Latvian State Roads Yearbook

2008

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Content

The development and growth of a country is largely influenced by qualitative roads. A qualitative road according to the present requirements includes a number of prerequisites and every prerequisite such as planning, designing, construction, maintenance or financing influences the final result. Activities in the road sector in 2008 were based on previously defined priorities, namely the renewal, strengthening and reconstruction of pavements, the reduction of the proportion of gravel roads and the improvement of traffic safety.

During the last years additional attention was paid to traffic safety improvements for the safety of less protected traffic participants, pedestrians and cyclists. The accomplished works certainly influenced the decrease of the number of accidents with killed and injured. Last year 25 % less were killed on roads and streets than a year before and such decrease was experienced for the first time in a long period.

Assessing the newly constructed section of route E22 Nirza–Ploski and section Jēkabpils–Varakļāni which still is under reconstruction, we may conclude that after Saulkrasti bypass the main construction works are focused in the East–West direction determined by the planned improvements of transit routes. Bituminous pavement was renewed in the total length of 355 km during last year, but the total length of gravel roads paved with bituminous pavement decreased by 36 km. Qualitative changes may be seen in road maintenance.

Nevertheless, the financing allocated from the state consolidated budget to road fund programme still is insufficient for the preservation and development of state road network.

State Road Network

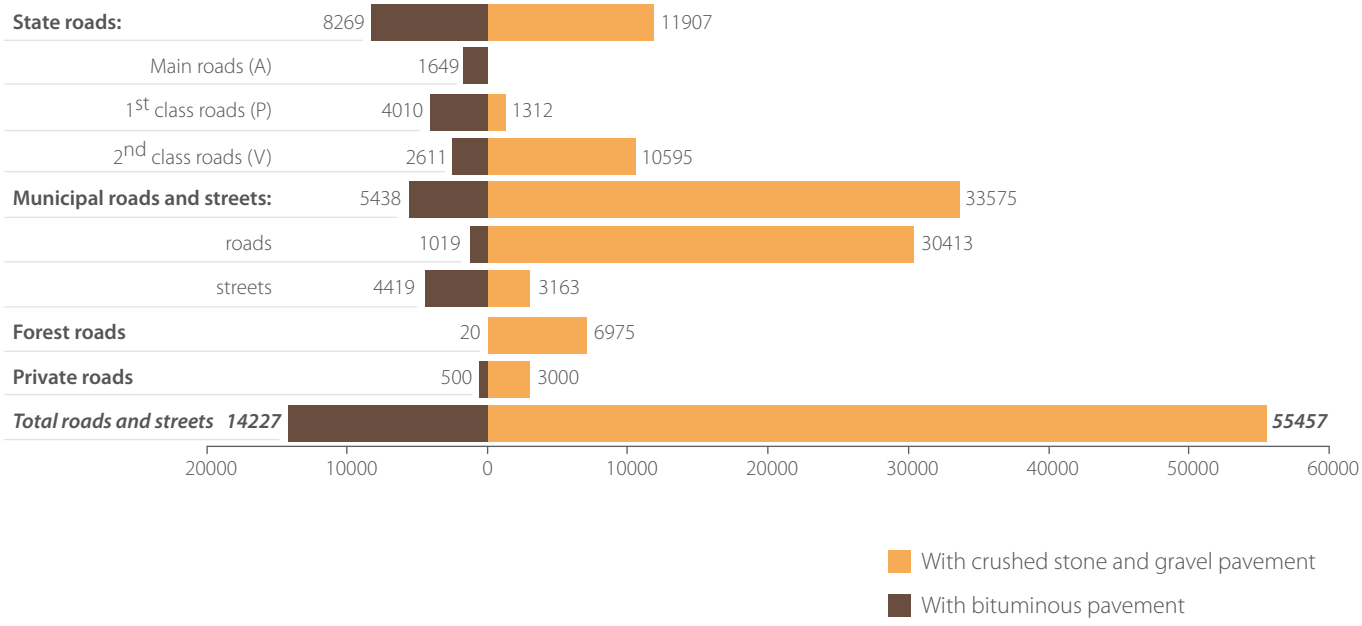
General

Territory of Latvia – 64 559 km^2.
Population as at December 31, 2008 – 2 261 000.

Total length of roads and streets – 69 684 km.
Average road network density – 1.079 km per 1 km^2.

Number of registered vehicles – 1 206 928.
Number of registered vehicles per 1000 inhabitants – 534.
Number of registered cars – 932 828.
Number of registered cars per 1000 inhabitants – 413.

Road length, km



State Roads

SJSC "Latvian State Roads" is responsible for roads with the total length of 20 176 km.
The average density of state road network is 0.312 km per 1 km^2.

SJSC "Latvian State Roads" is responsible for 934 bridges of which 881 are made of reinforced concrete, 15 – stone, 32 – steel and 6 – timber. The total length of bridges is 29 834 metres.

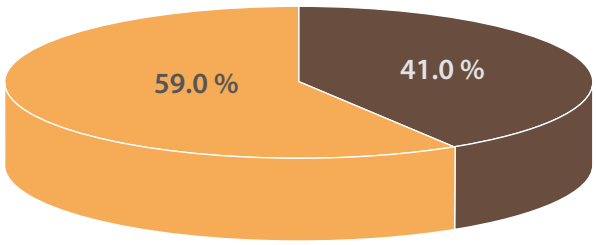
Value of state road network

In 2008 the state road network value was calculated according to newly developed methodological regulations for annual inventory of roads and their structures, and the state road network value as at January 1, 2009, was 3 089.5 million Lats including state main roads for 876.9 million Lats, state 1st class roads for 1 191.2 million Lats and 2nd class roads for 1 021.5 million Lats.

Total length of the state road network by district

District	Total length of the road network, km	With asphalt concrete and other bituminous pavement		With crushed stone and gravel pavement	
		km	%	km	%
Aizkraukle	747	270	36.1	477	63.9
Alūksne	620	195	31.5	425	68.5
Balvi	613	227	37.0	386	63.0
Bauska	710	257	36.2	453	63.8
Cēsis	1070	291	27.2	779	72.8
Daugavpils	831	373	44.9	458	55.1
Dobele	583	204	35.0	379	65.0
Gulbene	594	201	33.8	393	66.2
Jelgava	573	349	60.9	224	39.1
Jēkabpils	837	208	24.9	629	75.1
Krāslava	807	280	34.7	527	65.3
Kuldīga	727	333	45.8	394	54.2
Liepāja	931	411	44.1	520	55.9
Limbaži	810	360	44.4	450	55.6
Ludza	829	228	27.5	601	72.5
Madona	1007	280	27.8	727	72.2
Ogre	681	288	42.3	393	57.7
Preiļi	665	235	35.3	430	64.7
Rēzekne	859	327	38.1	532	61.9
Riga	1015	825	81.3	190	18.7
Saldus	612	227	37.1	385	62.9
Talsi	945	460	48.7	485	51.3
Tukums	858	404	47.1	454	52.9
Valka	774	346	44.7	428	55.3
Valmiera	798	381	47.7	417	52.3
Ventspils	680	309	45.4	371	54.6
Total	***20176***	***8269***	***41.0***	***11907***	***59.0***

With crushed stone and gravel pavement 11907 km



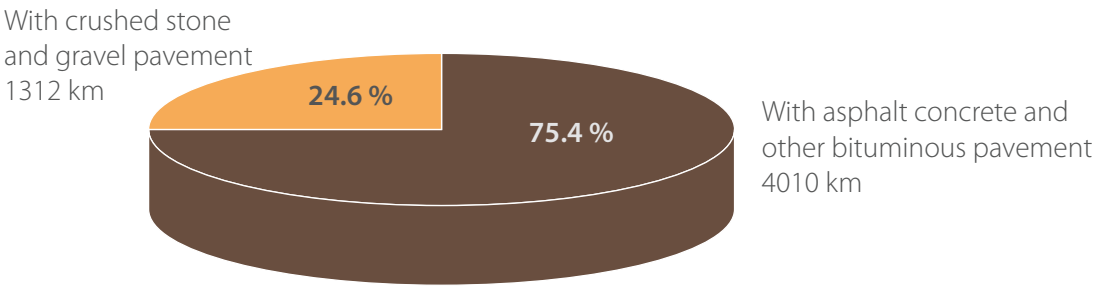
With asphalt concrete and other bituminous pavement 8269 km

Total length of state main roads by district

District	*Total length of the road network, km*	*With asphalt concrete and other bituminous pavement*	
		km	*%*
Aizkraukle	58	58	100
Alūksne	46	46	100
Balvi	-	-	-
Bauska	50	50	100
Cēsis	54	54	100
Daugavpils	113	113	100
Dobele	15	15	100
Gulbene	-	-	-
Jelgava	65	65	100
Jēkabpils	78	78	100
Krāslava	46	46	100
Kuldīga	21	21	100
Liepāja	94	94	100
Limbaži	59	59	100
Ludza	84	84	100
Madona	-	-	-
Ogre	44	44	100
Preiļi	57	57	100
Rēzekne	114	114	100
Riga	310	310	100
Saldus	51	51	100
Talsi	38	38	100
Tukums	79	79	100
Valka	71	71	100
Valmiera	53	53	100
Ventspils	48	48	100
Total	***1649***	***1649***	***100***

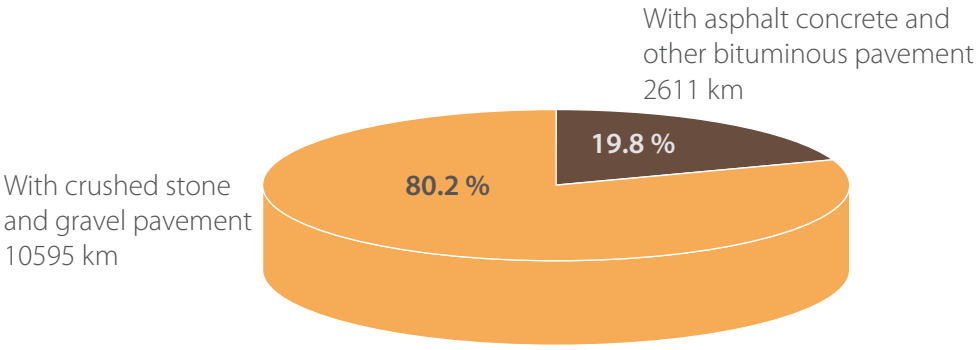
Total length of state 1st class roads by district

District	Total length of the road network	With asphalt concrete and other bituminous pavement		With crushed stone and gravel pavement	
	km	km	%	km	%
Aizkraukle	250	177	70.8	73	29.2
Alūksne	188	89	47.5	98	52.5
Balvi	215	158	73.5	57	26.5
Bauska	176	115	65.6	60	34.4
Cēsis	292	148	50.7	144	49.3
Daugavpils	160	127	79.0	34	21.0
Dobele	169	141	83.1	29	16.9
Gulbene	171	128	74.7	43	25.3
Jelgava	168	159	94.9	9	5.1
Jēkabpils	179	94	52.5	85	47.5
Krāslava	171	171	100.0	0	0.0
Kuldīga	251	218	86.7	33	13.3
Liepāja	241	198	82.2	43	17.8
Limbaži	221	211	95.4	10	4.6
Ludza	143	73	50.8	70	49.2
Madona	359	216	60.1	143	39.9
Ogre	258	167	64.5	92	35.5
Preiļi	143	120	84.1	23	15.9
Rēzekne	149	106	71.2	43	28.8
Riga	235	235	100.0	0	0.0
Saldus	161	104	64.7	57	35.3
Talsi	281	255	90.8	26	9.2
Tukums	224	180	80.4	44	19.6
Valka	182	144	79.4	37	20.6
Valmiera	168	153	91.3	15	8.7
Ventspils	166	123	74.1	43	25.9
Total	***5321***	***4010***	***75.4***	***1312***	***24.6***



