will be carried out.

Thematical planning involves the following main roads:

Road No.1 (E20) Tallinn – Narva

Thematical planning concerns the road section Jõhvi-Narva (km 163-208). In addition to the main goal, the best possible solution for the northern and eastern roundabouts of Jõhvi and for the roundabout of Sillamäe will be searched. The alignment of Vodava-Riigiküla road section (roundabout of Narva), which was laid down in 1991 will be checked and if necessary specified in the course of the planning.

Photo: Lemminkäinen Eesti AS

Road No.2 (E263) Tallinn – Tartu – Võru – Luhamaa

Thematical planning deals with the road section Mäo-Tartu (km 92-183). The best possible solution will be searched for the roundabouts of Mäeküla and Adavere, for the crossings of Paia (km 110.7) and Puhu (km 127.6) and for the road straightenings in Neanurme and Pikknurme.

Road No.4 (E67) Tallinn – Pärnu – Ikla

The thematical planning deals with the road from Tallinn to Häädemeeste (km 12-170). The best solutions will be searched for the roundabouts of Kernu, Are and Pärnu and for the road straightening in Nurme.

Utilization of European Regional Development Fund (ERDF)

The sum of 621.3 million kroons from the ERDF has been allocated to the Road Administration for development of the infrastructure of regional importance in the years 2009-2010. These external resources are used to finance the combined project of reconstruction of regional roads. The project is aimed to improve traffic safety on those roads, their passability, the environmental state, and enliven the development of the regions in general. Also access to the TEN-T network and eliminating bottlenecks on the roads are considered to be essential.

Six road sections of national roads with the total length of 39.1 km were reconstructed and 5.1 km of pedestrian and cycle-ways were built during the reconstruction. New pavements were constructed, embankments and water collecting systems were improved, road lighting was installed and traffic control facilities were renewed. 220 million kroons of the ERDF money was utilized in 2009 on the road sections listed below:

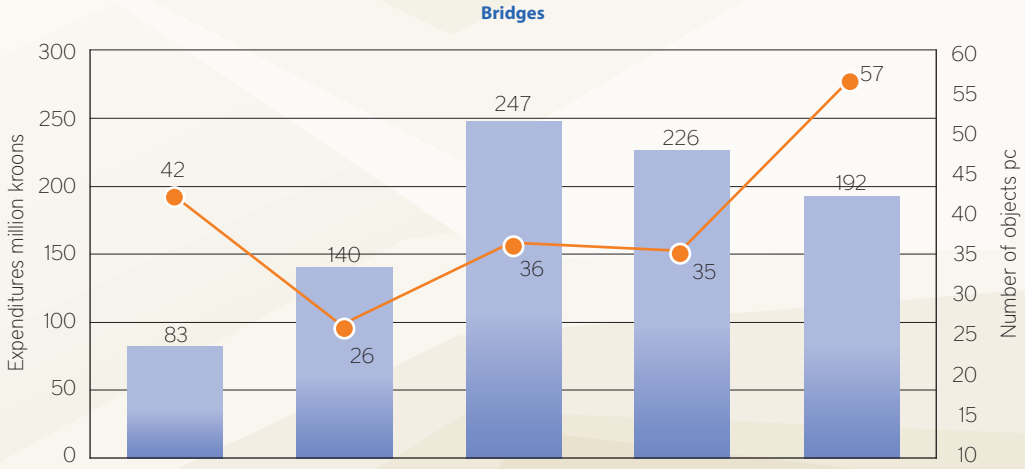
- Road No.5 Pärnu – Rakvere – Sõmeru, 6.6-16.0 km. Road works started in June 2009 and ended in November 2009. The contract was concluded between the RA of the Western Region and AS Teede REV-2;
- Road No.5 Pärnu – Rakvere – Sõmeru, 78.6-83.2 km. Reconstruction period: March 2009 - November 2009. Orderer – the RA of the Northern Region, performer – Nordecon Infra AS;
- Road No.51 Viljandi – Põltsamaa, 29.1-36.2 km. Reconstruction period: May 2009, - August 2009. Orderer – the RA of the Western Region, performer – AS Talter;
- Road No.58 Aluste – Kergu, km 5.9-12.2. Start in August, 2009, completion in November, 2009. Orderer – the RA of the Western Region, performer – AS TREF;
- Road No.11303 Jüri – Aruküla, km 5.1-8.2. Start in April, 2009, completion in August, 2009. Orderer – the RA of the Northern Region, performer – AS Talter;

- Road No.19203 Are – Suigu, km 0.3-8.9. Start in June, 2009, completion in November 2009. Orderer – the RA of the Western Region, performer – AS TREF.

Construction and Repairs of Bridges

The biggest bridge construction work on national roads in 2009 was the new Rannu-Jõesuu Bridge, which was opened for traffic on September 29. The bridge is located on Tartu-Viljandi road, crossing the river of Emajõgi close to its mouth on the northern shore of Lake Võrtsjärv. The 90 m long and 14 m wide new arch bridge is located about 90 m downstream from the 66 m long old reinforced concrete bridge, which was built in 1958, and is now open only for pedestrians and cyclists. The bearing construction of the new bridge is comprised of two 18 m high steel arches, which by means of sloping shrouds and crossbeams, hold the reinforced concrete carriageway.

Together with the building of an access road (section 1.7 km) and renovating the old bridge, the total construction cost of the project was 79 million kroons. The orderer of the bridge was the Road Administration of the Western Region, the designer the Technical Centre of Estonian Roads with experts Siim Idnurm and Juhan Idnurm from the Tallinn University of Technology, construction was carried out by the company AS Merko Ehitus and supervison by Eesti-Taani Kommunikatsiooni OÜ.



Pavements on Gravel Roads

The total of 272 km of road sections between settlements or on other roads with considerable traffic load in all counties were paved, using the resources allocated to regional road administrations. The focus of paving works was on secondary roads and after that on basic roads. Mostly light and cheap solutions were used, like pavement from crushed black rubble (RAP), obtained from repair works, and double surface dressing of gravel roads.

The longest sections of the roads were:

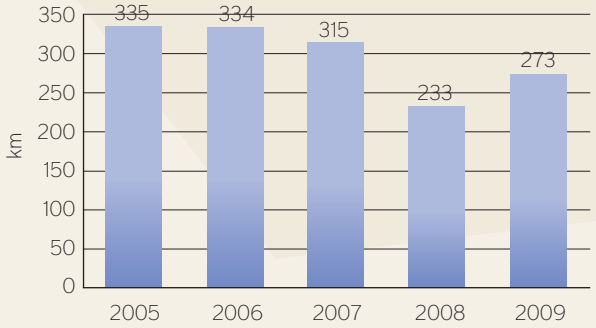
Lokuta – Roovere – Väätsa (the access road to the garbage dump)	8.5 km
Paldiski – Padise	12 km
Harju-Risti – Riguldi – Võntküla	23 km
Rakvere- - Rannapungerja	7 km
Peetri – Järva-Jaani	10.5 km

Different technologies of the following extent were used:

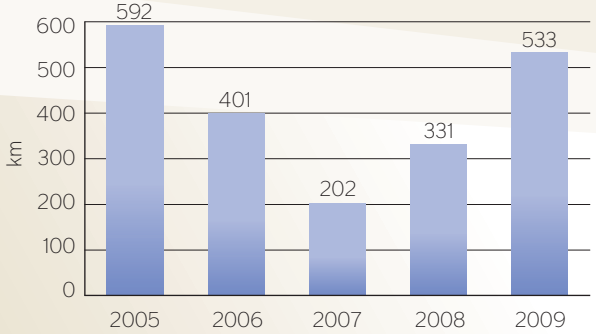
- Asphalt concrete pavements – 48.9 km
- Mixing in situ – 151.6 km (incl. 113.5 km using RAP)
- Double surface dressing – 72.3 km

Most of the pavements constructed by using RAP were built in Lääne and Saare counties (for example Harju-Risti – Riguldi - Võntküla 23 km, Vaisi – Riguldi 18 km, Läätsa – Jämaja – Sääre - Mäebe 10 km, Lõu – Jämaja 11 km etc.)