Total length of state 2nd class roads by district

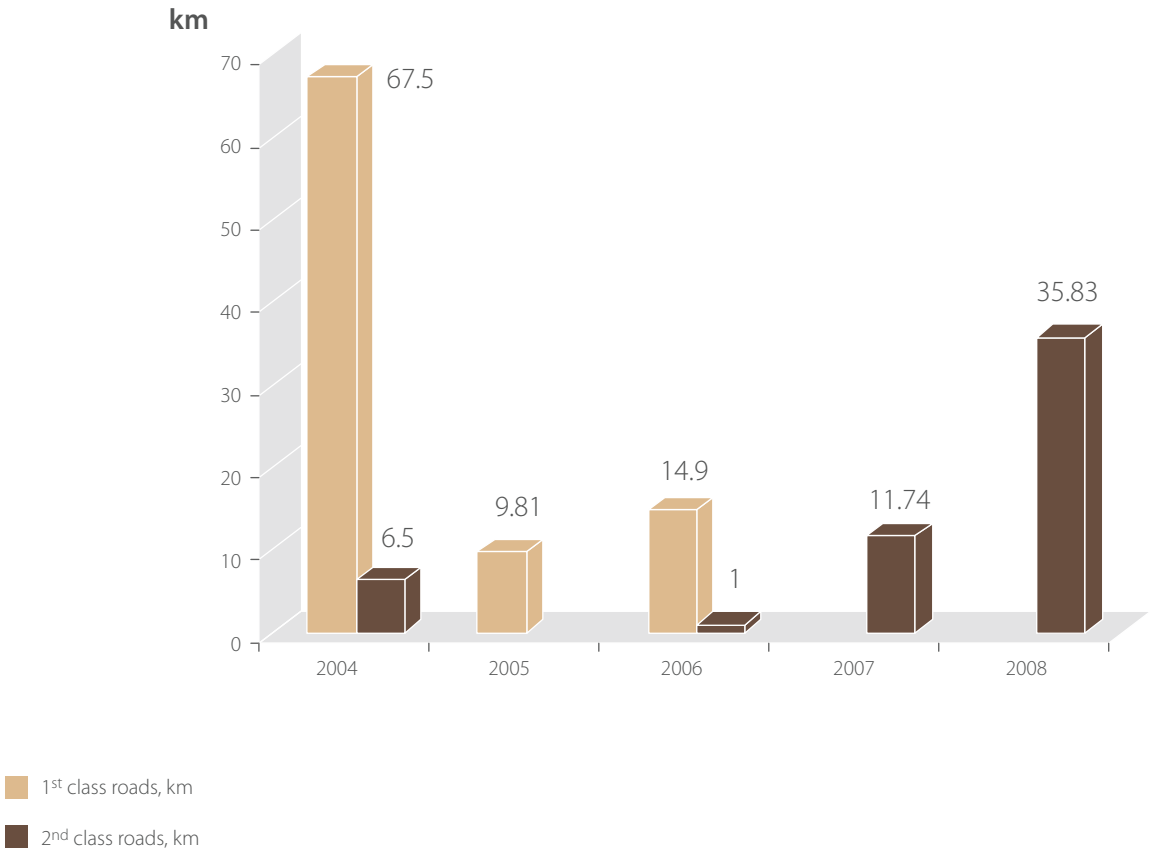
District	Total length of the road network	With asphalt concrete and other bituminous pavement		With crushed stone and gravel pavement	
	km	km	%	km	%
Aizkraukle	438	35	7.9	404	92.1
Alūksne	387	60	15.6	326	84.4
Balvi	397	68	17.1	329	82.9
Bauska	484	92	18.9	393	81.1
Cēsis	724	89	12.2	635	87.8
Daugavpils	557	133	23.8	424	76.2
Dobele	398	48	12.1	350	87.9
Gulbene	423	73	17.4	349	82.6
Jelgava	341	126	36.8	216	63.2
Jēkabpils	579	36	6.1	544	93.9
Krāslava	591	64	10.8	527	89.2
Kuldīga	456	95	20.8	361	79.2
Liepāja	596	120	20.0	477	80.0
Limbaži	530	90	16.9	440	83.1
Ludza	602	71	11.8	531	88.2
Madona	648	64	9.9	584	90.1
Ogre	379	77	20.3	302	79.7
Preiļi	465	58	12.5	408	87.5
Rēzekne	596	106	17.8	489	82.2
Riga	470	280	59.5	190	40.5
Saldus	401	73	18.1	328	81.9
Talsi	626	167	26.7	459	73.3
Tukums	555	145	26.2	410	73.8
Valka	522	131	25.1	391	74.9
Valmiera	577	175	30.3	403	69.7
Ventspils	465	138	29.6	327	70.4
Total	***13206***	***2611***	***19.8***	***10595***	***80.2***



Roads with gravel pavement

Approximately 25 % of 1st class roads and 80 % of 2nd class roads have gravel pavement.

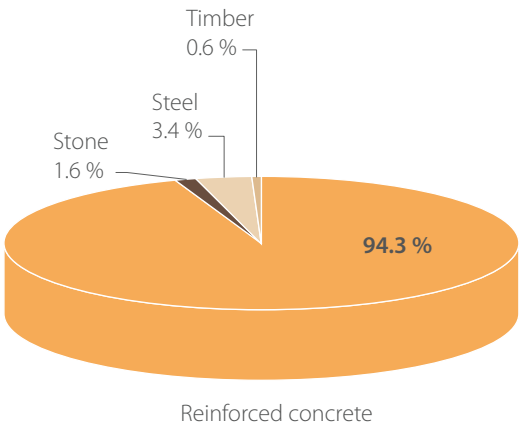
Paving of gravel roads



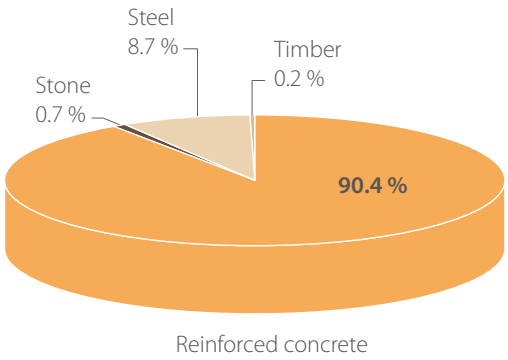
Bridges on state roads

District	Bridges, total		Reinforced concrete		Stone		Steel		Timber	
	No.	m	No.	m	No.	m	No.	m	No.	m
Aizkraukle	44	1484	44	1484						
Alūksne	23	544	20	498	1	15	1	13	1	18
Balvi	19	533	19	533						
Bauska	35	965	34	959	1	5				
Cēsis	52	1430	45	1063	1	13	4	324	2	30
Daugavpils	53	1526	50	1192			2	329	1	6
Dobele	23	501	20	444	1	11	2	46		
Gulbene	20	743	20	743						
Jēkabpils	29	756	26	695			3	61		
Jelgava	52	2334	51	2062			1	273		
Krāslava	20	450	19	446					1	4
Kuldīga	21	742	21	742						
Liepāja	43	1050	40	922	1	3	2	125		
Limbaži	42	1254	41	1240			1	14		
Ludza	27	868	26	864			1	5		
Madona	41	1250	38	1156	1	11	2	83		
Ogre	37	1220	34	1036			3	184		
Preiļi	28	629	27	614	1	15				
Rēzekne	30	1046	30	1046						
Riga	86	4769	81	3729			5	1041		
Saldus	22	675	22	675						
Talsi	29	595	26	564	2	15	1	17		
Tukums	42	915	32	734	5	101	4	74	1	6
Valka	37	1016	37	1016						
Valmiera	44	1345	44	1345						
Ventspils	35	1197	34	1173	1	24				
Total	**934**	**29834**	**881**	**26973**	**15**	**212**	**32**	**2586**	**6**	**64**

Bridge number according to material



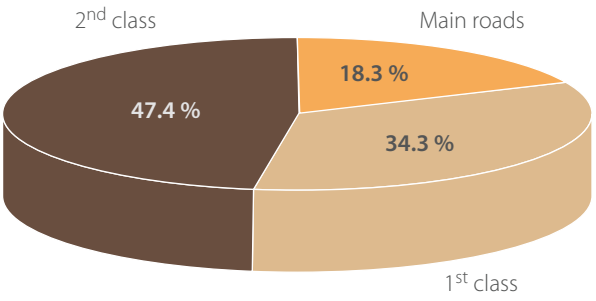
Bridge length according to material



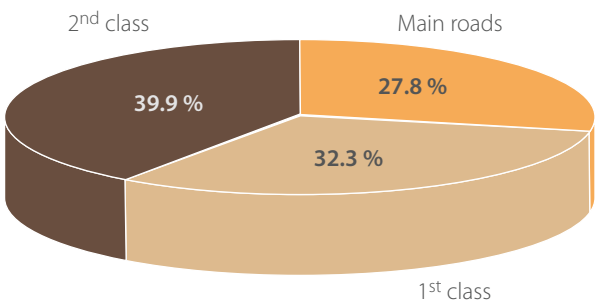
Location of bridges on state roads by district

District	Bridges, total		Main roads		1st class		2nd class	
	No.	m	No.	m	No.	m	No.	m
Aizkraukle	44	1484	7	461	23	524	14	498
Alūksne	23	544	3	134	9	191	11	218
Balvi	19	533	-	-	14	398	5	134
Bauska	35	965	2	55	13	382	20	528
Cēsis	52	1430	4	127	17	376	31	926
Daugavpils	53	1526	27	1034	10	169	16	323
Dobele	23	501	1	23	8	192	14	286
Gulbene	20	743	-	-	10	359	10	383
Jēkabpils	29	756	4	124	14	279	11	354
Jelgava	52	2334	11	953	19	682	22	699
Krāslava	20	450	1	27	6	140	13	283
Kuldīga	21	742	1	142	10	389	10	211
Liepāja	43	1050	7	120	11	361	25	569
Limbaži	42	1254	5	155	17	429	20	670
Ludza	27	868	6	204	4	119	17	546
Madona	41	1250	1	9	22	706	18	535
Ogre	37	1220	4	72	16	608	17	540
Preiļi	28	629	1	19	13	312	14	298
Rēzekne	30	1046	13	433	3	92	14	521
Riga	86	4769	52	3637	16	604	18	529
Saldus	22	675	3	100	8	309	11	267
Talsi	29	595	-	-	12	314	17	282
Tukums	42	915	8	173	14	273	20	469
Valka	37	1016	4	122	9	412	24	481
Valmiera	44	1345	2	74	15	617	27	654
Ventspils	35	1197	4	90	7	409	24	697
Total	**934**	**29834**	**171**	**8286**	**320**	**9647**	**443**	**11902**