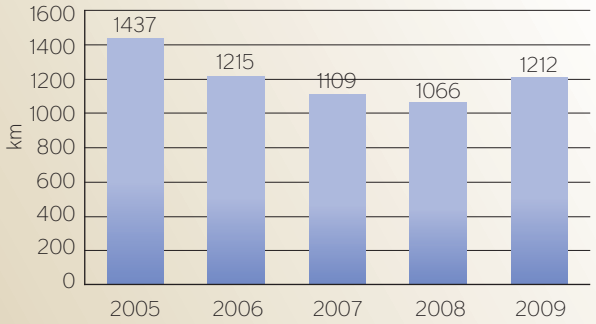
Paving of gravel roads



Repairs of gravel roads

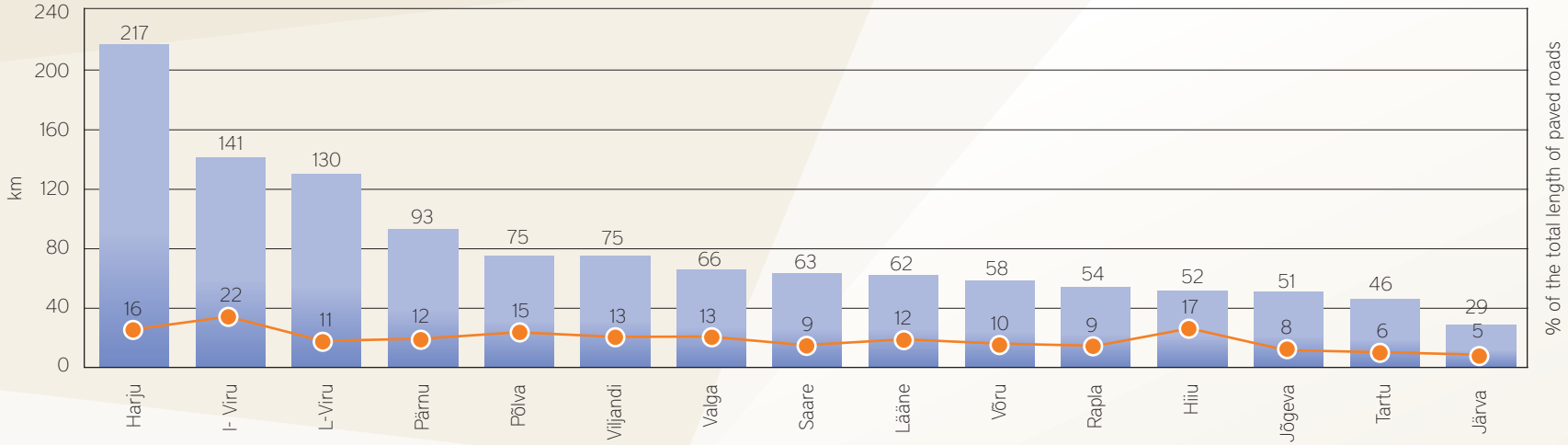


Surface dressing

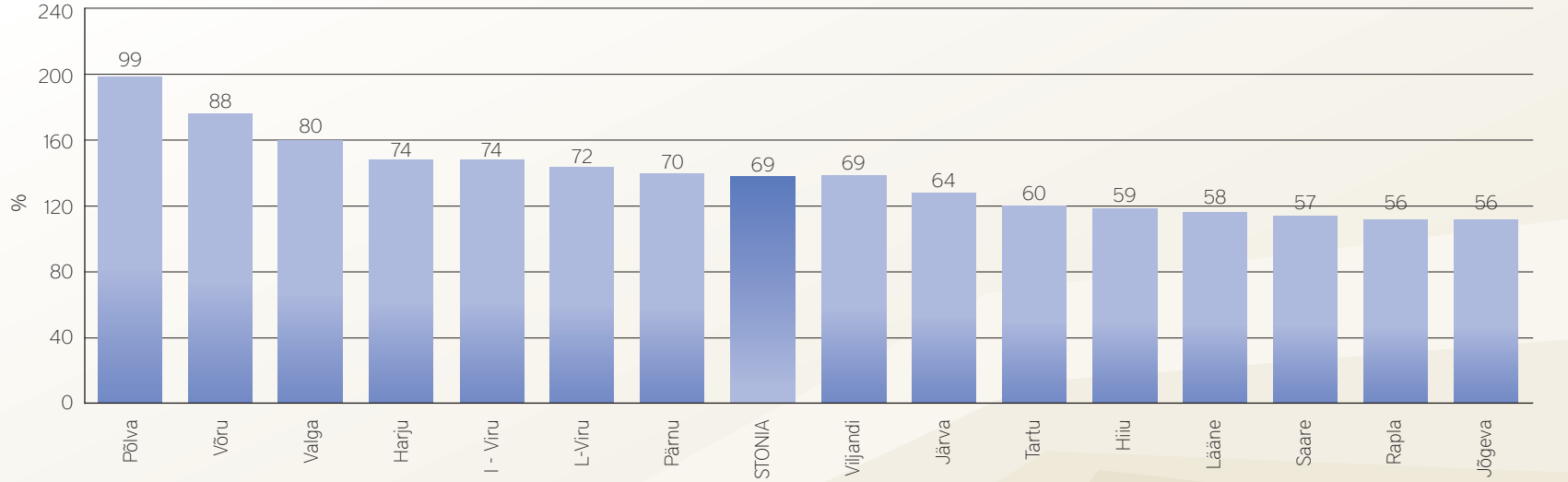


Surface dressing by counties

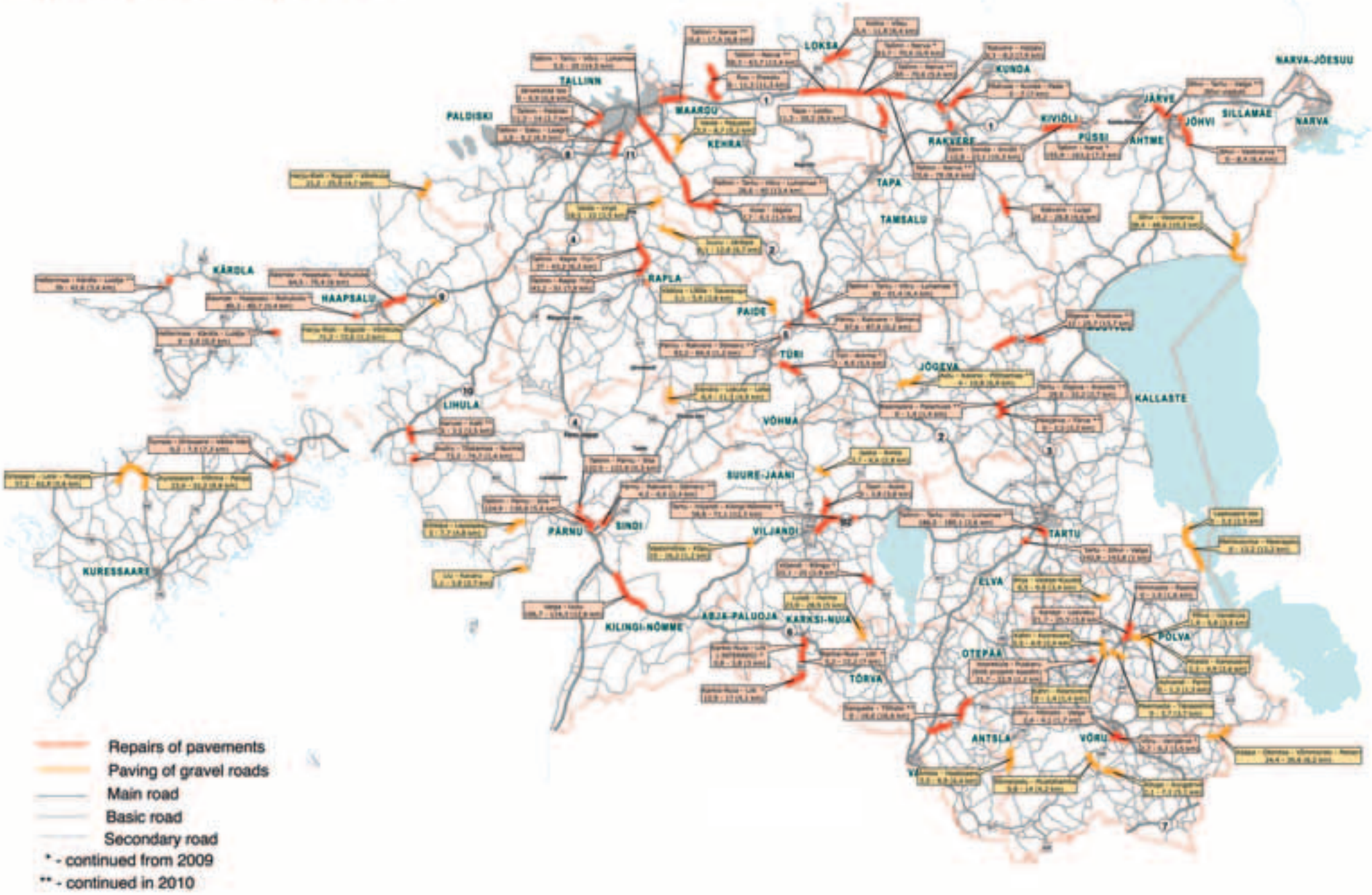
In 2009



During the period 2004-2009 (% of the total length of paved roads in the county)



Major constuction and repairs in 2010



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	**1,121,846.2**	**544,629.3**	**197,741.3**	**379,475.6**
Including:					
a) Construction of paved roads	th.of kroons	**1,121,846.2**	**544,629.3**	**197,741.3**	**379,475.6**
	km	**394.1**	**36.9**	**64.3**	**292.8**
From this by the types of surfaces:					
- asphalt concrete	th.of kroons	1,012,115.0	544,629.3	197,451.4	270,034.3
	km	168.9	36.9	64.1	67.8
- mix in plant and site	th.of kroons	75,194.5		289.9	74,904.6
	km	153.0		0.2	152.8
- surface dressing of gravel roads	th.of kroons	34,536.7			34,536.7
	km	72.2			72.2
b) Construction of gravel roads	th.of kroons	0.0	-	-	
	km	0.0	-	-	
2.Construction and reconstruction of bridges	th.of kroons	**141,150.2**	**119,657.9**	**1,194.4**	**20,297.9**
- reconstructed bridges	pc/m	19/170,7	4/13,8		15/156,9
- reconstructed overpasses	pc/m	1/58,2	1/58,2		
3. Repairs of roads *	th.of kroons	**543,054.9**	**83,735.9**	**170,092.6**	**289,226.4**
a) repairs of pavements	th.of kroons	**189,311.8**	**58,601.0**	**100,860.5**	**29,850.3**
	km	**136.9**	**52.9**	**58.8**	**25.2**
From this by the types of surfaces:					
- asphalt concrete overlays	th.of kroons	168,125.2	58,601.0	89,641.4	19,882.8
	km	118.6	52.9	48.7	17.0
- mix in plant and site (bitumen-gravel, stabilization, macadam)	th.of kroons	21,186.6		11,219.1	9,967.5
	km	18.3		10.1	8.2
b) repairs of gravel roads	th.of kroons	**142,265.0**		**2,125.8**	**140,139.2**
	km	532.6		18.9	513.7
c) surface dressing	th.of kroons	**211,478.1**	**25,134.9**	**67,106.3**	**119,236.9**
	km	**1212.0**	**123.9**	**318.2**	**769.9**

Activities	Unit	Volume in total	Including		
			Main roads	Basic roads	Secondary roads
4. Repairs of bridges	th.of kroons	**51,213.7**	**11,993.1**	**21,802.0**	**17,418.6**
- repaired bridges	pc/m	33/761,73	5/122,4	9/ 218,96	19/420,37
- repaired overpasses	pc/m	4/282,8	3/210,8	1/72	
5.Road operations **	th.of kroons	**612,660.8**	**156,529.7**	**137,151.5**	**318,979.6**
From this:					
- summer service	th.of kroons	403,860.6	89,332.1	80,327.2	234,201.3
- winter service	th.of kro ons	198,595.3	62,393.0	54,922.9	81,279.4
Road construction, repairs and operations in total	**th.of kroons**	**2,469,925.8**	**916,545.9**	**527,981.8**	**1,025,398.1**
Repairs of buildings	**th.of kroons**	**2,667.9**			
Construction, repairs and operations in total	**th.of kroons**	**2,472,593.7**	**916,545.9**	**527,981.8**	**1,025,398.1**

Road construction, repairs and operations by county

Expenditures thousands of kroons

Activities		County															TOTAL
		Harju	Hiiu	I-Viru	Jõgeva	Järva	Lääne	L-Viru	Põlva	Pärnu	Rapla	Saare	Tartu	Valga	Viljandi	Võru	
1. Road construction	**kr**	**138412**	**27361**	**278417**	**49275**	**242926**	**27409**	**906**	**66958**	**85558**	**50679**	**26145**	**47819**	**3693**	**54863**	**21425**	**1121846**
including																	
a) construction of paved roads	kr	138412	27361	278417	49275	242926	27409	906	66958	85558	50679	26145	47819	3693	54863	21425	1121846
	km	52.494	17.175	6.890	41.589	17.218	42.004		21.213	52.420	32.548	43.479	33.818	0.292	27.175	5.798	394.1
- asphalt concrete	kr	133181	21477	278417	37764	239597	910	906	54223	76660	46640	9763	39974	3693	52799	16111	1012115
	km	38.068	8.59	6.890	14.644	12.969	0.180		2.386	26.469	11.396	2.630	21.849	0.292	19.000	3.553	168.9
																	0
- mix in plant and site	kr				290	2047			10703	8369	411		6755				28575
	km				0.180	1.344			15.953	10.503	1.585		9.933				39.5
																	0
- paving with mild asphalt	kr	4970			11221	1282	14817		630	529	3105	5783	1090			3192	46619
	km	13.469			26.765	2.905	18.789			15.448	18.232	15.857	2.036				113.5
																	0
- surface dressing of gravel roads	kr	261	5884				11682		1402		523	10599			2064	2122	34537
	km	0.957	8.585				23.035		2.874		1.335	24.992			8.175	2.245	72.2
b) construction of gravel roads	kr																0
	km																0.0
2. Construction and reconstruction of bridges and overpasses	**kr**	**6670**	**0**	**54373**	**1091**	**65346**	**0**	**4258**	**1194**	**2852**	**3381**	**0**	**0**	**782**	**0**	**1203**	**141150**
- bridges	kr	6670		12868	1091	9184		4258	1194	2852	3381			782		1203	43483
	q	3		2	2	4		3		2	2			1			19
	m	30.1		9.3	5.0	22.0		27.2		36.0	36.1			5.0			170.7
- overpasses	kr			41505		56162											97667
	q			1.0													1
	m			58.2													58.2
3. Repairs of roads	**kr**	**51564**	**12194**	**30914**	**21598**	**19757**	**43069**	**68543**	**67864**	**32358**	**41984**	**46851**	**20305**	**15867**	**44174**	**26013**	**543055**
including																	
a) repairs of pavements	kr	20562	437	10207	591	252	24883	38112	45516	598	18299	22112	939	0	6447	357	189312
	km	17.390	0.160	7.750	0.000	0.000	35.895	16.323	26.011	2.681	15.240	11.107	0.682	0.000	3.700	0.000	136.9
- asphalt concrete	kr	19368	437	10207		252	14280	37777	44813	598	18299	16509	709		4519	357	168125
	km	16.606	0.160	7.750			26.086	15.923	26.011	2.681	15.240	4.731	0.482		2.961		118.6
- mix in plant and site	kr	1194			591		10603	335	703			5603	230		1928		21187
	km	0.784					9.809	0.400				6.376	0.200		0.7		18.3
b) repairs of gravel roads	kr	13171	2605		9214	7332	6851	2487	10209	18338	12046	10938	12331	5079	21409	10255	142265
	km	37.254	10.345	9.300	32.979	27.931	25.600	20.833	33.647	86.932	60.835	36.043	25.847	16.611	82.604	25.8	532.6
c) surface dressing	kr	17831	9152	20707	11793	12173	11335	27944	12139	13422	11639	13801	7035	10788	16318	15401	211478
	km	216.759	52.016	141.011	51.637	28.797	62.152	129.653	74.939	92.838	53.976	63.410	46.211	65.859	74.629	58.116	1212.0
4. Repairs of bridges and overpasses	**kr**	**5,207**	**1,758**	**228**	**7,502**	**0**	**2,038**	**3,145**	**0**	**4,717**	**4,838**	**0**	**2,694**	**5,968**	**13,119**	**0**	**51214**
including																	
- repaired bridges	q	5	2	1	1		1	4		10	2		2	2	3		33
	m	179.5	26.5		68.8		10.2			43.2	43.5		104.0	97.7	188.4		761.7
- repaired overpasses	kr	1,093					893	2,405							4150.0		8540.5
	q	1					1.0	1.0							1.0		4
	m	85.8					80.0	45.0							72.0		282.8
5. Road operations	**kr**	**66380**	**15457**	**46982**	**41072**	**35711**	**25399**	**43462**	**42602**	**47569**	**33402**	**36646**	**56122**	**42195**	**34246**	**45416**	**612661**
including																	
- summer service	kr	42772	11023	33417	25484	23208	15703	26718	29710	30522	19991	25215	37706	29297	23831	29264	403861
including																	

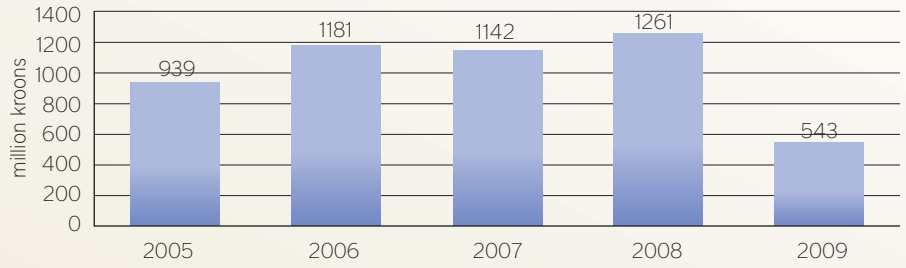
Expenditures thousands of kroons

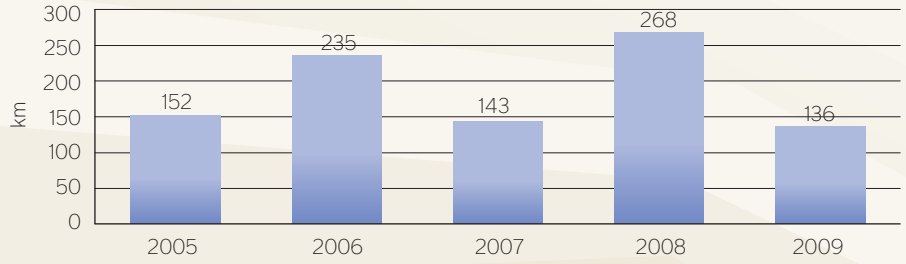
Activities		County															TOTAL
		Harju	Hiiu	I-Viru	Jõgeva	Järva	Lääne	L-Viru	Põlva	Pärnu	Rapla	Saare	Tartu	Valga	Viljandi	Võru	
paved roads	kr	36095	7900	24029	14214	14943	10945	26522	13679	16626	12507	19610	22495	15568	15783	15737	266653
gravel roads	kr	6677	3123	9388	11270	8265	4758	196	16031	13896	7484	5605	15211	13729	8048	13527	137208
- winter service	kr	21935	4224	13388	14603	11922	8945	15991	12263	16096	12866	11046	17553	12421	10158	15184	198595
- service of bridges and overpasses	kr	1673	210	177	985	581	751	753	629	951	545	385	863	477	257	968	10205
In total	**kr**	**268233**	**56770**	**410914**	**120538**	**363740**	**97915**	**120314**	**178618**	**173054**	**134284**	**109642**	**126940**	**68505**	**146402**	**94057**	**2469926**