Bridge number on roads

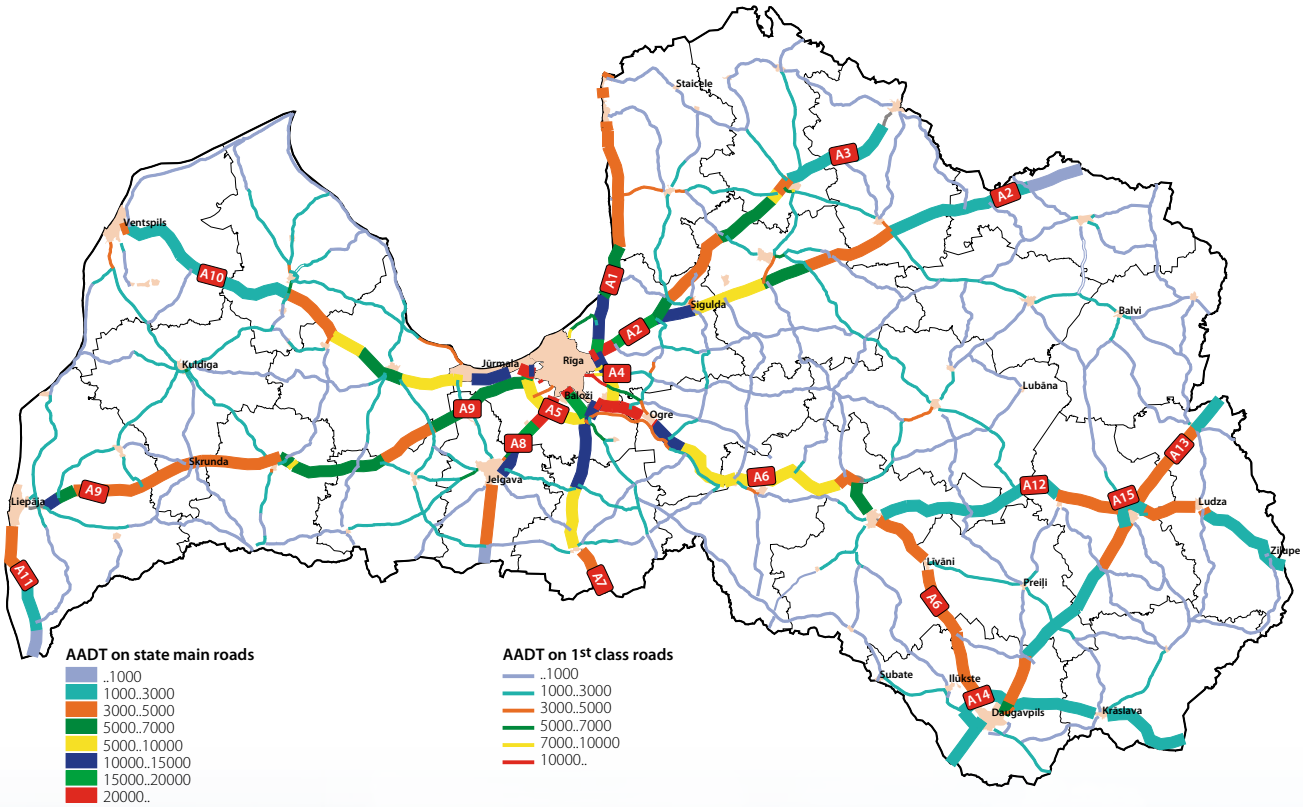


Bridge length on roads



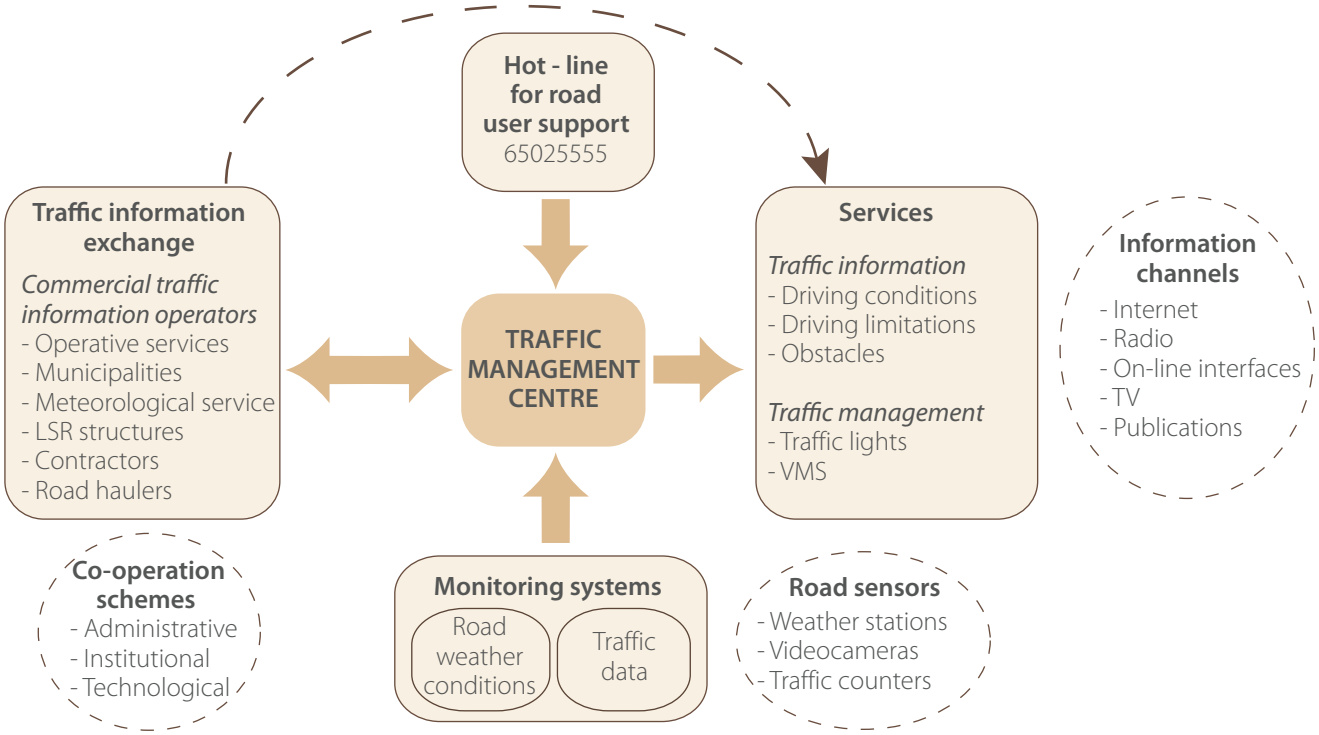
Road Traffic

Annual Average Daily Traffic



Traffic Information Centre

LSR Traffic Information Centre (TIC) ensures 24h observation, summarisation and publicity of traffic conditions, as well as, consults the road users and coordinates the cooperation of responsible institutions during operative elimination of traffic threats and interferences. TIC is the central element in the future Intelligent Transportation System in the state road network.



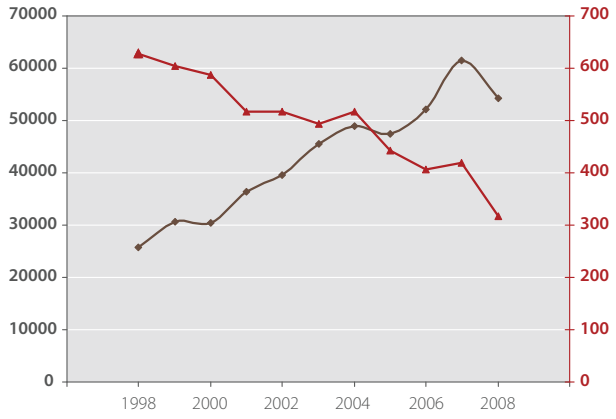
Long term functional scheme of Traffic Information Centre

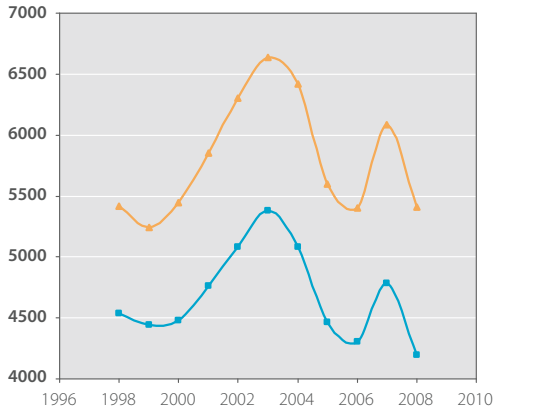
Traffic Information Centre is interested in further development of road monitoring system, its territorial coverage and cooperation in gathering information important for traffic. Access to data in the global network should be ensured (websites www.lvceli.lv and www.celugids.lv already fulfil this function). The entry of external operators in the field of broadcasting services should be supported since they would provide the road users with current traffic information in their planned routes by using their mobile phones, radio receivers and navigators.

In the framework of projects started in 2008 the functionality of current traffic monitoring system was substantially improved. 45 weather stations which inform on real weather conditions and warn on dangerous obstacles (ice, rain, fog) are equipped with video cameras and traffic counting system is automated to ensure broadcasting of online data on traffic.

During the operation of road user information hot-line it could be observed that the awareness of the society on this service constantly grew which was shown by the increasing number of incoming calls. In comparison with the previous year in 2008 the number of calls grew by 80 percent, and in 2100 cases further actions were required.