Road construction, repairs and operations in 2005-2009

Activities	Expenditures thousands of kroons					Construction and repairs of roads - km, bridges - pc/m				
	2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
1. Road construction	**297,031**	**419,994**	**583,170**	**737,627**	**1,121,846**					
Including:										
a) construction of paved roads	**296,920**	**416,416**	**581,757**	**709,049**	**1,121,846**	**334.9**	**333.9**	**319.7**	**264.2**	**394.1**
From this by the types of surfaces:										
- asphalt concrete	146,468	213,453	434,325	536,229	1,012,115	28.4	20.5	34.6	43.5	168.9
- mix in plant and site	96,648	143,481	109,120	124,845	75,194	181.4	208.1	200.5	132.2	153.0
- surface dressing of gravel roads	53,804	59,482	38,312	47,975	34,537	125.1	105.3	84.6	88.5	72.2
b) construction of gravel roads	**111**	**3,578**	**1,413**	**28578**			**10.9**		**13.6**	
2. Construction and reconstruction of bridges	**43,760**	**95,494**	**204,720**	**92,889**	**141,150**					
- reconstructed bridges						10/209,6	11/166,2	20/445,8	13/315	19/170,7
- reconstructed overpasses							3/15,0	3/123	3 /308	1/58,2
3. Repairs of roads	**1,210,429**	**1,476,715**	**1,142,073**	**1,260,976**	**543,055**					
Including:										
a) repairs of pavements	**939,337**	**1,180,620**	**870,288**	**883,505**	**189,312**	**152.0**	**235.2**	**143.0**	**268.5**	**136.9**
From this by the types of surfaces:										
- asphalt concrete	925,696	1,177,326	834,478	856,947	168,125	146.1	235.0	130.3	250.6	118.6
- mix in plant and site	13,641	3,294	35,810	26,558	21,187	5.9	0.2	12.7	17.9	18.3
b) repairs of gravel roads	**98,717**	**76,301**	**60,166**	**130,848**	**142,265**	**591.8**	**401.2**	**202.4**	**330.9**	**532.6**
c) surface dressing	**172,375**	**219,794**	**211,619**	**246,623**	**211,478**	**1436.7**	**1215.0**	**1108.8**	**1065.8**	**1212.0**
4. Repairs of bridges and overpasses	**39,350**	**44,088**	**42,293**	**133,207**	**51,214**					
- repaired bridges						21/587,4	12/536,5	15/286,6	17/ 279,4	33/761,73
- repaired overpasses						11/432,4		1/111	2/ 262	4/282,8
5. Road operations	**393,051**	**436,468**	**506,254**	**590,235**	**612,661**					
Including:										
- summer service	266,093	291,748	346,194	407,923	414,066					
- winter service	126,958	144,720	160,060	182,312	198,595					
Construction, repairs and operations in total	**1,234,355**	**1,983,621**	**2,814,934**	**2,814,934**	**2,469,926**					

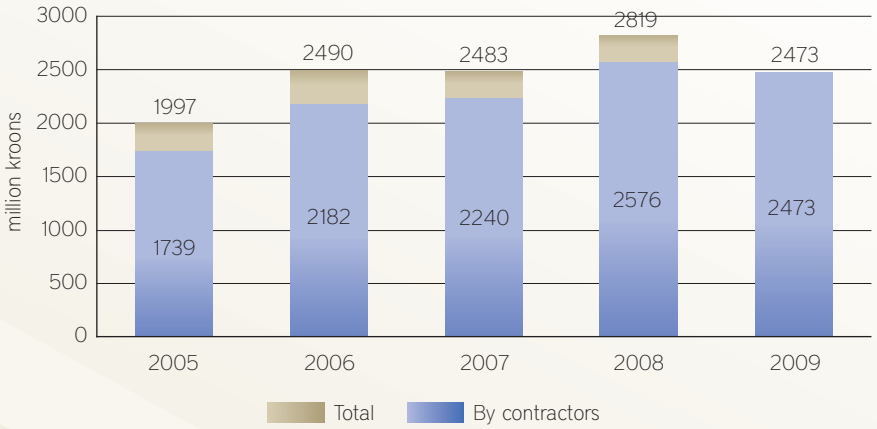
Repairs of pavements





Share of works performed by contractors in 2005-2009

		Expenditure (thousands of kroons)				
		2005	2006	2007	2008	2009
Construction, repairs and operations in total		**1,997,162**	**2,490,086**	**2,483,211**	**2,818,779**	**2,472,594**
Performed by contractors	thousands of kroons	1,738,579	2,182,272	2,239,923	2,576,331	2,472,594
	%	87.1	87.6	90.2	91.4	100.0



Environmental Measures

Construction of noise barriers

Two noise barriers were constructed in 2009: in the settlement of Assaku near Tallinn-Tartu-Võru-Luhamaa road and in Vidruka village (Lääne County) on Äsmäe-Haapsalu-Rohuküla road.

Assaku noise barrier had to be built due to the excessive level of traffic noise on the residential lands neighbouring the road. The noise caused by vehicles (AADT 15,679) moving on the high embankment exceeded both daily (60 dB) and nightly (55 dB) noise limits by 54% in tested cases. All studies showed that also nightly acoustic pressure exceeded the limit. In order to find proper mitigating measures, modelling of noise conditions on Mõigu-Vaida road section was carried out and temporary summer speed limit 90 km/h was imposed. Construction of a 1084 m long noise barrier on the right and a 247 m long barrier on the left was completed in December, 2009. The barriers (4 m high) were built by using Royal Europe plastic modules. The designer of the barrier was Järelpinge Inseneribüroo OÜ, the constructor Merko Ehitus Ltd and the supervisor Taalri Varahaldus Ltd. The construction costs were 10.9 million EEK.

Vidruka noise barrier was constructed by Roadservice OÜ in the frames of a repairs project on the road section 49.4-64.2 km on Äsmäe-Haapsalu-Rohuküla road. The 102 m long and 3 m high barrier was built by using Schütte aluminium profiles, with a foundation on a 0.5 m high concrete base.

Monitoring of noise barriers

In order to assess how effectively barriers reduce the noise level on residential lands, the Road Administration launched a monitoring project of noise barriers in 2009. The first studied object was Vaida noise barrier completed in 2008. The monitoring was implemented by the physics laboratory of the Health Inspection, using the methods of research worked out in this laboratory. The noise level was measured by profiles, in four points of every profile located on different distances from the road, and keeping a 50 m distance between the profiles. The results of measurements confirmed that the average noise level in residential areas at peak hours did not exceed the allowed limits.

Assessment of environmental impact

The assessment of the environmental impact of the activities that were outlined by the preliminary design of Kose-Võõbu and Võõbu-Mäo sections on Tallinn-Tartu road was completed and approved by the Environmental Board. According to the Assessment Report the future alignment of the road will be placed considering dislocation of protected areas (incl. NATURA 2000 areas), single protected objects, valuable landscape, productive agricultural land, historical and cultural monuments. The following mitigating measures will be foreseen: 3 ecological viaducts, 5 culverts and 3 crossings for wild animals, 3.7 km of noise barriers and 70 culverts in order to save the humidity regime in swamp areas. Rainwater will be collected and cleared in settling ponds.

The Assessment Reports of environmental impact on road sections Väo-Keila, Tartu-Elva, Tartu northern by-pass, Rakvere-Haljala and Kukruse-Tammiku were also approved in 2009.

Traffic Count

Statistics of the number of vehicles using roads is the basis for road design, determination of service levels and applying several traffic safety measures. Though traffic count has been carried out for a long time, it is possible to speak about up-to-date count only since 1990-ies when the first automatic counters were set on roads.

In 2009 the Road Administration continued to develop the stationary network of counting points. 56 new counting points were built. There are 22 points where the count is performed periodically (usually during 1 month), as they have no permanent electricity and stationary counting set. At the end of the year the total number of counting points was 105 in Estonia. They measure the number, classes and speed of passing vehicles. In a few years a new level of quality will be achieved. The availability and friendliness of counting data for users will improve essentially.

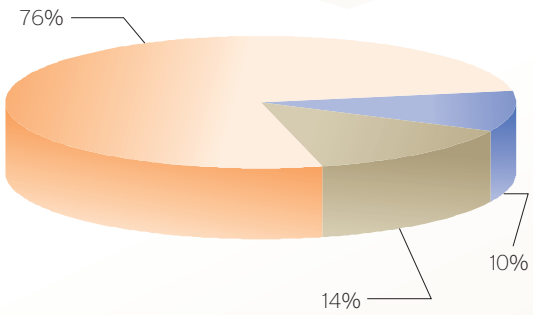
Changes in the economy are reflected directly in traffic count. Up to 2007, a constant 6-10% average growth of traffic flow was observed on main and basic roads. But in 2008 and also in 2009 the traffic flow continued to decrease. The decrease on main roads was 6.4%, on basic roads 6.7% and on secondary roads 10.2%.

The highest traffic density in Estonia (AADT 31,694) was fixed on the section 13.0-13.7 km of Tallinn-Pärnu - Ikla main road. The biggest fall of AADT on main roads was measured on a Valga-Uulu road section (16%).

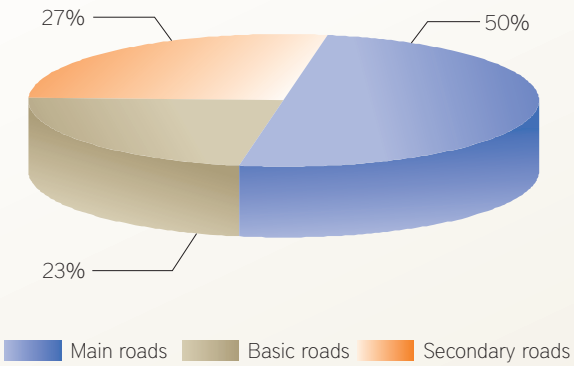
The main goal for the coming years is to apply entirely new technology of traffic count. A further gain in efficiency without any loss in quality is expected to be achieved as a result of reducing count volumes by reducing the hose method.