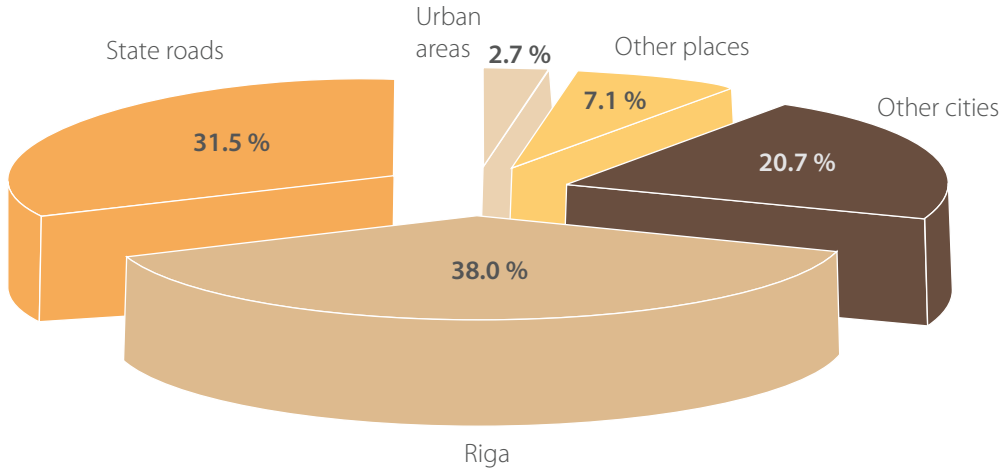
Registered road traffic accidents





Year	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
Registered road traffic accidents	25 655	30 614	30 454	36 468	39 593	45 555	48 912	47 353	52 102	61 383	54 323
Registered road traffic accidents with injured / killed	4 540	4 442	4 482	4 766	5 083	5 379	5 081	4 466	4 302	4 781	4196
Number of killed	627	604	588	517	518	493	516	442	407	419	316
Number of injured	5414	5 244	5 449	5 852	6 300	6 639	6 416	5 600	5 404	6 088	5408

Registered road traffic accidents with injured/killed by accident location



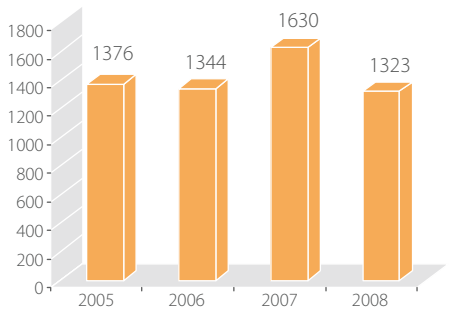
Registered road traffic accidents with injured/killed on state roads

Road	Road traffic accidents with injured / killed				Killed				Injured			
	2005	2006	2007	2008	2005	2006	2007	2008	2005	2006	2007	2008
A1	41	39	44	58	11	9	8	6	57	57	62	96
A2	64	55	73	44	22	10	14	9	90	72	115	64
A3	34	32	35	32	5	7	8	2	50	43	50	50
A4	22	23	39	28	4	2	9	2	44	35	64	39
A5	20	22	34	29	5	5	13	3	38	30	40	42
A6	117	100	112	91	19	29	21	15	186	113	163	148
A7	41	44	56	43	13	7	10	3	48	75	76	69
A8	44	50	38	34	15	14	11	5	40	53	47	39
A9	54	73	78	62	17	14	19	15	63	101	136	95
A10	68	75	68	45	13	11	9	4	110	109	95	65
A11	4	5	8	5	1	1	0	0	9	4	11	8
A12	38	35	30	25	11	7	9	5	49	42	36	28
A13	33	30	32	26	10	7	2	5	40	41	43	32
A14	1	1	4	3	0	0	2	3	1	1	3	4
A15	0	1	0	1	0	2	0	0	0	2	0	1
Total (A1–A15)	***581***	***585***	***651***	***526***	***146***	***125***	***135***	***77***	***825***	***778***	***941***	***780***
Total on 1st class roads	***464***	***485***	***558***	***491***	***100***	***88***	***94***	***80***	***652***	***657***	***801***	***660***
Total on 2nd class roads	***331***	***274***	***321***	***306***	***42***	***32***	***31***	***36***	***460***	***395***	***444***	***457***
Total	***1376***	***1344***	***1630***	***1323***	***288***	***245***	***260***	***193***	***1937***	***1830***	***2186***	***1897***

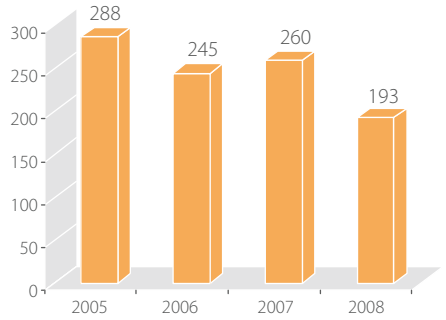
Main Roads

A1 – Riga (Baltezers)–Estonian border (Ainaži), A2 – Riga–Sigulda–Estonian border (Veclaicene), A3 – Inčukalns–Valmiera–Estonian border (Valka), A4 – Riga bypass (Baltezers–Saulkalne), A5 – Riga bypass (Salaspils–Babīte), A6 – Riga–Daugavpils–Krāslava–Byelorussian border (Paternieki), A7 – Riga–Bauska–Lithuanian border (Grenctāle), A8 – Riga–Jelgava–Lithuanian border (Meitene), A9 – Riga (Skulte)–Liepāja, A10 – Riga–Ventspils, A11 – Liepāja–Lithuanian border (Rucava), A12 – Jēkabpils–Rēzekne–Ludza–Russian border (Terehova), A13 – Russian border (Grebņeva)–Rēzekne–Daugavpils–Lithuanian border (Medumi), A14 – Daugavpils bypass (Kalkūni–Tilti), A15 – Rēzekne bypass.

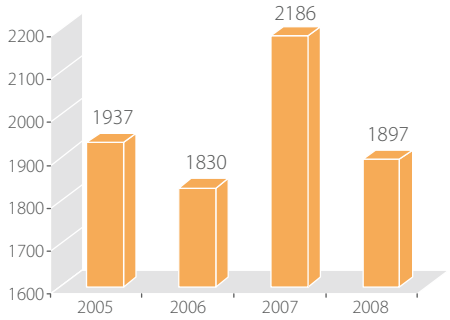
Road traffic accidents with injured/killed



Killed



Injured



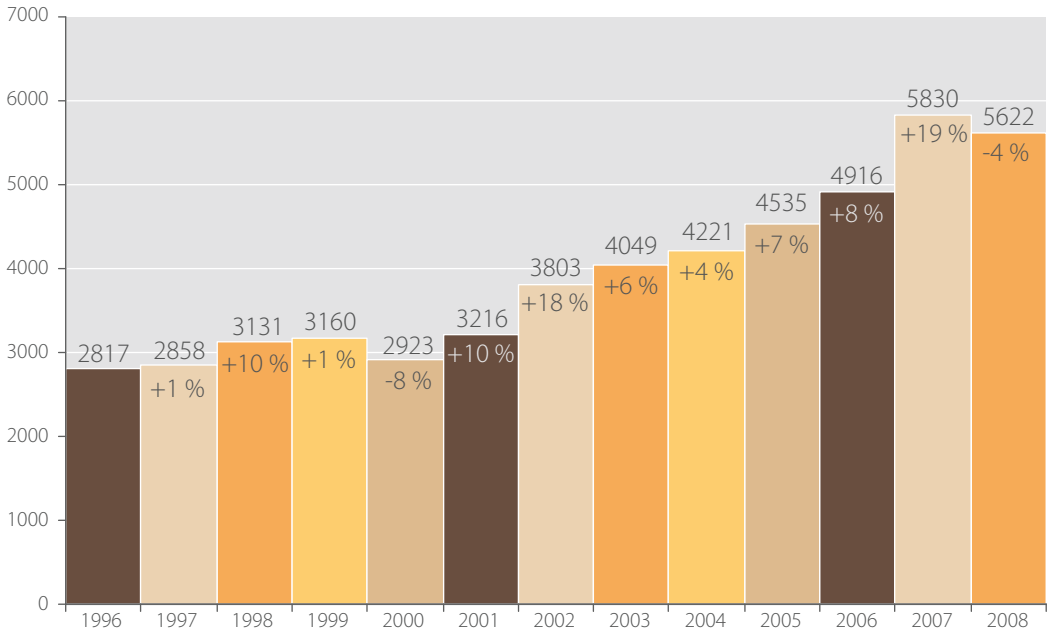
Traffic counting

Traffic counting system in its present form was developed since 1996. With the development of technologies the equipment of traffic counting system was constantly modernised and automated. All state main roads and high intensity 1st and 2nd class roads are equipped with built-in sensors recording road transport parametres. In accordance with the traffic counting development programme new permanent counting points are established that provide larger possibilities for traffic data analysis and adjusting of necessary indicators for calculations in the rest of the road network.

In 2008 traffic counting was performed at 109 locations on state main roads, 68 locations on state 1st class roads and 313 locations on state 2nd class roads. The aim of traffic counting is to acquire data to facilitate the planning of the road network, as well as, to define the level of road maintenance depending on traffic intensity, selection of methods for pavement repair, forecasting future traffic flows and analysis of traffic safety. The acquired data on transport composition is one of the main criteria for road designing.

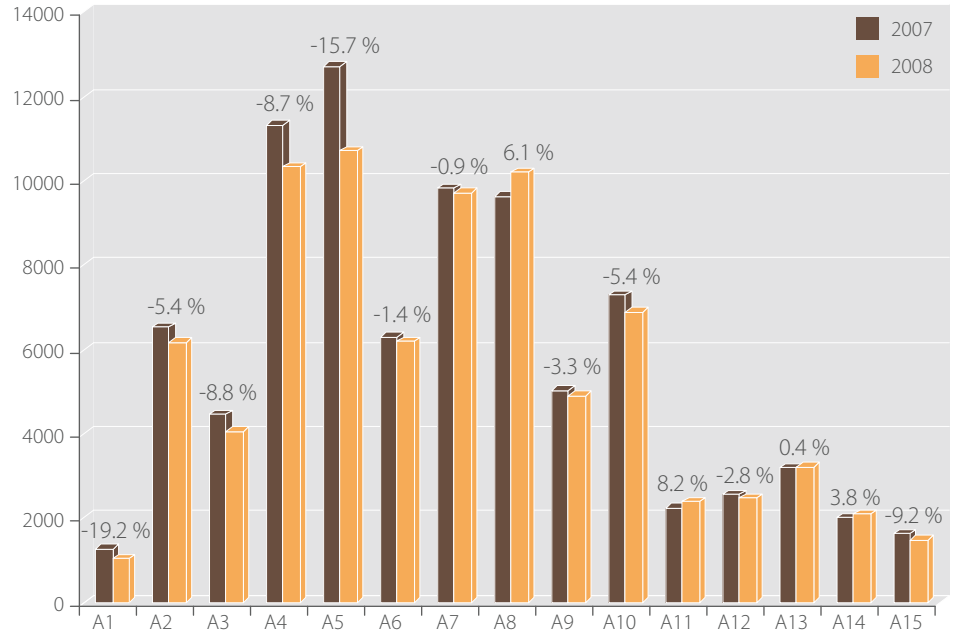
Traffic counting data of 2008 shows that after long growth period since 2000 the total traffic flow has decreased for the first time which could be explained with the economical recession.

Average changes in daily traffic on state main roads

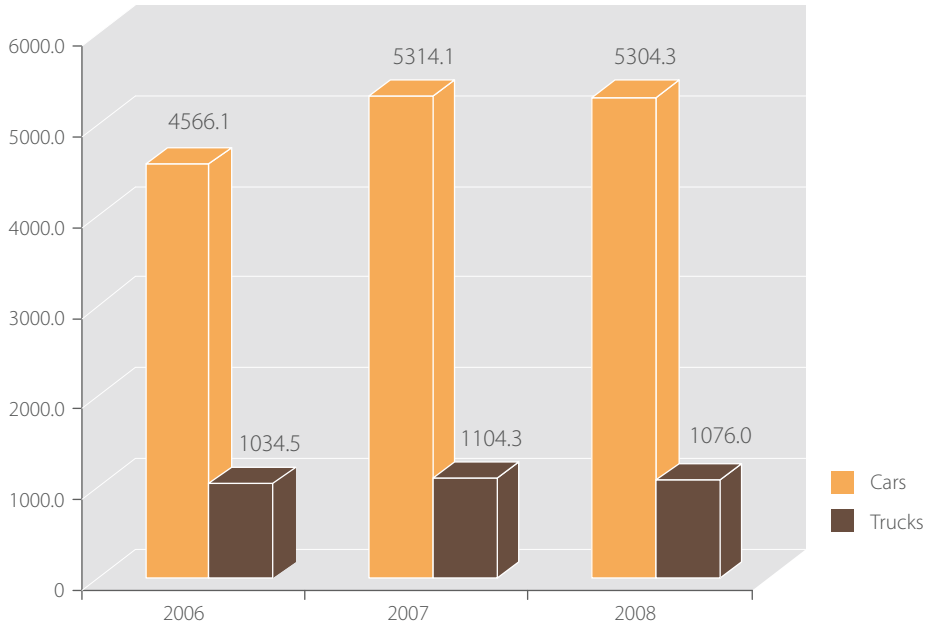


It may be seen that the traffic flow in the state main road network has decreased practically on all roads with some exceptions.

Changes in vehicle flow on state main roads



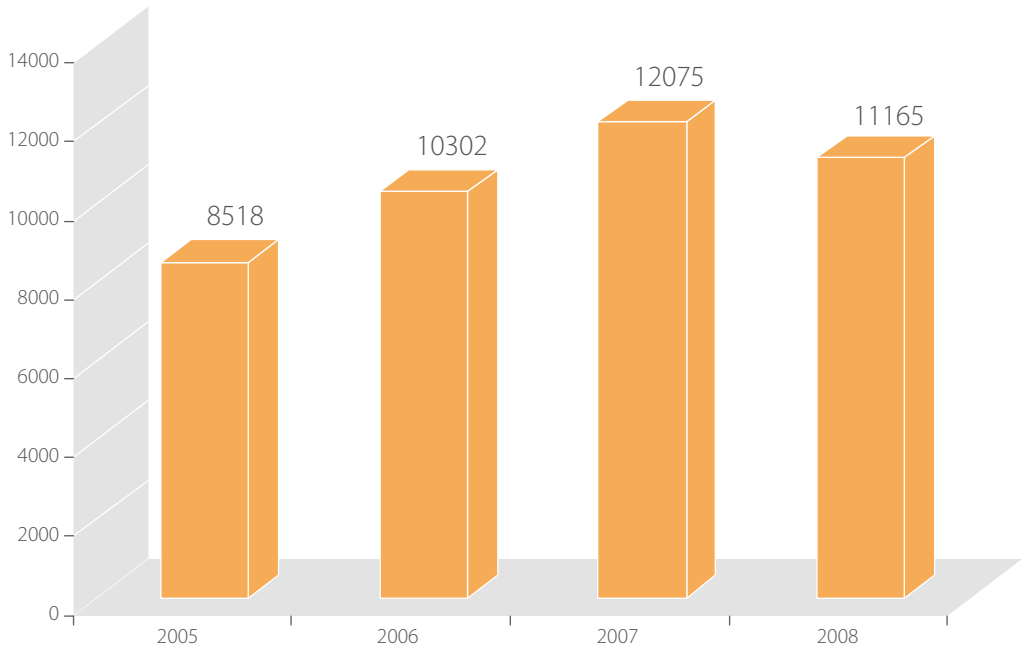
Vehicle mileage on state roads, million km



Number of permits issued to heavy and oversized transport

Types of heavy transport	No. of permits issued in 2005	% of total no.	No. of permits issued in 2006	% of total no.	No. of permits issued in 2007	% of total no.	No. of permits issued in 2008	% of total no.
Towing vehicles with trailers	5653	66	6933	67	7940	66	7592	68
Trailers	388	5	639	6	881	76	782	7
Timber transporters	2190	26	2287	22	2266	19	1675	15
Special transport (petrol tankers, motor cranes)	287	3	443	4	988	8	1116	10
Total	***8518***	***100***	***10302***	***100***	***12 075***	***100***	***11165***	***100***

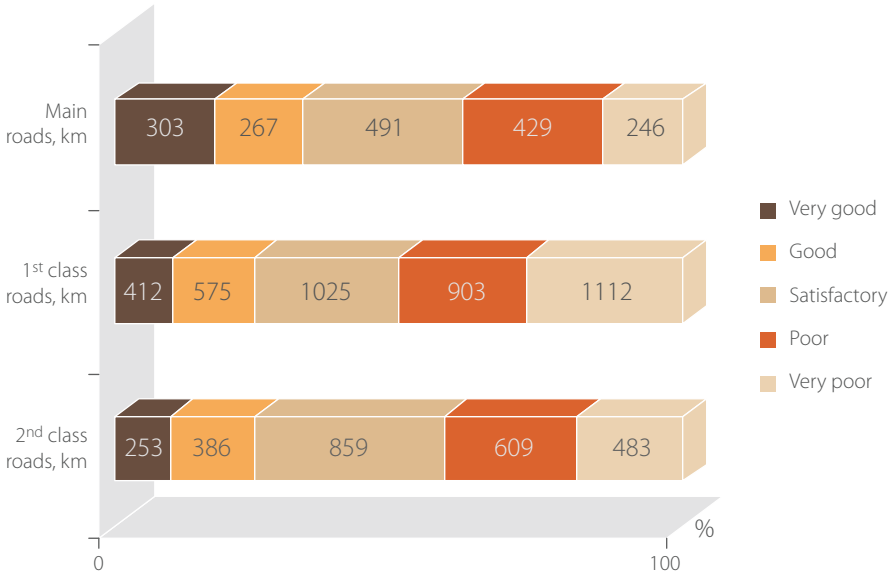
Dynamics of issued permits



Results of visual assessment of roads and bridges

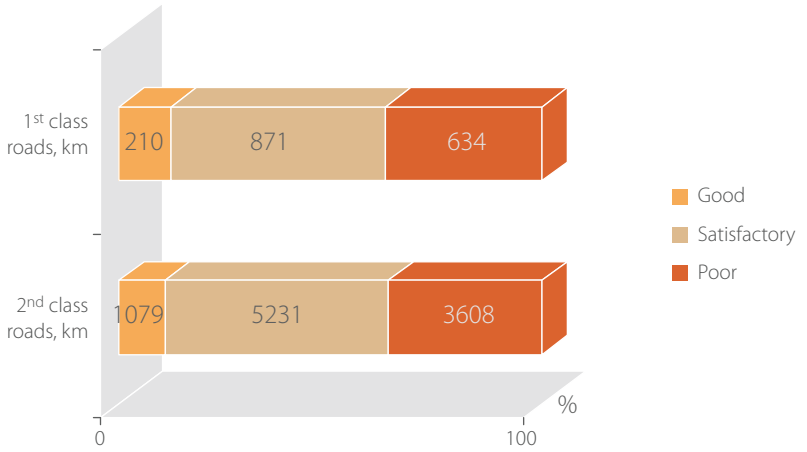
Technical condition of bituminous pavement

Pavement condition	Main roads, km	1st class roads, km	2nd class roads, km	Total length, km	Share of total length, %	Share of total length of main roads, %
Very good	303	412	253	968	12	18
Good	267	575	386	1228	15	15
Satisfactory	491	1025	859	2374	28	28
Poor	429	903	609	1941	23	25
Very poor	246	1112	483	1841	22	14
Total, km	***1736***	***4027***	***2590***	***8352***	***100***	***100***



Technical condition of gravel roads

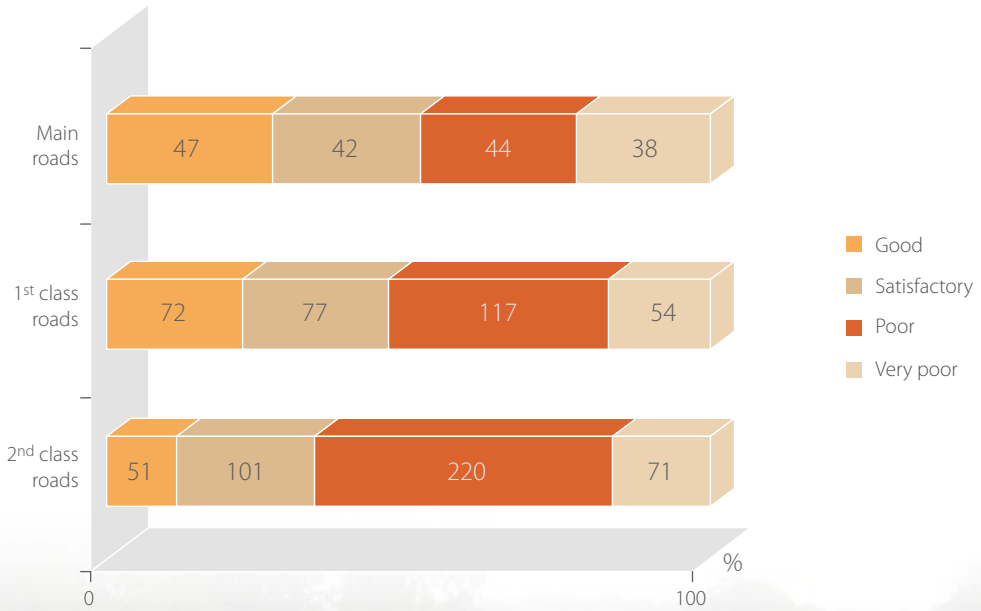
Pavement condition	1st class roads, km	2nd class roads, km	Total length, km	Share of total length, %
Good	210	1079	1289	11
Satisfactory	871	5231	6101	52
Poor	634	3608	4242	37
Total, km	***1715***	***9918***	***11632***	***100***



Technical condition of bridges

Technical condition	*Bridge no.*	*Including*			*Share of total no. %*
		Main roads	*1st class roads*	*2nd class roads*	
Good	170	47	72	51	18
Satisfactory	220	42	77	101	24
Poor	381	44	117	220	41
Very poor	163	38	54	71	17
Total	***934***	***171***	***320***	***443***	***100***

Various restrictions have been introduced on 49 bridges.



Technical condition of roads

The level of road user comfort depends on surface evenness. The measurement unit is the International Roughness Index (IRI) – summed up vertical fluctuations in metres per one road kilometre.

IRI	*Description of road surface*
0 to 2.5	Very even road surface; driving conditions are comfortable
2.5 to 3.5	Even road surface but vehicle fluctuations are observed
3.5 to 4.5	Uneven road surface, vehicle fluctuations are observed
4.5 to 6.0	Very uneven road surface but traffic is still possible
Over 6.0	Very uneven road surface and traffic safety is substantially diminished

In accordance with data of 2008 the average IRI value on state main roads is 2.97. In comparison with the last year a trend may be observed that the average road evenness decreases.