Traffic perfomance on national roads in 2009

Road network

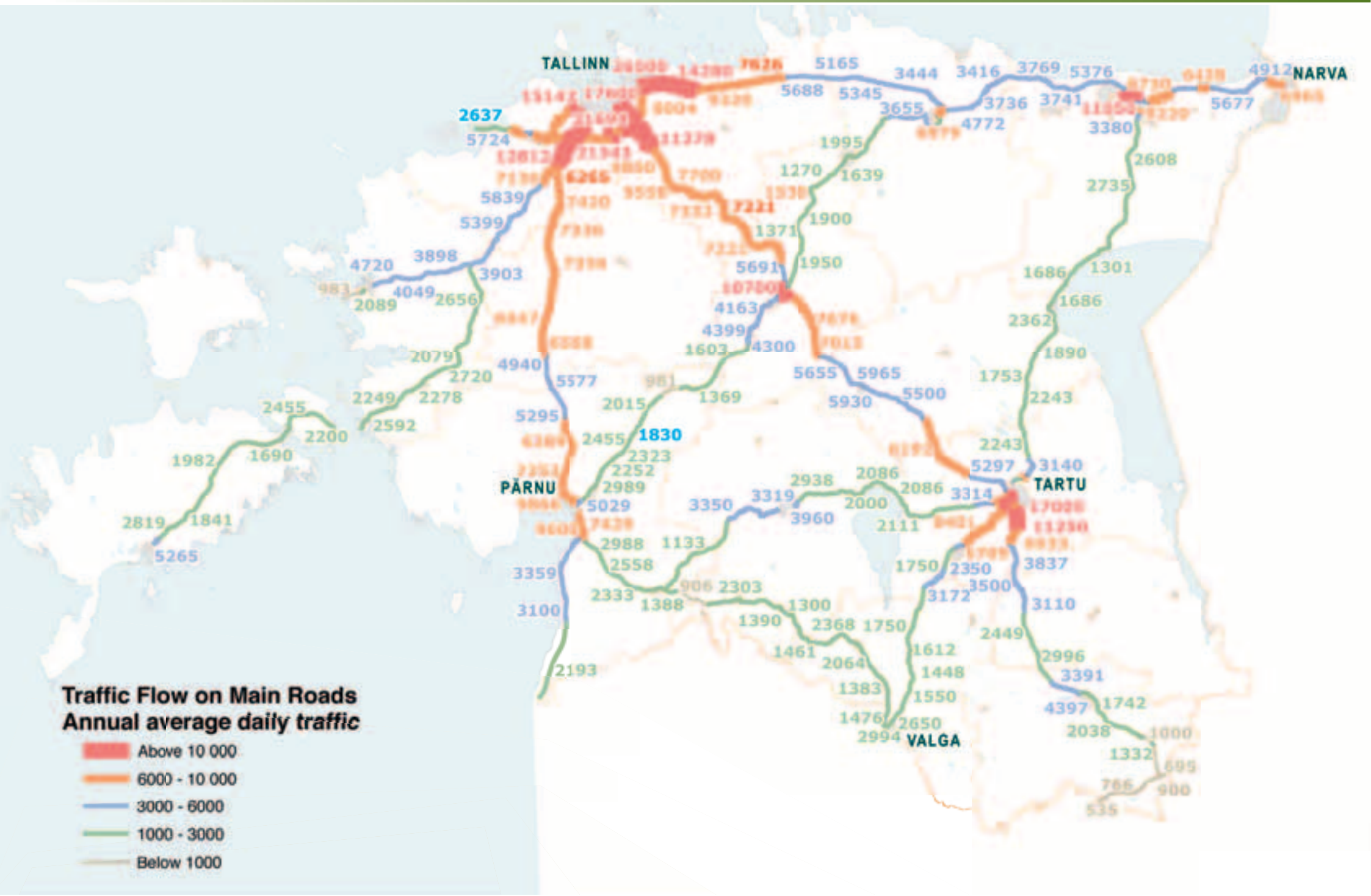


Performance



Main roads Basic roads Secondary roads

Photo: Nordecon Infra AS

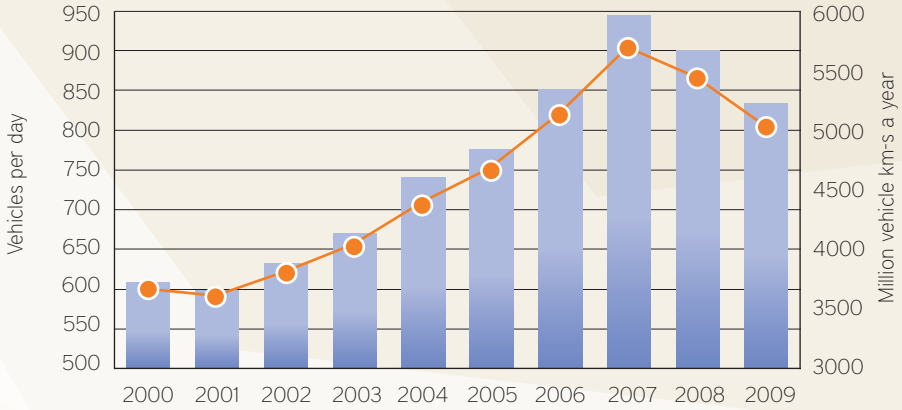

TALLINN
NARVA
TARTU
PÄRNU
VALGA
2637
1830
Traffic Flow on Main Roads
Annual average daily traffic
Above 10 000
6000 - 10 000
3000 - 6000
1000 - 3000
Below 1000

Classification of vehicles by administrative territories as of January 1, 2010

	Passenger cars		Buses		Goods vehicles		Motorcycles		Trailers	
County	Total	incl private	Total	incl private	Total	incl private	Total	incl private	Total	incl private
HARJU county	178211	107027	1471	105	30406	5477	5356	4182	20432	8308
incl TALLINN	122695	68965	1168	56	21655	2810	3158	2275	13295	4360
HIIU county	7630	6234	41	11	1080	508	388	363	925	638
incl KÄRDLA	2543	2012	21	2	470	153	133	122	366	205
IDA-VIRU county	54231	45206	615	85	5713	2124	989	907	3919	2296
incl NARVA	17074	14865	122	27	1454	514	237	214	948	495
incl KOHTLA-JÄRVE	13302	11118	206	18	1049	418	138	128	673	460
incl JÕHVI	4948	3567	69	9	733	197	112	101	388	227
JÕGEVA county	19424	14983	137	32	2688	1172	859	794	2284	1691
incl JÕGEVA	3995	2206	16	8	605	125	141	130	318	217
JÄRVA county	17248	13623	73	22	2345	903	710	657	1915	1290
incl PAIDE	3958	2960	22	7	522	140	141	127	440	248
LÄÄNE county	16127	11621	84	13	2413	812	597	552	1738	1284
incl HAAPSALU	6333	3903	40	3	1162	202	189	172	553	403
LÄÄNE-VIRU county	30916	24052	212	22	4773	1954	1048	943	3559	2216
incl RAKVERE	7883	5695	29	5	1188	389	242	212	938	582
PÕLVA county	23107	19384	88	36	2830	1513	1054	1003	2218	1622
incl PÕLVA	5195	4145	23	6	731	227	224	215	599	320
PÄRNU county	38606	29334	142	25	5808	2145	1613	1447	4897	3055
incl PÄRNU	15946	11283	75	9	2395	622	612	510	1393	1036
RAPLA county	19676	15645	125	43	2743	1231	771	698	2222	1507
incl RAPLA	2667	1974	42	2	423	102	112	100	368	190
SAARE county	20099	15820	101	18	2617	1145	925	841	2708	1950
incl KURESSAARE	7703	5723	58	3	1184	315	301	263	1216	786
TARTU county	55460	41411	560	43	9077	2351	1823	1543	8140	4146
incl TARTU	33736	24050	468	21	5613	1011	1035	844	5059	2181
VALGA county	17221	14449	82	28	2192	1018	630	579	1818	1310
incl VALGA	6113	5233	8	3	814	311	184	170	570	408
VILJANDI county	26664	21432	243	48	3563	1671	1212	1117	3069	2275
incl VILJANDI	9509	7232	162	15	1372	421	432	385	1142	764
VÕRU county	21072	17752	143	43	2863	1367	651	594	2166	1487
incl VÕRU	7613	6222	22	4	1086	390	263	229	744	486
Estonia Total	**545692**	**397973**	**4117**	**574**	**81111**	**25391**	**18626**	**16220**	**62010**	**35075**

Average traffic flow and overall traffic performance on national roads in 2000-2009

	Traffic flow (vehicles per day)				Performance
	Main roads	Basic roads	Secondary roads	National roads on average	Million vehiclekm-s a year
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
2009	4,255	1,325	301	834	5,013

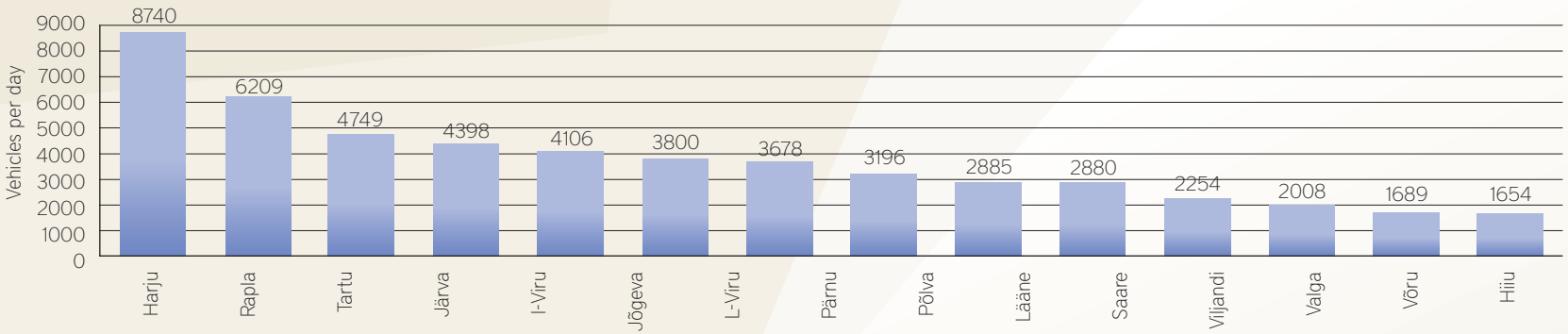


Number of vehicles

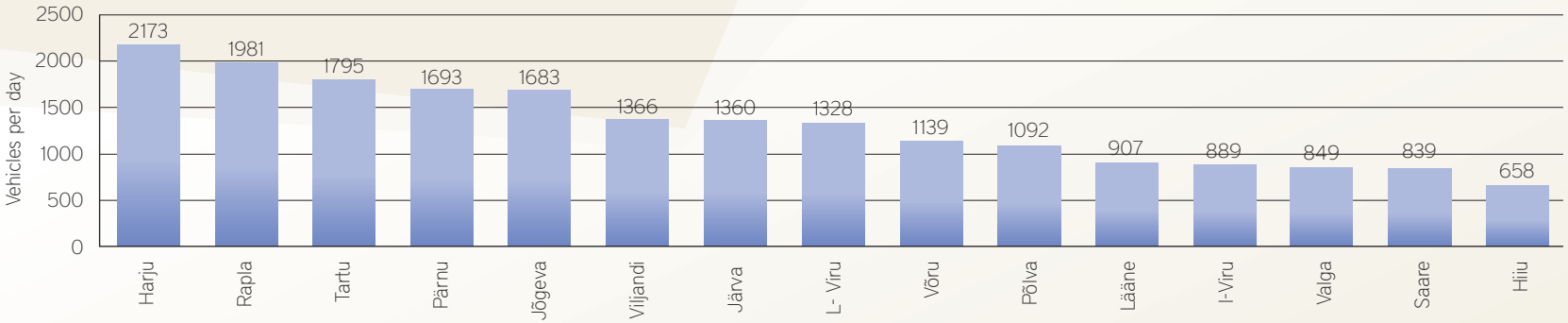
Year	Number in total	Including			Vehicles per 1000 inhabitants	
		Lorries	Buses	Cars	Vehicles in total	Cars
1993	**389059**	62971	8663	317425	**263**	215
1994	**440198**	61124	6918	372156	**304**	257
1995	**456051**	65598	7009	383444	**320**	269
1996	**484731**	71304	6829	406598	**345**	289
1997	**510740**	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
2009	**630920**	81111	4117	545692	**471**	407

Average traffic flow in countys per 1 km

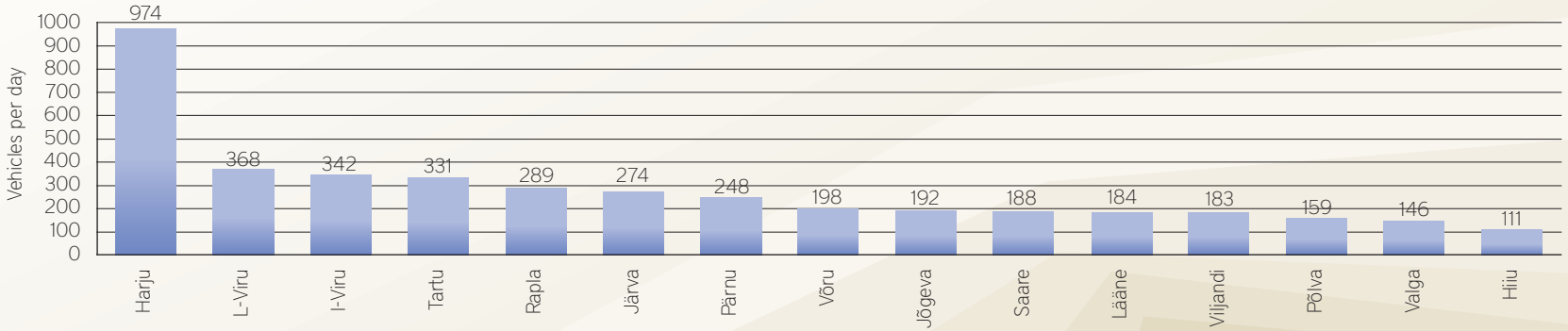
Main roads



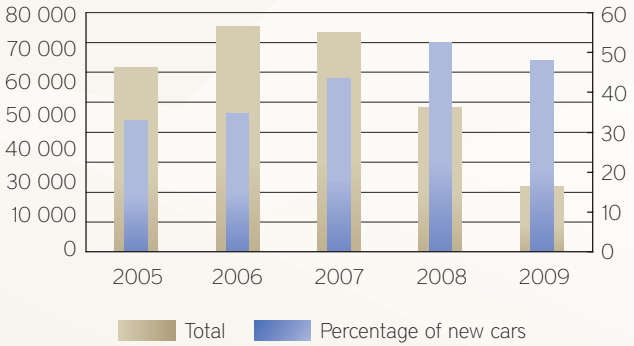
Basic roads



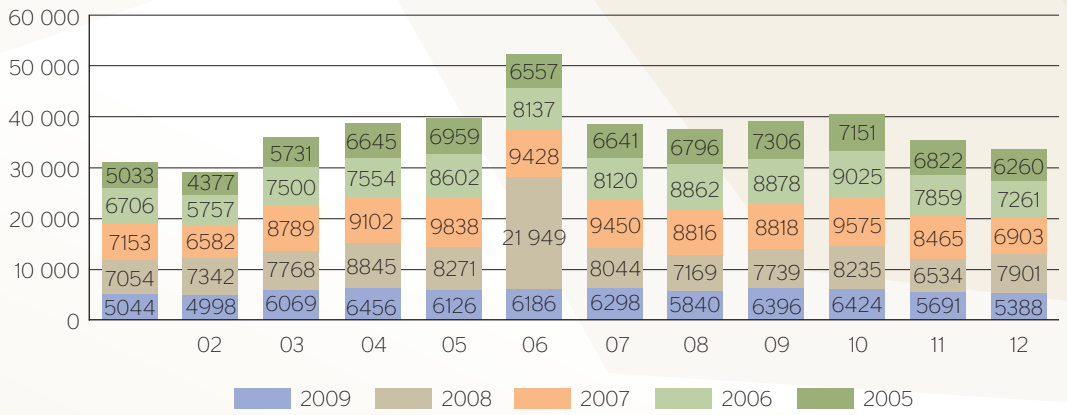
Secondary roads



Initial registration of passenger cars



Monthly change of the passenger cars ownership during 2005 – 2009



Vehicles 2005-2009

Initial registration of vehicles has decreased

In 2009 the number of initially registered vehicles decreased more than three times compared to the previous year. During 12 months 30 243 vehicles were recorded on the register, including 15 905 new ones.

21,037 cars, including 9,948 new cars were registered. The number of other registered vehicles was considerably smaller: the level of 1000 was exceeded by trailers (3093), lorries (2656) and motor - cycles (1171).