Changes of IRI value on state main roads

	2004	*2005*	*2006*	*2007*	*2008*
A1	2.46	2.59	1.82	1.28	1.35
A2	2.78	2.91	2.85	2.76	2.69
A3	3.00	3.23	3.39	3.07	3.14
A4	2.01	2.13	2.18	2.10	2.26
A5	2.72	2.84	2.99	3.04	3.46
A6	3.06	3.29	3.12	3.17	2.98
A7	2.53	2.60	1.72	1.67	1.71
A8	3.03	3.16	3.26	3.30	3.35
A9	2.82	2.89	2.86	2.92	2.69
A10	2.49	2.60	2.64	2.73	2.54
A11	3.15	3.21	3.45	3.49	3.41
A12	3.82	4.05	4.37	4.44	3.82
A13	3.25	3.43	3.42	3.28	3.14
A14	3.59	3.60	3.90	3.92	3.98
A15	3.69	3.73	3.76	3.79	3.98
IRI, average	***2.96***	***3.09***	***3.05***	***3.00***	***2.97***

The state road section were IRI index is the lowest is the road A6 Riga – Daugavpils – Byelorussian border (Grebņeva), section from km 272.0 to 273.0.

Other state road sections with low IRI index

Road	From km	To km	IRI
A1	84	85	3.16
A6	272	273	10.52
A6	273	274	8.60
A12	104	105	7.87
A12	108	109	8.82

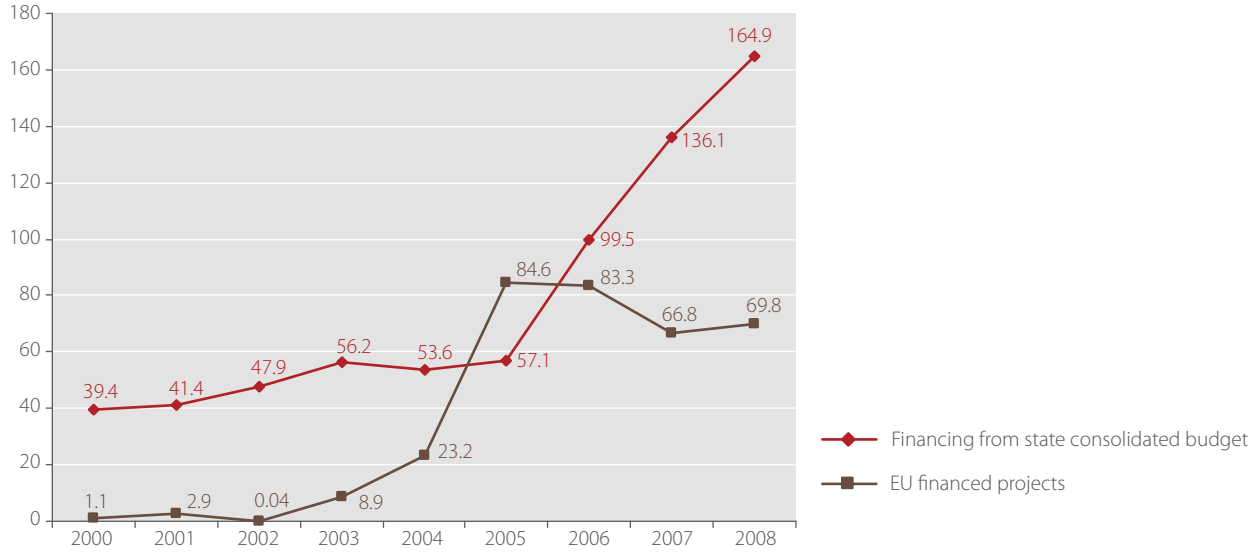
In addition to evenness measurements also the depth of ruts is measured. Ruts deeper than 25 mm present threats to traffic safety. In accordance with data of 2008 the average depth of ruts on state main roads is 7.6 mm. The lowest average index of this parametre per 1 km is on the road A5 Riga bypass (Salaspils–Babīte). The state road section with the deepest ruts is road A3 Inčukalns–Valmiera–Estonian border (Valka) section from km 52.0 to 53.0.

Sections of state main roads with the deepest ruts

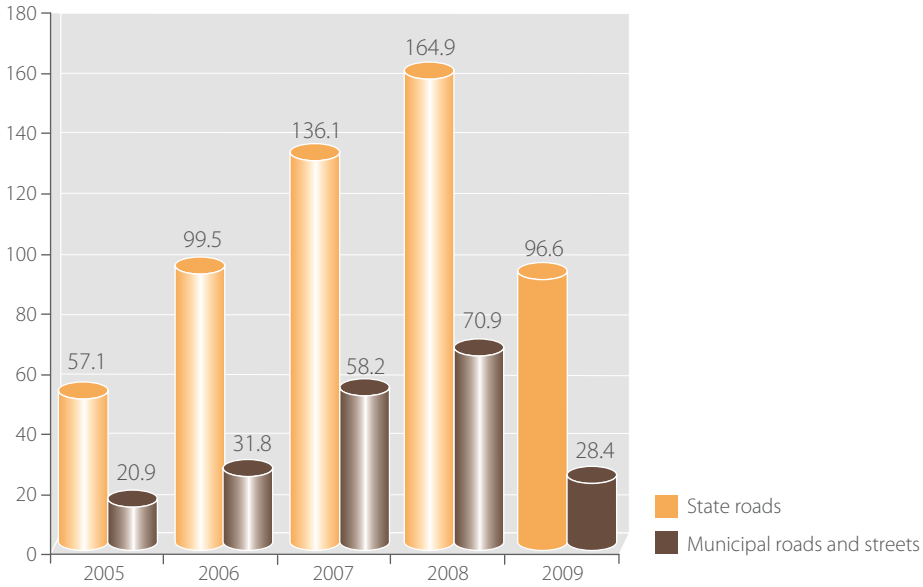
Road	From km	To km	Ruts, mm
A3	52	53	30.3
A3	51	52	27.9
A3	45	46	26.7
A2	52	53	26.6
A2	153	154	23.9

Road Financing

Financing of state road programmes, million Lats



Actual and foreseen road financing, million Lats



State road financing in 2008

No.	Programmes, sites, works	Thousand Lats
1.	**MAINTENANCE AND MANAGEMENT COSTS**	**74 211.983**
1.1.	**MAINTENANCE**	**65 755.175**
1.1.1.	Routine maintenance:	64 547.739
1.1.1.1.	Routine maintenance of state roads	50 092.927
1.1.1.2.	Maintenance of bituminous pavements (surface treatment)	3 841.184
1.1.1.3.	Painting of horizontal markings within the state road network	5 659.348
1.1.1.4.	Maintenance of gravel pavements	4 954.280
1.1.2.	**Co- financing for routine maintenance of urban transit roads**	522.111
1.1.3.	**Co- financing for routine maintenance of roads over "Latvenergo" hydro-technical structures**	9.266
1.1.4.	**Subsidy to Road Museum**	123.750
1.1.5.	**New technology research programme**	378.037
1.1.6.	**Maintenance of technical equipment of Traffic Information Centre**	3.465
1.1.7.	**Payment for electrical equipment connections**	170.807
1.2.	**MANAGEMENT**	**5 883.100**
1.2.1.	**Management of road network**	5 426.757
1.2.2.	**Inventory of state roads**	109.378
1.2.3.	**Standardisation**	85.506
1.2.4.	**Audit of state road traffic safety**	14.386
1.2.5.	**Registration of state road lands in the Land Register**	83.149
1.2.6.	**Public information on road sector issues**	94.906
1.2.7.	**VAT payment for income**	42.115
1.2.8.	**Financial statement audit for ERDF programme**	2.124
1.2.9.	**Consulting on the development of draft laws on road user charging**	24.780
1.3.	**DESIGNING AND PROJECT PREPARATION**	**2 573.708**
1.3.1.	**Road research, studies and designs**	539.962
1.3.2.	**Bridge research, studies and designs**	252.166
1.3.3.	**State road construction designs**	1 234.613
1.3.4.	**Bridge construction designs**	247.065
1.3.5.	**Construction designs for traffic organisation equipment**	230.775
1.3.6.	**Preparation of public and private partnership projects**	69.128
2.	**CAPITAL INVESTMENTS**	**90 682.816**
2.1.	**PERIODICAL MAINTENANCE AND RECONSTRUCTION**	**90 425.272**
2.1.1.	**Roads**	**66 062.482**
2.1.1.1.	State main road improvement programme	21 805.333
2.1.1.2.	Improvement of state 1st and 2nd class road sections with bituminous pavement and construction of new sections	16 535.967
2.1.1.3.	Periodical maintenance of gravel roads	1 587.516
2.1.1.4.	Improvement of state 2nd class roads for regional support	12 120.495
2.1.1.5.	State road improvement in connection with the closing of railway lines	2 333.189
2.1.1.6.	Co – financing for the reconstruction of urban transit streets	11 003.647
2.1.1.7.	Construction of truck control points	676.334
2.1.2.	**Bridges**	**16 419.664**
2.1.2.1.	Periodical maintenance of bridges	2 465.585
2.1.2.2.	Reconstruction of bridges	13 954.079
2.1.2.3.	Co – financing for periodic maintenance and reconstruction	0.000
2.1.3.	**Traffic organisation and road equipment**	**7 943.127**
2.1.3.1.	Periodical maintenance of technical equipment of traffic organisation	3 015.654
2.1.3.2.	Traffic safety improvement projects	4 815.864
2.1.3.3.	Development of Road Weather Information System	62.119
2.1.3.4.	Development of technical instruments for Traffic Information Centre	13.222
2.1.3.5.	Development of traffic counting system	36.268
2.2.	**OTHER COSTS**	**257.543**
2.2.1.	**Support to municipalities**	119.567
2.2.2.	**Project management and construction supervision for ERDF projects**	128.976
2.2.3.	**Payments for land acquisition**	9.000
	Total	***164 894.799***

Implementation of projects financed by the Cohesion Fund in the road sector

No.	*Programmes, sites, works*	*Thousand Lats*
	MAINTENANCE COSTS	**1 108.500**
1.	**Payment into consolidated budget**	1 108.500
	CAPITAL INVESTMENTS	**43 832.926**
2.1.	**TEN road network improvements, 1st project**	36 795.275
	Including:	
2.1.1.	E22/A12 Jēkabpils–Varakļāni, km 6.8–62.1 (construction)	36 583.513
2.1.2.	Land procurement and other costs	211.762
2.2.	**E67 Via Baltica, Saulkrasti bypass**	7 037.651
	Total	***44 941.426***

Financing of regional road development programme (ERDF)

No.	*Programmes, sites, works*	*Thousand Lats*
	CAPITAL INVESTMENTS	**3 452.689**
1.1.	P73 Vecumnieki–Nereta–Subate, km 75.0–84.8	2 207.656
1.2.	P124 Ventspils–Kolka, km 56.3–67.3	1 245.033
	Total	***3 452.689***

Preparation and construction of urgent infrastructure projects of the East – West transport corridor

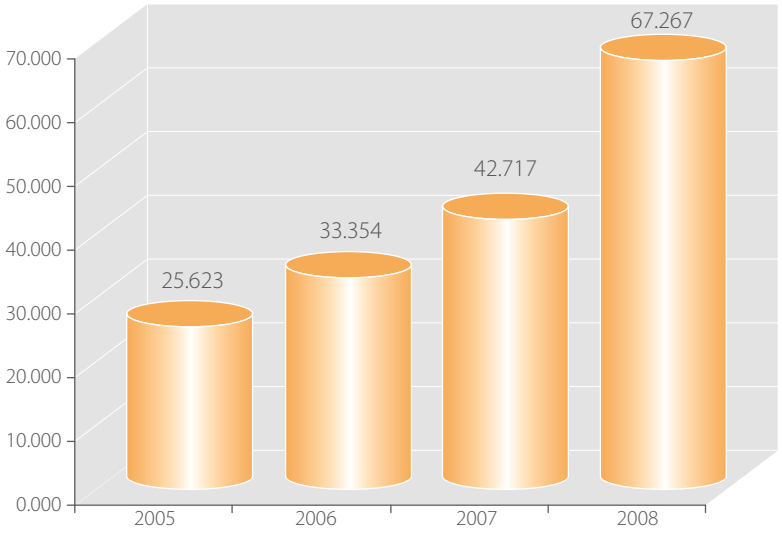
No.	*Programmes, sites, works*	*Thousand Lats*
	CAPITAL INVESTMENTS	**22 495.186**
2.1.	E22 section Tīnūži–Koknese (land acquisition, construction)	12 380.442
2.2.	E22 section Ludza–Terehova (land acquisition, construction)	8 814.744
2.3.	Improvement of 1st class roads (P73 Vecumnieki–Nereta–Subate, km 75.0–84.8)	1 300.000
	Total	***22 495.186***

Results Achieved

Routine road maintenance

67.267 million Lats were spent for routine maintenance works during 2008 covering a total length of 20 180 km of state roads.