The most active registration of cars took place in April, when 2093 cars were registered. The least active registration month was February with 1346 cars. On average 1753 cars (including 829 new cars) per month were regiatered in 2009.

Rapid growth in the number of registered vehicles was replaced by a fall in 2008

Since the year 2000 initial registration of vehicles per year grew rapidly, reaching the approximate number of 95 000 in 2006. In May 2006 the registration record per month was fixed – 10 501 vehicles. Contrary to very active registration in I-III quarters of 2007, at the end of the year the number of initially registered vehicles started to decrease. In December just 3622 cars were included in the register.

The changes of owner

While the import of vehicles has fallen due to the economic downturn, it has not affected changing ownership of cars. On average 7500 cars per month changed their owner during the last 5 years. More changes than on average took place from 2006 - 2008. However, the change of ownership in 2009 (6,000 cars) cannot be compared to the year 2005.

* The number of changes of passenger cars ownership in June 2008 was way over average due to change of Sampo Bank's name.

Vehicles first registered in traffic register in 2009

Month	Passenger cars	incl new	Goods vehicles	incl new	Buses	incl new	Motorcycles	incl new	Trailers	incl new	Total	incl new
january	1604	1017	268	195	17	4	35	18	167	131	**2091**	**1365**
february	1346	792	229	148	29	22	50	29	132	95	**1786**	**1086**
march	1648	895	225	136	32	13	81	47	228	195	**2214**	**1286**
april	2093	1164	233	125	19	6	215	80	358	304	**2918**	**1679**
may	1825	875	227	114	26	8	191	82	432	357	**2701**	**1436**
june	1920	982	182	93	25	14	173	53	401	333	**2701**	**1475**
july	1825	714	191	105	18	4	142	45	301	223	**2477**	**1091**
august	1639	600	169	83	23	10	99	35	257	194	**2187**	**922**
september	1959	812	235	127	20	10	70	33	235	184	**2519**	**1166**
october	1888	728	250	119	29	9	56	17	245	190	**2468**	**1063**
november	1653	671	229	76	20	5	25	13	148	104	**2075**	**869**
december	1637	698	218	110	15	7	34	16	189	160	**2093**	**991**
TOTAL	**21037**	**9948**	**2656**	**1431**	**273**	**112**	**1171**	**468**	**3093**	**2470**	**28230**	**14429**

Month	All terrain vehicles	incl new	Wheel tractors	incl new	Mobile machinery	incl new	Wheel tractor trailers	incl new	Recreational craft	incl new	Jets	incl new	Total	incl new
january	18	9	31	28	14	14	19	16	29	21	0	0	**111**	**88**
february	22	11	30	25	13	9	18	15	16	10	2	0	**101**	**70**
march	23	8	36	31	13	10	14	13	69	56	0	0	**155**	**118**
april	17	14	48	41	10	7	23	17	166	125	5	2	**269**	**206**
may	11	8	74	69	20	18	19	18	145	103	8	4	**277**	**220**
june	3	3	49	42	24	20	26	24	138	95	10	2	**250**	**186**
july	6	5	18	17	35	29	23	21	162	107	17	6	**261**	**185**
august	5	3	24	20	23	21	20	19	80	55	4	0	**156**	**118**
september	6	4	21	18	12	7	15	13	79	60	5	1	**138**	**103**
october	3	2	18	15	18	9	3	3	42	31	0	0	**84**	**60**
november	14	7	19	11	13	5	11	9	27	17	0	0	**84**	**49**
december	19	3	31	19	16	11	23	21	37	19	1	0	**127**	**73**
TOTAL	**147**	**77**	**399**	**336**	**211**	**160**	**214**	**189**	**990**	**699**	**52**	**15**	2013	1476

Passenger cars first registered in 2009 (TOP 15)

By make	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	Older	Total
VOLKSWAGEN	722	25	66	141	144	79	46	46	73	106	155	175	182	212	126	83	34	35	21	13	39	2523
TOYOTA	1294	18	57	60	43	58	43	33	20	26	29	29	9	10	7	10	7	4	4	8	12	1781
FORD	389	15	18	45	54	43	35	46	84	77	148	145	133	85	47	27	13	5	9	3	19	1440
RENAULT	1260	1	0	5	7	5	7	10	9	11	9	14	10	8	5	1	1	2	4	2	2	1373
AUDI	214	18	36	83	98	66	41	38	38	53	76	103	106	103	94	41	21	21	14	6	18	1288
VOLVO	160	16	46	85	115	94	58	67	73	83	92	81	57	46	24	16	12	10	5	1	28	1169
BMW	158	29	34	49	48	44	38	39	57	64	90	86	70	79	61	36	25	20	7	10	30	1074
MERCEDES-BENZ	233	44	45	70	46	41	39	42	34	49	52	59	55	43	28	29	24	16	21	10	75	1055
OPEL	207	5	7	29	33	30	28	32	29	64	89	79	65	47	31	23	12	9	4	4	8	835
HONDA	666	7	9	15	10	8	6	7	2	11	8	11	5	4	1	1	3	6	4	1	4	789
MAZDA	536	20	11	14	6	12	9	11	11	15	14	36	17	15	11	9	4	8	4	9	3	775
HYUNDAI	678	5	8	4	8	5	6	11	5	6	5	7	3	2	0	1	0	1	1	0	0	756
SKODA	668	0	2	17	6	3	7	5	3	2	4	4	1	1	1	0	0	0	0	0	0	724
PEUGEOT	516	1	3	14	14	8	5	4	3	2	2	4	4	7	3	4	4	2	4	0	3	607
CITROEN	491	2	3	2	3	0	2	4	11	4	2	3	1	2	1	2	2	1	2	0	0	538

Passenger cars first registered in 2009

By chassis type

Chassis type	Number
STATION WAGON	6912
HATCHBACK	5186
SALOON	4972
MULTI-PUROPSE VEHICLE	3053
COUPE	635
CONVERTIBLE	193
CARAVAN	48
SPECIAL PURPOSE	16
SPORTS CAR	12
LIMOUSINE	9
PICK-UP	1

By doors

Doors	Number
5	13702
4	5606
3	1190
2	498
0	38
1	3

By power (kw)

Power (kw)	Number
kuni 59	1893
60 - 74	3182
75 - 99	6375
100 - 124	5303
125 - 149	2160
150 - 199	1423
200 - 249	497
250 - 299	114
300 - 399	74
404	1
408	1
412	7
426	2
449	2
450	2
601	1

By capacity (cm^3)

Capacity (cm^3)	Number
kuni 950	30
951 - 1150	246
1151 - 1250	339
1251 - 1350	338
1351 - 1450	1537
1451 - 1550	1075
1551 - 1650	3137
1651 - 1750	165
1751 - 1850	2108
1851 - 1950	1447
1951 - 2150	4017
2151 - 2350	1056
2351 - 2550	2439
2551 - 2750	324
2751 - 2950	449
2951 - 3450	1308
3451 - 3950	335
3951 - 4950	417
4951 - 5950	195
over 5951	78

By colour

Colour	Number
black	3940
grey	3440
silver	2528
red	1767
dark blue	1631
blue	1271
white	986
dark grey	945
beige	690
green	667
dark green	648
light grey	613
dark red	547
light blue	252
violet	227
brown	216
golden	151
light green	137
yellow	102
orange	97
light beige	81
dark brown	57
light brown	27
pink	8
light yellow	5
indefinite	3
dark yellow	1

New passenger cars first registered in 2009

By make

Make	Number
TOYOTA	1288
RENAULT	1255
VOLKSWAGEN	716
HYUNDAI	676
SKODA	666
HONDA	665
MAZDA	533
PEUGEOT	515
CITROEN	490
FORD	385
NISSAN	289
SUBARU	271
MERCEDES-BENZ	215
OPEL	207
AUDI	204
KIA	192
MITSUBISHI	185
SEAT	170
VOLVO	159
BMW	147
SUZUKI	105
LEXUS	87
CHEVROLET	79
DACIA	79
JAGUAR	52
LAND ROVER	49
CHRYSLER	42
DODGE	41
JEEP	41

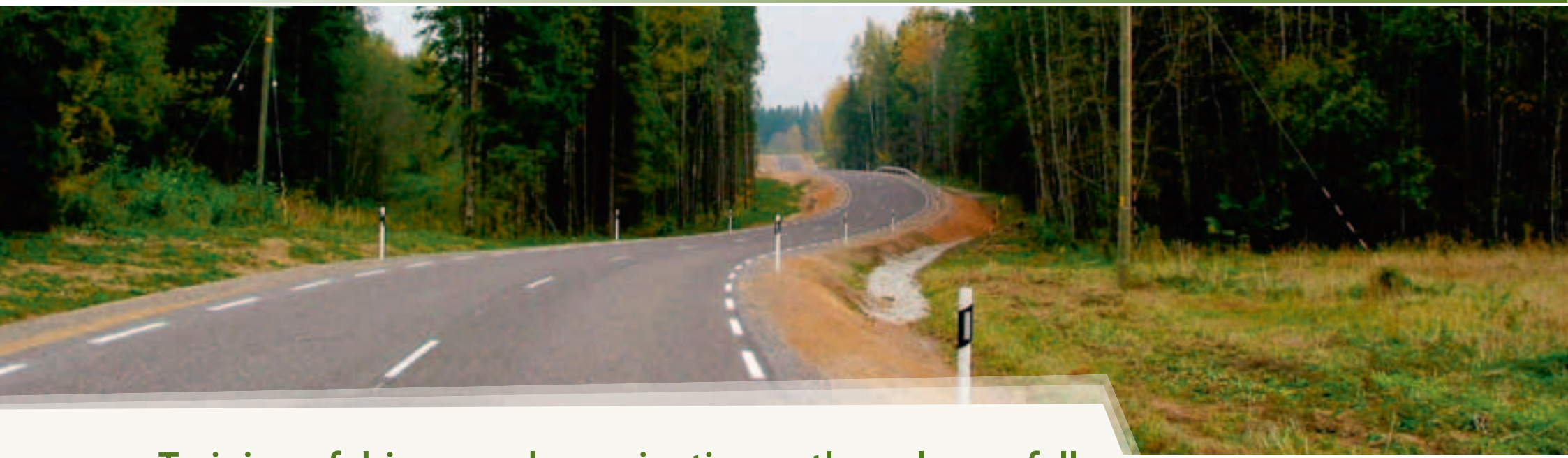
Make	Number
FIAT	35
SAAB	19
CADILLAC	14
ALFA ROMEO	9
ZHONGHUA	9
MINI	8
PORSCHE	8
LINCOLN	7
LADA	5
INFINITI	4
SSANGYONG	4
LOTUS	3
SELF-ASSEMBLED	3
AMG HUMMER	2
LAMBORGHINI	2
SHUANGHUAN	2
ASTON MARTIN	1
FIAT CARTHAGO	1
FIAT DETHLEFFS	1
FIAT HYMER	1
FIAT ITINEO	1
FIAT MCLOUIS	1
FIAT TRIGANO	1
FORD RIMOR	1
FORD TRIGANO	1
GMC	1
KOENIGSEGG	1
TOTAL	**9948**

Classification of vehicles by type of fuel

Type	Total	Passenger cars	Goods vehicles	Buses	Motorcycles
Petrol	**457245**	417287	21009	325	18624
Diesel-Fuel	**192272**	128385	60094	3792	1
Gas-Powered	**23**	17	6	0	0
Electric-Powered	**6**	3	2	0	1
Total	**649546**	**545692**	**81111**	**4117**	**18626**

Vehicles submitted to technical inspetion by bureaus, Jan 1, 2009 - Dec 31, 2009

Bureau	Technical inspetion	Compatible	Repetiteve	Average age	Amount of vehicles	Repeta-bility %
Tallinna	127745	115351	11963	11.1	104636	10.06
Viljandi	19809	18504	1286	14.4	17944	6.62
Pärnu	37659	34755	2711	13.3	31744	7.78
Valga	14080	12694	1367	14.7	12186	10
Hiiumaa	4307	4018	279	15.6	3899	6.57
Jõhvi	25560	23074	2419	13.5	21052	9.97
Jõgeva	14510	13141	1358	14.8	12629	9.58
Kuressaare	12596	11465	1119	14.4	11273	8.94
Rapla	8286	7796	476	13.6	7354	6.03
Saue	62249	55874	5341	11.1	47980	9.99
Narva	14820	13201	1600	13.6	11854	11.64
Põlva	12596	11077	1450	14.8	10599	11.88
Paide	14740	13780	951	13.6	13068	6.73
Rakvere	25845	23873	1905	13.9	22453	7.67
Haapsalu	5004	4394	574	13.1	4200	11.94
Tartu	59566	53537	5666	12.1	48665	10.31
Võru	12682	11150	1467	13.9	10382	12.29



Training of drivers and examinations – the volumes fall

A gradual decrease in the number of driving examinations was the prognosis for 2009. The highest level was achieved in 2008, when there were approximately 56 000 attempts to take the driving examination during 12 months. The total number of driving examinations had grown by more than 10 % in that time compared to some previous years. But after that, the number of those who wished to take the theory examination as well as the driving examination started to decrease.

In total 38 474 examinees in theory and 49 267 examinees in driving attempted to take the examinations in 2009. The same indicators for 2008 were 51 012 and 56 363 respectively. The number of passed B-category examinations in theory was 28 588 (40 688 in 2008) and in driving – 38636 (45 954 in 2008).

The current year started quietly. There were no queues for the theory examinations or driving examinations. Maximum a week was the waiting time in a few register bureaus. Most of the examinees were able to take the examination on the same day or some days later.

Considering the birth rate of the last 15 years, the number of examinees will decrease until 2013.