Routine maintenance works, million Lats



Programme	*2005*	*2006*	*2007*	*2008*
Road winter maintenance	10.647	11.059	11.718	18.032
Bridge, interchange and culvert maintenance	0.506	0.519	0.685	0.712
Traffic organisation	1.248	1.317	1.648	2.034
Pavement routine maintenance	9.861	15.515	19.891	21.149
Maintenance of bituminous pavements (surface treatment)	-	-	-	3.844
Painting of horizontal markings	-	-	-	6.646
Maintenance of gravel pavements	-	-	-	5.001
Road cleaning and inspection	2.337	3.585	6.020	7.775
Maintenance of road weather stations	0.085	0.071	0.057	0.114
Programme management and construction supervision	0.939	1.288	1.742	1.960
Elimination of ruts and depressions in bituminous pavements	-	-	0.956	-
Total	***25.623***	***33.354***	***42.717***	***67.267***

The most important routine maintenance task during 2008 was to ensure continuous traffic along state roads. Expenditures for these works amounted up to 9.059 million Lats more than in 2007 and exceeded the financing planned for 2008 for 1.457 million Lats.

In 2008 the expenditures for winter road maintenance amounted up to 6.314 million Lats more than in the previous year in order to ensure equal driving conditions as in 2007. In comparison with the winter season of 2007/2008 the maintenance level of state roads was increased for 320.6 km in maintenance class A and for 268.5 km in maintenance class A1.

Expenditures for pavement maintenance in 2008 amounted up to 1.258 million Lats more than in 2007. The renewal of deteriorated bituminous pavements with surface dressing with the financing from routine maintenance resources was performed on approximately 110 km and amounted up to 736.6 thousand m^2. In addition to routine maintenance programme for bituminous pavement maintenance planned in 2008 the surface dressing and renewal of wearing course in the length of 195.9 km was performed for 3.682 million Lats.

In comparison to previous years the maintenance of gravel pavements was decreased by 0.379 million Lats. Although in the 1st quarter of 2008 as in 2007 extraordinary maintenance works on gravel pavements were necessary to ensure traffic. In comparison with 2007 the physical amounts of grading and profiling works were decreased by 7.1 %, and the amounts of road levelling were decreased by 7.7 %. 215.3 thousand m^3 of gravel were used for the renewal of gravel road pavements and elimination of indents, potholes and sand pits on state roads, which was 30 % less than in 2007. The decrease of physical works was partly connected to the fact that 4.801 million Lats from the planned financing for gravel road maintenance were spent to ensure the functioning of 238.0 kilometres.

Even though expenditures for bridge and culvert maintenance in 2008 amounted up to 0.027 million Lats more than in 2007, not all planned works were completed. There still is a large deficit in periodic bridge maintenance and repairs.

During 2008 the expenditures for traffic organisation exceeded the corresponding figure from the previous year for 0.386 million Lats. After traffic safety improvements and in newly built and rebuilt road sections, routine maintenance has to be performed in road sections where traffic is regulated with traffic lights. Road signs and equipment (especially safety guard rails and lightning pillars) are still subject to malicious damage and theft. Equipment is damaged also in traffic accidents. Total incurred losses for road equipment amounted up to 0.507 million Lats. Horizontal markings during last year were renewed for 6.430 million Lats.

Expenditures for routine state road maintenance works in 2008

Type of maintenance works	*Measurement unit*	*Quantity*	*Costs, Lats*
1.1.1.1. Routine state road maintenance			
Road winter maintenance	**-**	**-**	**18 031 763**
Snow removal	track km	122 593	545 707
Snow removal	km	103 179.3	1 149 022
Snow removal with de-icing	km	157585.2	5 050 254
De- icing	km	411276.3	8 630 935
Formation of grooves in ice	track km	41 560	277 055
Main road winter maintenance	km	1 931.4	1 130 827
Road winter maintenance	km	40 167.5	183 044
Winter service duty	hours	118 628	639 407
Other winter service works	-	-	425 512
Maintenance of bridges, interchanges, pedestrian tunnels and culverts	**-**	**-**	**712 387**
Bridge and interchange maintenance	-	-	184 858
Culvert maintenance	-	-	465 451
Tunnel maintenance	-	-	62 078
Traffic organisation	**-**	**-**	**2 033 731**
Maintenance of bus stops, pavilions and rest areas	-	-	520 226
Replacement of road sign posts	it.	5 407	206 081
Replacement of road signs on existing posts	it.	6 863	451 116
Road sign renewal	m^2	37.3	2 467
Painting of road markings	m^2	1 004	7 337
Signal post replacement	it.	6 037	125 072
Signal post washing	it.	4 132	7 885
Fixing reflectors on signal posts	it.	963	1 680
Replacement of damaged guard – rails	running m	2 830	145 404
Guard – rail washing	m	18 072	7 281

Installation of reflectors on guard – rails	it.	767	4 064
Guard rail improvements	m	2 286	28 618
String guard rail treatment	m	1 174	3 759
Maintenance of equipment packages necessary for the equipment of places dangerous for traffic	it./month	337	50 928
Replacement of information signs	it.	29	35 633
Traffic light maintenance	Lats	-	45 586
Road lighting and lighting equipment maintenance	Lats	-	288 838
Other traffic organisation works	-	-	101 756
Pavement routine maintenance	**-**	**-**	**21 148 547**
Bituminous pavements:	-	-	10 394 199
Crack filling	running m	42 952	39 728
Pothole repairs	m^2	685 581	8 278 545
Pavement cleaning	m^2	4 580 000	66 553
Repair of bleeding	m^2	11 150	1 721
Protection of humped sections	m^3	424	6 943
Renewal of pavement skid resistance	m^2	736 630	1 577 149
Indent repairs	t	4 334	336 792
Levelling	m^2	9 950	27 874
Other pavement maintenance works	Lats	-	58 894
Gravel pavements:	-	-	10 754 348
Road grading	km	115 030	3 756 452
Road profiling	km	2 715.8	121 049
Pavement renewal	m^3	165 600	4 615 067
Indent and pothole repairs on gravel roads	m^3	49 653	924 602
Road levelling (dragging)	track km	168 593	1 272 815
Other pavement maintenance works	Lats	-	64 363
Road treatment	**-**	**-**	**7 260 211**
Elimination of scouring	m^3	8 973	216 438
Slope strengthening in scourings	m^2	1 617	13 122
Ditch cleaning and renewal	m^3	215 071	1001483
Cleaning of covered systems for rainwater drainage	Lats	-	9 644
Shoulder profiling	km	7 551.5	189 644
Shoulder repairs	m^3	20 858	595 951
Removal of accumulated shoulder gravel	m^3	54 586	272 748
Bush cutting	ha	1 078	847 523
Mechanical sprout cutting	track km	31 980	1 072 396
Sprout cutting with hand bush cutter	ha	963.5	195 327
Mechanical bush cutting with simultaneous crushing	ha	128.8	133 177
Mechanical mowing of grass	track km	90 232	422 862
Manual mowing of grass	m^2	2 749 283	200 546
Mechanical mowing of grass in road median and right of way	ha	1 012.2	28 121
Cutting of hogweeds in road right-of-way	ha	343.8	113 053

Tending of shrubs	-	-	437 648
Operative road treatment	km	60 264.1	458 556
Treatment of road right of way	km	11 773.9	603 321
Treatment and maintenance of road right of way in border land	-	-	129 630
Treatment of household waste containers	m^3	7 853	308 964
Other road treatment works	-	-	10 057
Road inspection	**-**	**-**	**514 807**
Road inspection	km	210 996	225 604
Operative traffic information co-ordinator work	hours	92 190	289 203
Maintenance of road weather stations and Traffic Information Centre			**113 878**
Maintenance	-	-	73 259
Communications	-	-	14 130
Service of meteorological radar	-	-	13 784
Maintenance of Traffic Information Centre and traffic counting points	-	-	12 705
Programme management and work control	-	-	1 960 340
1.1.1.1. Total	**-**	**-**	***51 775 664***
1.1.1.2. Maintenance of bituminous pavements (surface dressing)			
On state main roads	km	1.23	31 702
On state 1st class roads	km	147.46	2 968 868
On state 2nd class roads	km	47.20	680 931
Programme management and work control	-	-	163 023
1.1.1.2 Total			***3 844 524***
1.1.1.3. Painting of horizontal markings in state road network			
Painted horizontal marking in 2008, total, including:	m^2	862 476	6 430 121
on state main roads	m^2	505 240	
on state 1st class roads	m^2	347 552	
on state 2nd class roads	m^2	9 684	
Programme management and work control			216 000
1.1.1.3. Total			***6 646 131***
1.1.1.4. Maintenance of gravel roads			
On state 1st class roads	km	105.87	2 509 054
On state 2nd class roads	km	132.09	2 491 861
Programme management and work control			200 000
1.1.1.4. Total			***5 000 915***
Routine maintenance works, grand total			***67 267 234***

Track kilometre is equal to a kilometre of road treated in the width of road maintenance machinery.
Running metre is equal to the length of road element or structure per road metre.

Winter road maintenance

During the winter of 2008/2009 winter road maintenance was ensured in accordance with the maintenance classes approved by the Ministry of Transport, as follows:

Winter maintenance class A:	996 km
Winter maintenance class A1:	2 900 km
Winter maintenance class B:	1 756 km
Winter maintenance class C:	12 886 km
Winter maintenance class D:	1 759 km
Total:	***20 296 km***

Division into winter maintenance classes is carried out depending on the classification of state roads, traffic intensity, road pavement, its technical condition, funding planned or available for road maintenance and road economic and social significance. Guaranteed higher maintenance level was determined for the most intensively used roads with traffic intensity exceeding 5000 cars per day, whilst lower levels have been set for roads with traffic intensity ranging from 100 to 500 cars per day, as well as, roads with lower intensity used for regular bus transport. Maintenance of remaining state roads was organised without guaranteed limits depending on the funding remaining after the maintenance of the above mentioned roads was performed. D class roads are state 2nd class roads on which regular transportation of bus passengers does not take place and snow is removed not more than four times per season.