The share of successful examinations has remained low for a longer time already

A negative aspect of the record years in the number of examinations has been the poor level of execution. For some time already, the results of driving examinations in all the categories have worsened by a couple of per cent every year, and the tendency does not seem to have reverted.

Inattention and not sufficient driving experience causing dangerous situations and ignoring the traffic regulations are the main reasons for failures in driving examinations. Poor driving skills prevent the examinee from concentrating on traffic and as a result he is no attentive enough and makes mistakes.

The biggest trials are continuously B-category driving examinations (execution rate only 52.7% in 2009). With time the results of this category have got worse – for example the passing rate in 2008 was 55.1%.

Contrary to driving examination, the execution level of theory examinations has risen. In 2009 the B-category theory examination was executed in 71.3% of cases. Compared to 2008, the results improved already in the first half of the year (execution rate grew from 67.3% to 71.4%).

The exceptions prove the rules

Based on the statistics, youths under 18 are the best in passing driving examinations. The results of this age group surpasse the average execution level by about 20%.

It was also found that women pass theory examinations better than men. The execution rate of women was 71.9%, of men – 62.5%. But men surpassed women by execution of driving examinations: the respective results were 59.2% and 51.8%.

Considering the categories, the best theoretical knowledge was shown by bus-drivers, whose execution rate was 100% in D1-category and 95.7% in D-category. The second best were lorry-drivers with 90.8%. Motor-cyclists had also very good passing rate in theory examinations 88% of cases.

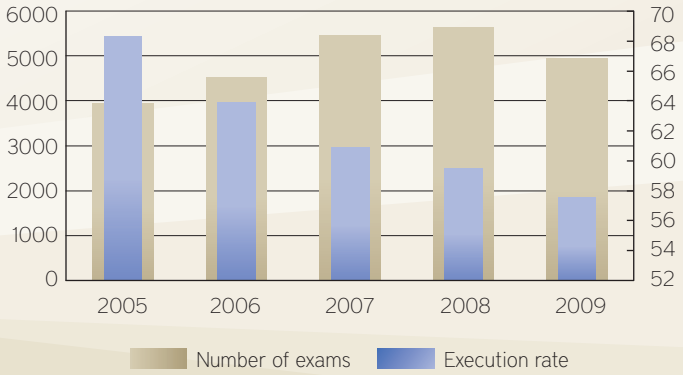
Except B-category driving examinations, the results in the rest of the categories can be considered satisfactory with the execution rate over 70% in A-, C- and D-categories.

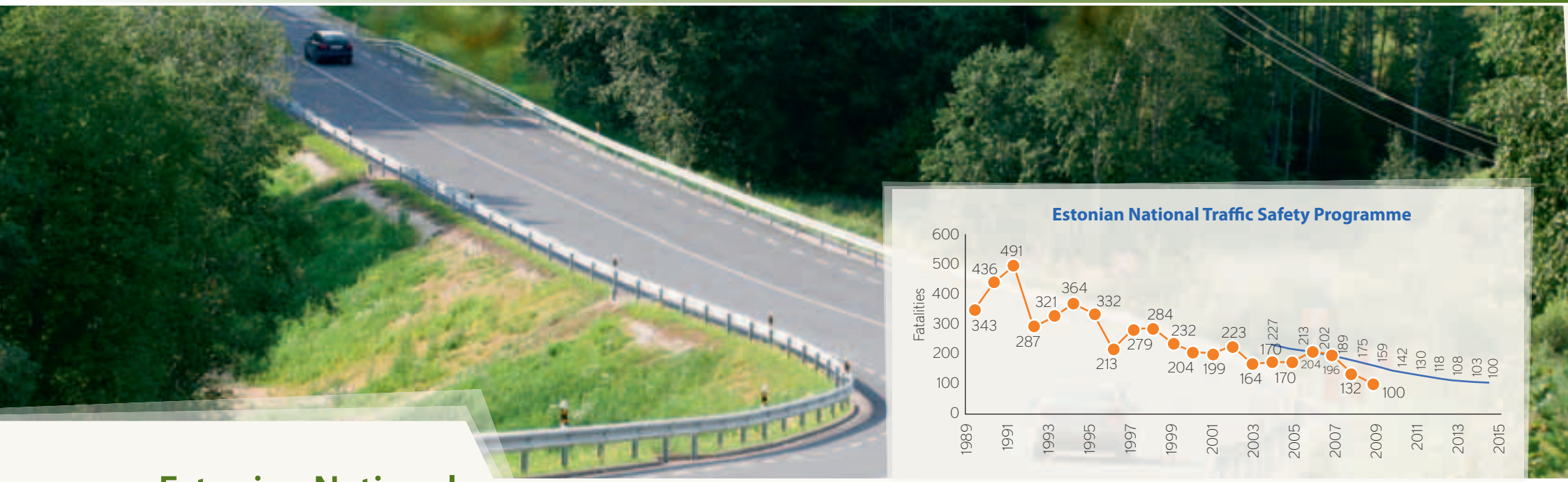
The first weeks of 2010 have brought pleasant surprises. Execution of driving examinations has improved by a few per cent. Also passing theory examinations show a continuous trend of improvement. But the total number of examinations has decreased compared to earlier years and there is no reason to expect any changes during the nearest future.

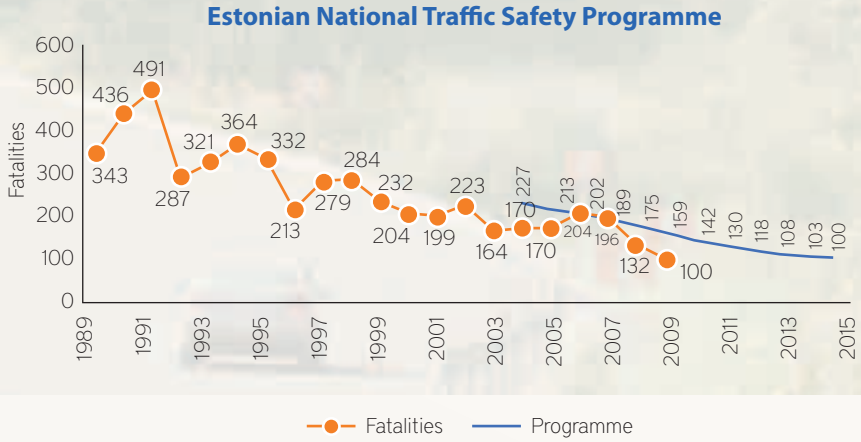
Training and education of drivers

Training and education on traffic safety and traffic behaviour is continuously carried on in the form of annual campaigns and by distributing information in newspapers, TV, radio and the Internet.

Number of traffic exams and execution rates







Estonian National Traffic Safety Programme for 2003-2015

The ERA in co-operation with ministries, administrations, local municipalities and educational institutions continues to carry on the measures of the traffic safety programme application plan for 2008-2011. Reduction of the planned financing for traffic safety, approximately by a half from the state budget, considerably influenced the application extent of the measures.

The decrease of traffic accidents and improvement of other traffic safety indicators in 2009 was caused by several factors, including the economic downturn. Besides, the stability and continuity of national traffic inspection, traffic education and establishment of safety infrastructure foreseen by the traffic safety programme contributed to the improvement of traffic safety.

The Governmental Road Traffic Commission continued its work. Local road traffic commissions were established by city governments in Tallinn, Tartu, Pärnu and Narva. Moreover, the first local traffic safety programmes were put together in Tallinn and Narva. Preliminary activities have started in order to apply intelligent traffic systems, which must support both pedestrians and drivers, improve traffic safety and upgrade the service level of roads and streets.

Traffic education and training were continuously carried out in co-operation with the Ministry of Education and Research, other educational institutions and local municipalities. In the frames of the traffic safety programme, the Road Administration initiated the development and assessment system of the effectiveness of the training and examination of motor vehicle drivers.

The most essential step was applying an automated traffic inspection system on Tallinn-Tartu road in 2009, which has already had an impact on the choice of safe speed. Working out new measures for road planning, design and construction has started on the basis of the European Parliament and Council Directive on road infrastructure safety. To improve traffic safety, traffic in 19 more dangerous accident concentration places all over Estonia was rearranged, including construction of 3.3 km of pedestrian and cycle-ways and 0.8 km of sidewalks on roads passing settlements.

In 2010 the Traffic Safety Programme Division of the ERA starts working out the application plan for the 3rd stage of the traffic safety programme for 2012-2015. The effectiveness of the applied measures and traffic safety indicators will be assessed, and the results of former stages will be considered.

Speed Cameras on Tallinn-Tartu Road

In 2009, for the first time in Estonia, stationary automated speed cameras were installed on the road as a measure of the traffic safety programme. The cameras save the speed of the passing vehicles which exceed the speed limit, the place and the time of the violation and take a photo of the vehicle and the driver.

During the year 2009, 16 speed cameras were installed on an approximately 65 km long section of Tallinn-Tartu road. By the end of October the measuring cabins of the cameras were set, in November additional gearing and testing followed.

Drivers travelling in the direction of Tartu from Tallinn are observed on the road section Sõmeru-Kiigevere (~65 km). The traffic flow moving from Tartu to Tallinn is monitored by the cameras on the road section Koigi-Matsimäe (~33 km). The cameras are most densely located on the section between Matsimäe and Kükita, where 9 cameras have been installed.

Up to the middle of November most of the cabins were empty, as testing the cameras was not carried out everywhere. As of November 27, 2009 all the cameras were set and the respective road sections were provided with traffic signs informing about automated control. The speed threshold of the cameras was set at 97 km/h for the testing period, but the procedures (including penalties) towards possible violators were not planned to be initiated during the period.

Average speed 85 km/h during the test period

Based on the measuring results of 8 cameras, the average speed during the testing period was fixed as 85 km/h on the whole section. In the speed limit zone of 90 km/h, the average speed was 88 km/h and in the speed limit zone of 70 km/h it was 70 km/h.

The speed limits were violated by 100-200 vehicles per day. The AADT of the section is 5,000-7,000 vehicles.

As a reaction to the excess of the threshold value 97 km/h in the speed limit zone of 90 km/h, the camera takes a photo of the vehicle. While photographing the driver sees the flash of the red flashbulb of the camera, which is a warning to him to reduce the speed. The red filter of the flashbulb avoids blinding the driver.

The purpose is smoother traffic

The statistics of the last five years about traffic accidents with casualties, the traffic density, the speed of the vehicles, availability of electricity supply and other local conditions have been considered when choosing the location of speed cameras. The purpose of installing the cameras is calming down the traffic in order to decrease the number of accidents. Due to the cameras possible racers will be restrained, speed will fall within the allowed limits and traffic on the dangerous sections is made safer. Based on the experience of other countries, it is estimated that speed cameras reduce traffic accidents by 20%.

Traffic Accidents

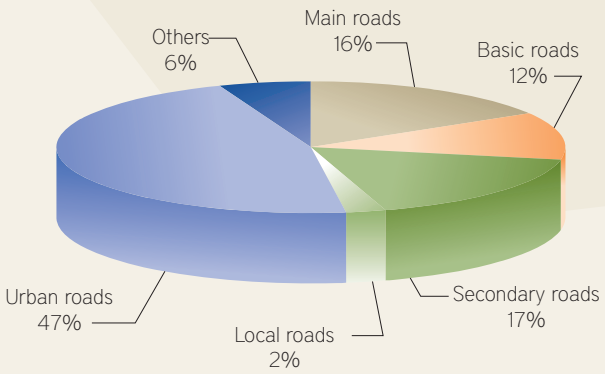
2008 was the seventh year when traffic safety management was carried out according to the Estonian National Traffic Safety Programme. Before launching the programme in 2002, the number of traffic fatalities registered in Estonia was 223, whereas in 2009 it came down to 100.

However, during the programme, the traffic situation has not always been stable. The number of fatalities was reduced by a quarter in 2003 and remained so for a short time, but grew up to the level of 200 again in 2006-2007. As a result of that several goals of the programme were not achieved. The change towards improvement took place in 2008, when the overall number of fatalities was reduced by a third compared to 2007, and in the next year it continued to decrease. Contrary to pessimistic prognosis (159 fatalities) there were just 100 killed in 2009. The traffic flow on Estonian roads, which had grown fast in previous years, also started to fall in 2008-2009.

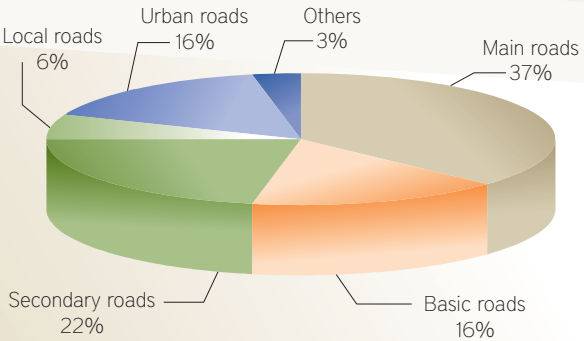
In total, 1498 traffic accidents with casualties were registered in 2009 (1869 in 2008), with 100 people killed and 1918 people injured. As for traffic safety, Estonia together with Latvia and Lithuania has been among the least safe countries in Europe for a lot of years. Though we have improved our position at present, our indicators still continue to be worse than the average in the EU.

It is worth mentioning that the number of both traffic accidents and fatalities has decreased in the last two years like in most EU member states and several bigger countries in America and Asia.

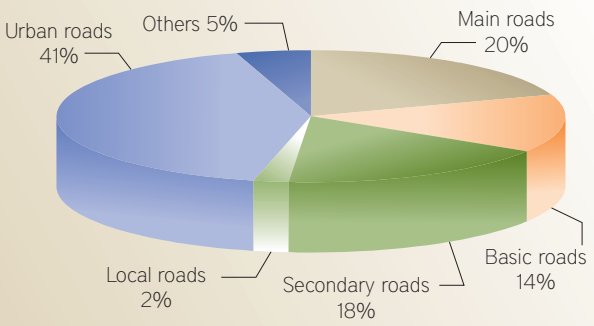
Traffic accidents



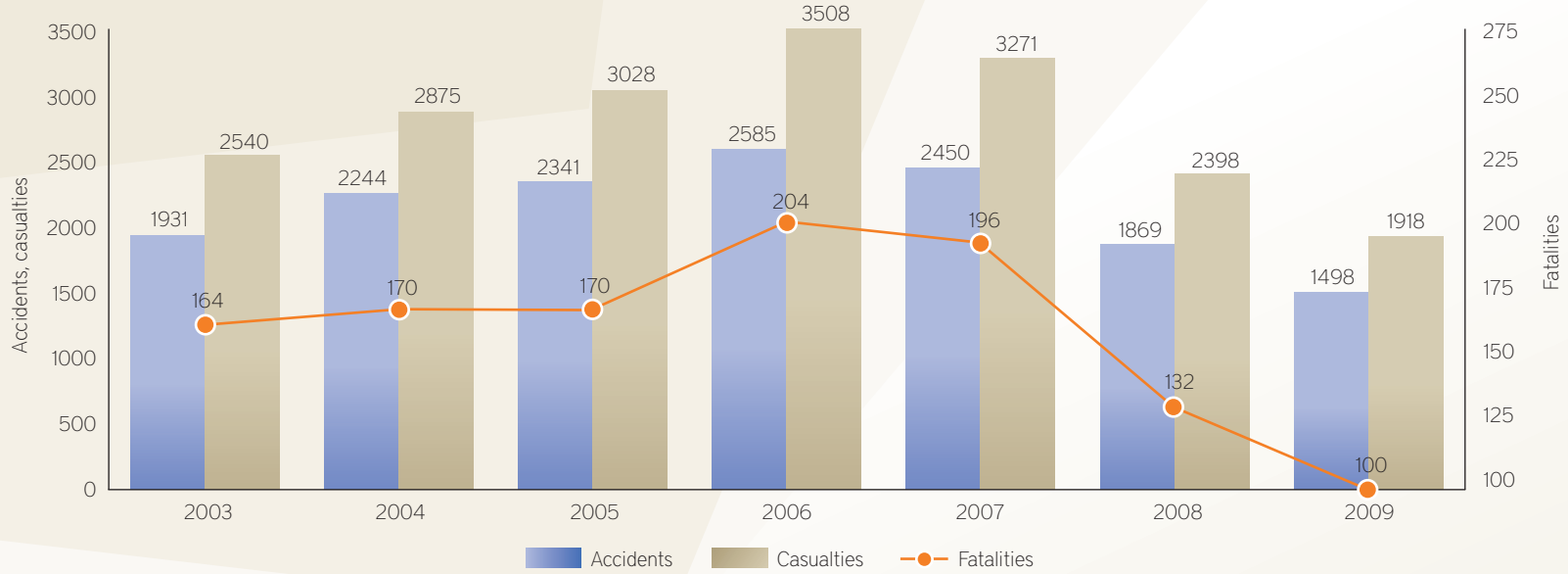
Fatalities



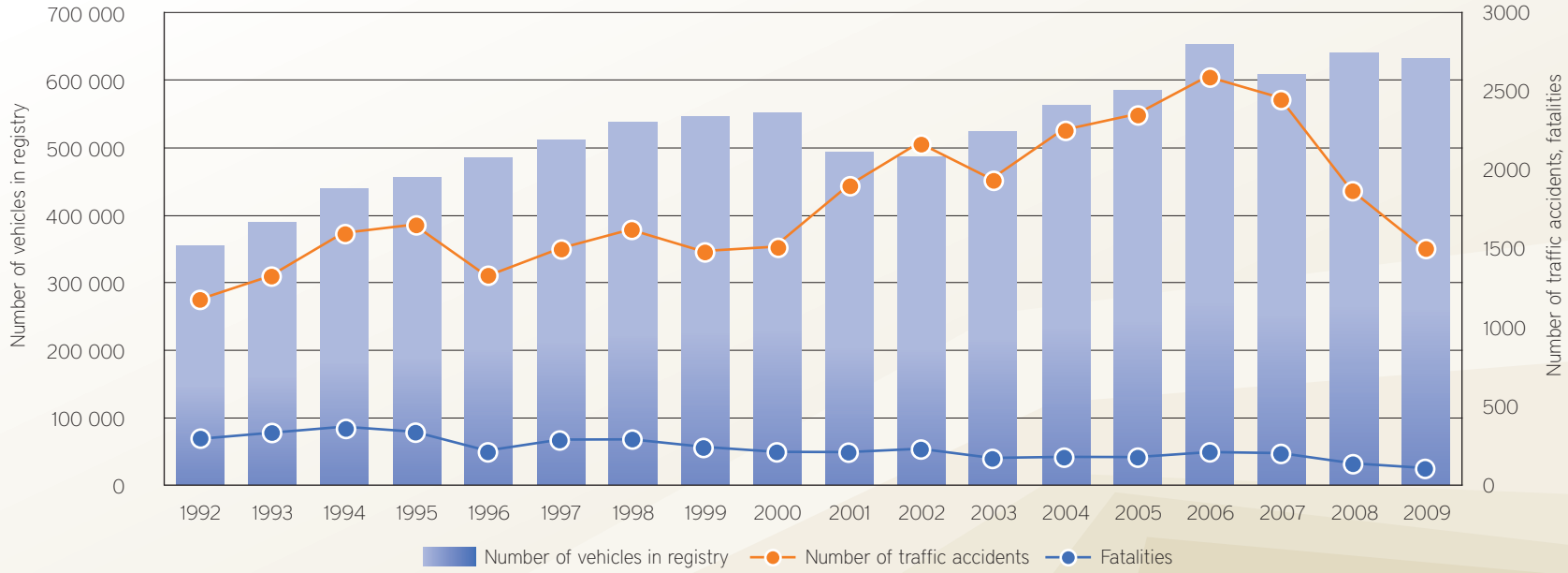
Casualties



Traffic accidents in 2003 - 2009



Vehicles, traffic accidents and fatalities



Traffic accidents in Estonia in 1999 - 2009

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total	**1472**	**1504**	**1889**	**2164**	**1931**	**2244**	**2341**	**2585**	**2450**	**1869**	**1498**
1999=100%	100.0	102.2	128.3	147.0	131.2	152.4	159.0	175.6	166.4	127.0	101.8
Traffic accidents per 10 000 vehicles	27.0	27.2	38.3	44.5	36.9	39.9	40.0	39.6	40.3	29.2	23.7
Traffic accidents per 100 000 inhabitants	107.3	110.0	138.8	159.6	142.9	166.5	174.1	192.6	182.7	139.4	111.8
Fatalities	**232**	**204**	**199**	**223**	**164**	**170**	**170**	**204**	**196**	**132**	**100**
1999=100%	100.0	71.8	70.1	78.5	57.7	59.9	59.9	71.8	69.0	46.5	35.2
Fatalities per 10 000 vehicles	4.2	3.7	4.0	4.6	3.1	3.0	2.9	3.1	3.2	2.1	1.6
Fatalities per 100 000 inhabitants	16.9	14.9	14.6	16.4	12.1	12.6	12.6	15.2	14.6	9.8	7.5
Fatalities per 100 accidents	15.8	13.6	10.5	10.3	8.5	7.6	7.3	7.9	8.0	7.1	6.7
Fatalities per 100 injuries	13.7	11.1	8.1	7.8	6.5	5.9	5.6	5.8	6.0	5.5	5.2
Casualties	**1691**	**1843**	**2443**	**2868**	**2539**	**2875**	**3028**	**3508**	**3271**	**2398**	**1918**
1999=100%	100.0	109.0	144.5	169.6	150.1	170.0	179.1	207.5	193.4	141.8	113.4
Traffic accidents caused by drunken drivers	**322**	**318**	**393**	**495**	**394**	**398**	**431**	**518**	**521**	**347**	**247**
1999=100%	100.0	98.8	122.0	153.7	122.4	123.6	133.9	160.9	161.8	107.8	76.7

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	**1498**	678	37	695	88	**100**	75	6	16	3	**1918**	987	42	798	91
incl. in daytime	**1026**	438	25	489	74	**52**	36	5	9	2	**1332**	669	26	559	78
at night	**472**	240	12	206	14	**48**	39	1	7	1	**586**	318	16	239	13
By types															
Collision of motor vehicles															
with moving vehicles	**674**	304	11	336	23	**41**	37	2	2	0	**939**	489	12	413	25
incl. with motor vehicle	**434**	218	4	208	4	**32**	30	0	2	0	**690**	404	6	274	6
with motor/bycicle	**240**	86	7	128	19	**9**	7	2	0	0	**249**	85	6	139	19
Collision of motor vehicles															
with obstacle	**17**	6	0	9	2	**1**	1	0	0	0	**21**	9	0	10	2
incl. with standing vehicle															
Collision with pedestrian	**337**	49	7	239	42	**23**	10	2	9	2	**326**	41	5	239	41
One-vehicle accident	**404**	293	18	77	16	**30**	24	1	4	1	**555**	418	24	95	18
Other accidents	**66**	26	1	34	5	**5**	3	1	1	0	**77**	30	1	41	5

Types of Traffic Accidents

The less protected road users – pedestrians and cyclists – have been the main problem in our traffic safety in years. While the total number of pedestrian accidents has decreased by a quarter and the number of killed in those accidents by a third, the safety of children under 10 has not improved. The greatest danger for them is city traffic and especially in the places where crossing the street is not regulated by traffic lights.

Though a pedestrian usually gets involved in an accident while crossing the road, the number of cases where pedestrians are hit by vehicles that are manoeuvring in parking or courtyard areas, in petrol stations, on road shoulders or pedestrian and cycle-ways has increased. The share of such accidents amounts to one third of all pedestrian accidents. Out of 24 pedestrians who lost their lives in 2009 only 10 were crossing the road at the time of the accident. Elderly people still dominate among the victims. 10 pedestrians (including 8 without safety reflectors) were killed while walking on roads in the darkness. However, the number of such accidents has decreased. No one of the killed pedestrians was drunk, but in two cases the driver who caused the accident was drunk.

The number of persons involved in cycle accidents has decreased compared to the previous years, whereas particularly among middle-aged inhabitants of rural areas. 81 of 35-64 year old cyclists were involved in traffic accidents in 2009 or 40% more than in the year before. More frequent accidents and fatalities with cyclists in the darkness an in winter road conditions show that bicycles are actively used throughout the year. Similarly to 2008, every fourth adult cyclist involved in an accident was drunk. The number of 10-13 year old cyclists involved in road accidents has increased. Like young pedestrians they have difficulties in places where they need to cross the road without traffic lights.

The popularity of mopeds has decreased, especially among up to 25-year old youths. Similarly, an interest in applying for a moped licence has decreased. In 2009 mopeds were involved in 92 traffic accidents with 2 fatalities and 98 injured drivers or passengers.

The number of motor-cycle accidents did not increase. In fact the number of new motor-cycles in the traffic register decreased by 2.5 times compared to the previous year. The number of people applying for a motor-cycle licence and those passing the examination decreased approximately by one fifth.

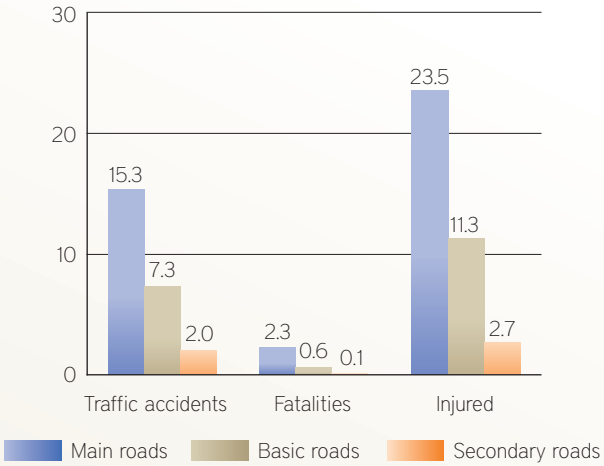
Due to the decrease of traffic density in general, the number of collisions between vehicles and one-vehicle accidents has also decreased. However, in the last months of 2009, a slight rise in the number of collisions and the people injured in them was noted. During the year there were 32 fatalities connected with collisions of motor-vehicles and 8 of them happened in November and December. Complicated weather conditions – frequent snowing and sleet played an important role in these collisions. A constant problem on highways is drivers` different and often wrong understanding of fluent and safe traffic. A lot of drivers lack the habit of driving in a column, keeping proper distance and avoiding risky overtaking, especially if it requires using the counter flow lane.

Most of one-vehicle accidents took place in summer time like in previous years. However, the last quarter of 2009 passed successfully, bringing just one fatality instead of 7-8 as usual. The total number of accidents decreased basically on smaller secondary roads and on local roads.

One reason why the number of killed in traffic has decreased is significantly greater usage of safety belts. When in 2007, 94 traffic victims had not used safety belts, in 2008 that number was 40 and in 2009 it was 28. No difference was noted in the number of those victims who had worn seat belts as required. 61 drivers and passengers lost their lives in car or van accidents in 2009, and 1164 were injured.

Although traffic behaviour monitoring shows increasing usage of seat belts, the inquiry carried out by TNS EMOR refers to the difference between the positive attitude of drivers towards wearing a seat belt and their real performance. 94% of adult respondents consider wearing a safety belt very important, but actually a third of casualties had not worn them. As for children and retired people, there was no discrepancy between the results of the inquiry and traffic statistics - 80% of casualties among them had worn safety belts.

Traffic accidents and casualties per 100 km



Accidents on Highways

Though the main national roads make up about 3% of the whole Estonian road network, one sixth of all personal injury accidents and over a third of all fatalities were registered on the main roads.

	2009	2008
Traffic accidents on main roads	246	315
Killed	37	46
Injured	377	494

Due to the high speed on the main roads, which is higher than the speed in settlements, pedestrians and cyclists are more endangered expressly on highways. While the mentioned group was involved barely in one fifth of the main road accidents, almost every third killed was a pedestrian or a cyclist. Collisions of motor vehicles are usually the most tragic accidents on main roads. Seventeen drivers and passengers lost their lives in 115 accidents of that type in 2009.

Traffic accidents in 2007 - 2009

Counties, towns	Traffic accidents			Fatalities			Casualties		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
Towns in total	**921**	**760**	**578**	**32**	**25**	**14**	**1063**	**843**	**651**
Including:									
Tallinn	578	483	364	25	17	11	672	537	414
Tartu	177	161	141	4	3	2	197	172	154
Pärnu	91	65	37	1	1	0	107	79	44
Kohtla-Järve	24	21	12	1	0	1	29	27	13
Narva	51	30	24	1	4	0	58	28	26
Counties in total	**1529**	**1109**	**920**	**164**	**107**	**86**	**2208**	**1555**	**1267**
Including:									
Harjumaa	292	215	177	40	16	14	409	291	256
Hiiumaa	17	13	12	2	1	1	22	17	15
Ida-Virumaa	124	72	62	15	10	10	169	124	74
Jõgevamaa	77	65	42	9	8	3	110	93	57
Järvamaa	87	64	65	11	9	9	137	88	105
Läänemaa	63	41	35	8	9	2	89	45	43
Lääne-Virumaa	148	104	83	17	10	14	231	142	110
Põlvamaa	47	39	40	5	2	3	70	60	63
Pärnumaa	124	79	80	10	16	8	159	110	97
Raplamaa	88	57	46	13	1	3	138	78	69
Saaremaa	74	58	53	6	4	2	123	79	79
Tartumaa	151	127	93	17	11	7	221	197	117
Valgamaa	58	54	34	4	3	4	71	69	50
Viljandimaa	100	80	51	4	6	1	159	110	76
Võrumaa	79	41	47	3	1	5	100	52	56
TOTAL:	**2450**	**1869**	**1498**	**196**	**132**	**100**	**3271**	**2398**	**1918**
Comparison with the previos year (%)	-5.2	-23.7	-19.8	-3.9	-32.6	-24.2	-6.8	-26.7	-20.0

Considering the length and traffic density, the most dangerous main roads are Jõhvi-Tartu-Valga and Pärnu-Rakvere. Though accidents took place also on smaller basic and secondary roads, the accidents were more evenly dispersed there and had no drastic concentration place.

The skills, abilities and health of road users getting into accidents are more important than the place of an accident. 57 victims out of 100 were killed as a result of their own mistake or carelessness in 2009. The main reason was violation of traffic regulations or driving together with a drunk driver.

Share of Drunk Drivers in Traffic Accidents

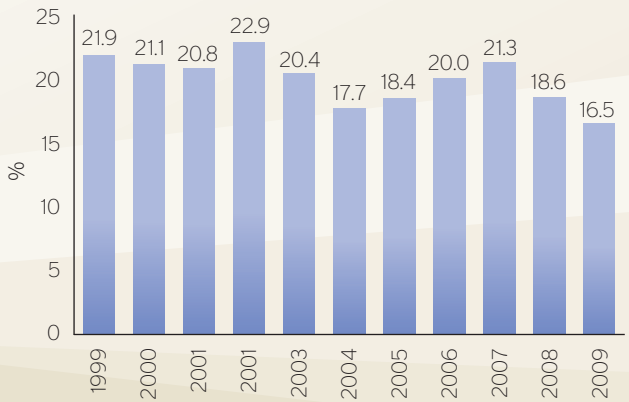
28 people lost their lives and 351 were injured in traffic accidents in which drunk drivers participated in 2009. Alcohol is continuously a predominant problem among young drivers. Every second drunk driver of a motor vehicle who was involved in an accident was younger than 30 years and only a fifth of drunk drivers was older than 45. Thirteen drunk juvenile drivers (including a 14 year old schoolboy from Tallinn) were involved in registered accidents in 2009. In 2008 fourteen drunk juvenile drivers who were involved in an accident were captured at the wheel. At the same time the number of drunk drivers among 18-30 year old youths has essentially decreased, their number decreased in 2009 by a third compared to 2008. The number of drunk drivers involved in accidents in the age group 45-55 years remained the same as in 2008.

The monitoring of traffic behaviour in 2009, based on police raids showed that 0.6% of all the drivers involved in traffic were intoxicated (the degree of alcohol in the blood was ≥ 0.5‰) and 0,2% had signs of residual effect (the degree of alcohol 0.2-0.5 ‰). These indicators are the lowest during the whole history of the monitoring since 2002.

If we add to drunk drivers of motor vehicles also drunk cyclists and pedestrians, the number of traffic fatalities caused by overconsumption of alcohol amounts to 30 killed or about a third of all traffic victims. Among them 10 car drivers, 1 motorcyclist and 2 cyclists caused their own death, 11 passengers died in the cars of drunk drivers and 2 pedestrians were hit by the car of a drunk driver. One driver of a moped with his passenger and 2 car drivers were killed in collisions with the cars of drunk drivers moving in the opposite direction.

Traffic accidents caused by drunk drivers

(% of traffic accidents with casualties)



Traffic Education

The year 2009 has a remarkable importance as 15 years have passed from compiling and issuing the first training material regarding traffic education. The mentioned material is a 17 minute long film "A child's way to school", which seems a bit retro nowadays, but which is still quite popular and used in schools and kindergartens.

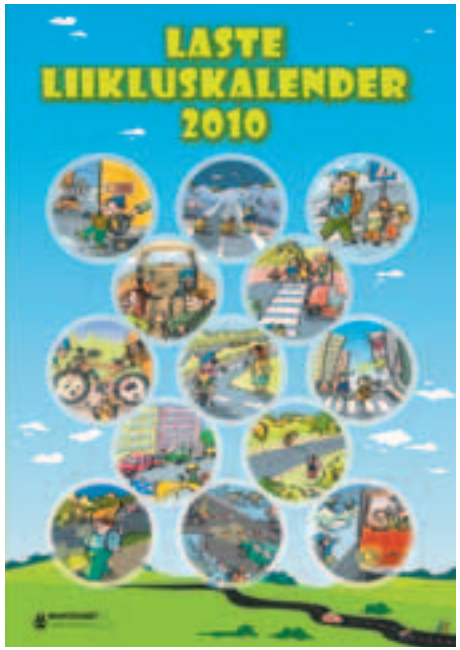
15 years ago the first children's traffic calendar was also issued. Its form and contents have been renewed year by year in order to keep the calendar interesting, playful, childlike and didactic as much as possible.

In traffic behaviour and traffic education continuity is decisive. Therefore, it is important to continue several activities during a longer period. For example since 1997, the Traffic A-B-C book (a teaching material with the longest history) has been given as a present to the I form children at the beginning of their school year. At present teaching materials concerning traffic consist of more than 60 items in the collection of the ERA. There are educational board games, paint and think books, workbooks with traffic exercises, educational films, training materials for cyclists etc. in this collection. These materials are directed to children of kindergartens, pupils of comprehensive schools, their teachers and also driving schools. 20 teaching materials have also been issued in the Russian language.

Several new materials were compiled in 2009. The first original training material „Traffic and physics" should specially be mentioned. Its aim is to integrate traffic education into the curriculum of upper basic school. The new training material helps to make the lesson more exciting by explaining everyday traffic situations by using concepts of physics. "Traffic and physics" was elaborated in co-operation with the National Examination and Qualifications Centre.

In addition, the following training materials were issued:

- Traffic Safety Quiz is a didactic board game that expands memory. It deals with using the safety belt and other safety equipment, crossing the road, driving or walking in the courtyard area or on pedestrian and cycleway. The quiz includes 18 cards with images of traffic signs for learning the meaning of these signs.
- The Workbook "I Drive Safely" has been worked out for the pupils of primary and basic school and includes several attractive exercises.
- Audiovisual teaching programmes "Moving in the street with a group of children" (for teachers who accompany groups of pupils) and "Drive Safely on a Highway" (dealing with preparations for driving, keeping safe longitudinal and lateral distance, safe overtaking etc).



Every two years a catalogue of the training materials of the ERA is issued both in printed and digital form. The catalogue is distributed in schools and kindergartens, during trainings, on briefings and fairs.

Accompanying persons of children`s groups are responsible for the safety of the children. Therefore they have to pass special training how to move in traffic. Respective trainings are carried out, where the participants are provided with both theoretical knowledge and practical skills how to move about safely with groups of children.

On the basis of an agreement signed with the Estonian National Broadcasting, more essential traffic safety issues have been included in the morning programme of the ETV - "Terevisioon".

Traffic safety campaigns started in spring with the campaign directed to using safety belts and traffic safety equipment for children. In summer, traditional preventive work in connection with drunk driving was carried out by using both national media channels and public entertainment events like concerts and popular festivals. The campaign for increasing safety on unregulated pedestrian crossings and choosing the safe speed while driving in settlements was connected with the beginning of the school year in September.

The traffic safety campaign "The lives of your intimates are not a testing object. Don't exceed the speed limit!" directed to the need to observe the speed limits on highways was for the first time carried out by the ERA in June and July by using roadside notice boards, radio and TV.

The autumn traffic safety campaign "Don't forget the reflector" needs to be especially mentioned as it was acknowledged on the national advertising competition "Kuldmuna (The Golden Egg) 2009". The creative solution was graded as the best in the category of social campaigns, and the campaign won the Grand Prix among 631 competing works. The web site of the campaign was opened in November, which also introduced a possibility to apply for a reflector via the Internet. The chance was used by more than 5000 people.

The inquiries carried out after the campaigns reflected a positive change in people's traffic behaviour in the areas covered by the campaigns. This is an essential precondition of improving traffic safety.

Top-facts of 2009

January

15.01 – the department of public transport starts work in the Motor Vehicle Registration Centre (ARK). In connection with the amendment of the Public Transport Act, the Ministry of Economic Affairs and Communications delegates the duties of organizing public bus transport and control over it to the ARK (after joining of the ARK and the ERA to the joint Road Administration).

28.01 – signing of the procurement contract between the ERA and Alarmtec Asiga for the supply of 16 stationary speed cameras and their installation on Tallinn-Tartu road.

February

1.02 – the former deputy Director General Koit Tsefels becomes the Acting Director General of the ERA instead of Riho Sõrmus, who resigns after holding the post since 1994.

9.02 – the ERA signs the construction contract of Kukruse-Jõhvi road section.

March

20.03 – the annual meeting of the ERA takes place in Olustvere, Viljandi County.

April

3.04 – the traffic safety campaign "Don't forget the reflector" ordered by the ERA wins the Grand Prix in the national advertising competition "Kuldmuna (The Golden Egg) 2009" from among 631 competing works.

May

14.-15.05 – the training of A-category examiners "Examination in the Netherlands – the evaluation philosophy and general principles of arranging A-category driving examinations" is carried out in the ARK.

June

The traffic safety campaign "The lives of your intimates are not a testing object. Don't exceed the speed limit!" is carried out by the ERA in June and July. The campaign directed to highlighting the need to observe the speed limit on highways was arranged for the first time.

July

1.07 – the ERA and the ARK are joined. Tamur Tsäkko becomes the Director General of the joint Estonian Road Administration.

7.07 – the first stationary speed camera is installed on Tallinn-Tartu road.

August

23.-26.08 – a large delegation of Estonian road specialists participates in the XXVII International Baltic Road Conference arranged in Riga.

September

4.09 – Rõhu-Puhja road section (16.4 km, construction costs 109 million kroons) of Tartu – Viljandi – Kilingi-Nõmme road is opened for traffic.

23.09 – the new Rannu-Jõesuu Bridge with access road sections and the renovated old bridge (construction costs 79 million kroons), crossing the river Emajõgi close to its mouth on the northern shore of Lake Võrtsjärv is opened for traffic on Tartu-Viljandi road.

23.09 – the ERA signs the construction contract of the eastern section of Pärnu by-pass.

28.09 –a campaign to introduce the internet travel planner www.peatus.ee is launched by the ERA. The travel planner contains the timetables of all Estonian public transport lines, giving a chance to plan the journey both between the stops and different geographical points for the first time in history.

October

2.10 – Leevaku-Võõpsu road section (construction costs 139 million kroons) on Tartu-Räpina-Värska road is opened for traffic.

5.10 – the ERA signs the construction contract for the reconstruction of Liiapeksi-Loobu road section on Tallinn-Narva road.

The first original training material „Traffic and physics" is completed in October. The aim of the material is integration of traffic education into the curriculum of basic school.

November

56 new stationary traffic counting points start work at the beginning of the month, thus doubling the overall number of the points in Estonia.

3.11 – the ERA signs the construction contract of the western part of Pärnu by-pass.

26.11 – the traditional Road History Day is arranged in the Road Museum to celebrate the 91st anniversary of the ERA.

27.11 – all the 16 speed cameras are installed on the 65-km section of Tallinn Tartu road with the aim of calming down the traffic.

December

8.12 – the ERA signs the design and construction contract of Viitna by-pass on Tallinn-Narva road.

17.12 – the ERA signs the contract for the repairs of Papiniidu bridge in Pärnu.

23.12 – the ERA signs the contract for the design and repairs or Sõpruse bridge in Narva.

2009 – the most successful traffic year over the last 62 years ended with only 100 fatalities, which is comparable to 1947 when the traffic density in Estonia was almost non-existent.

Notes

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