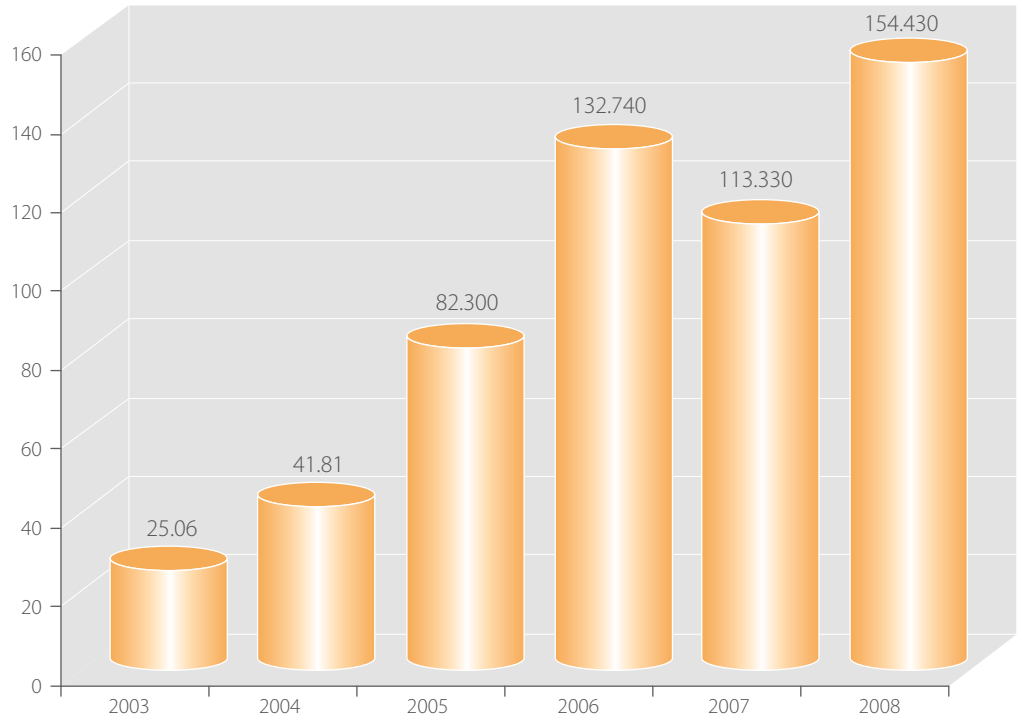
State main and 1st class road winter maintenance 2007/2008

Construction works

In 2008 the newly built road section Nirza – Ploski was finished. Procurement process was started for the section Ludza – Nirza. Both sections constitute immediate infrastructure projects of the West – East transport corridor and after finishing will be included in the route E22.

In 2008 the works were carried out for 154.4 million Lats and bituminous pavements were reconstructed or renewed in the length of 199.5 km.

Construction works, million Lats



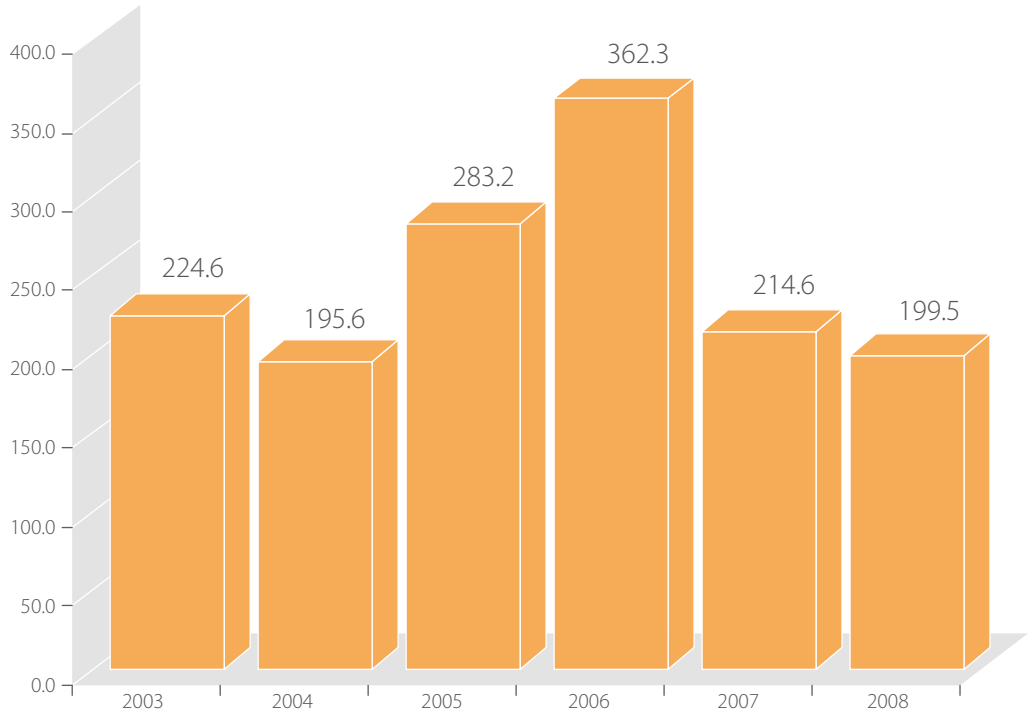
Within the framework of the programme for periodic maintenance and reconstruction of bituminous pavements on state main roads 34.4 km of road pavement were reconstructed and constructed at a cost of 30.297 million Lats.

Within the programme for the renewal of state 2nd class roads for regional support 65.8 km of asphalt concrete road pavements and 82.1 km of gravel roads were renewed. Paving of roads with gravel pavement was carried out on 29 km of roads at a total cost of 9.753 million Lats.

Within the programme of gravel road periodical maintenance 31.7 km of gravel pavements were renewed at a total cost of 745.6 thousand Lats in 2008.

Within the programme of periodical maintenance of bituminous pavements 73.6 km of state 1st and 2nd class roads including 4 km of gravel pavements were renewed for 10.447 million Lats.

Renewal of bituminous pavements, km



The total costs of traffic organisation and road equipment programme amounted up to 2.95 million Lats. Steel guard rails with the total length of 58.4 km and 9791 road signs were installed.

The total cost of traffic safety improvement programme was 2.9 million Lats. On state main roads and 1st class roads 9 pedestrian crossings and cycling paths were constructed. On the road A8 Riga – Jelgava – Lithuanian border in sections from km 21.8 to 22.43 and from km 19.765 to 20.5 the reconstruction of crossing and construction of pedestrian path and traffic lights was performed.

Within the programme for periodical bridge maintenance 27 bridges with the total length of 700 m were renewed for 2.315 million Lats.

In 2008 within the framework of bridge reconstruction programme 10 bridges with the total length of 33 m were reconstructed and works on 4 bridges and road interchanges have to be finished in 2009. The reconstruction of the bridge over the Gauja river on road A4 Inčukalns – Valmiera – Estonian border at km 1.2 was finished. Bridge piers were repaired and span and cone structure was renewed to ensure appropriate traffic safety level and road user comfort. Total expenditures for bridge reconstruction works in 2008 were 10.115 million Lats.

Within the truck control point programme 9 weighing stations were constructed for 1.026 million Lats.

22 land properties were bought in 2008 for 660 000 Lats. They were registered in the Land Register under the name of the Ministry of Transport. 24 draft Resolutions of the Cabinet of Ministers on the procurement of 210 land properties were prepared and submitted to the Ministry of Transport.

Projects co-financed by the EU Cohesion Fund

The EU co-financing of road construction and reconstruction continued in 2008. The Cohesion Fund financing is planned for the development of roads of European importance. The construction of route E22 section Nirza – Ploski in 2007/2008 was financed from the state consolidated budget and the total expenditures amounted up to 24.9 million Lats. 85 % of this financing may be reimbursed from the Cohesion Fund. During last year the reconstruction of section Jēkabpils–Varakļāni continued and it will be completed in the autumn of 2009. The total costs of construction works amount up to 79.4 million Lats and the Cohesion Fund will cover significant part of expenditures.

The financing from the European Regional Development Fund (ERDF) ensures regional development and is attracted to the reconstruction of state 1st class roads, for example, roads with gravel pavement are paved with bituminous pavement. In 2008 the reconstruction of road P124 Ventspils–Kolka section Mazirbe–Vaide and road P73 Vecumnieki–Nereta–Subate section Rite–Apserde was started. Accordingly the costs were 2.8 and 4.2 million Lats. Co-financing of both sections from the consolidated state budget is planned in the amount of 15 %.

Traffic safety improvement projects

1. Black spots were eliminated at:
- road 2 Riga–Sigulda–Estonian border (Veclaicene), km 46–47 (reconstruction of intersection);
- road 2 Riga–Sigulda–Estonian border (Veclaicene), km 47–48 (reconstruction of intersection);
- road A6 Riga–Daugavpils–Krāslava–Byelorussian border (Paternieki), km 18–19 in Salaspils;
- road A6 Riga–Daugavpils–Krāslava–Byelorussian border (Paternieki) in Koknese;
- road A6 Riga–Daugavpils–Krāslava–Byelorussian border (Paternieki) in Spuņģēni (construction of lightened pedestrian and cycling path);
- reconstruction of intersection on road Riga–Jelgava–Lithuanian border (Meitene) and reconstruction of intersection of road P100 Ozolnieki–Dalbe;

2. Installation of lighting:
- 32 450 m of roads including Saulkrasti, Madona and Koknese towns.

3. Construction of pedestrian and cyclist sidewalks
- 19 359 m of roads including Saulkrasti, Madona and Koknese towns.

4. Other measures (traffic safety technical means)
- New guard-rails (including reconstruction and construction sites):
  Road guard rails - 97 868 m;
  Pedestrian barriers - 6 346 m.
- 12 109 road signs were installed or renewed (including reconstruction and construction sites).
- Painting of horizontal markings:
  Axis line - 423 654 m^2;
  Edge line - 379 664 m^2;
  Manual painting - 53 079 m^2.

Co-operation with municipalities

The reconstruction projects of 1st class roads with gravel pavement for 2007-2013 with the co-financing from the European Regional Development Fund were prepared according to the Resolution of the Cabinet of Ministers on the improvement of state 1st class road routes. Initially the 1st class road routes of regional importance were determined in cooperation with the regional planning councils. The total available financing was divided in proportion to the total length of 1st class roads and the share of gravel road sections in regions. Simultaneously the applications of reconstruction projects were prepared. Projects were evaluated and approved by project evaluating commission of the Ministry of Transport. In this commission municipality representatives took part as observers. In total 55 applications for road reconstruction were prepared and only 35 projects were approved considering assessment criteria and financing available for each region. Total costs are almost 205 million Lats including 147 million from ERDF. Until 2013 it is planned to reconstruct more than 300 km of state 1st class roads in 13 routes and 9 bridges. In 9 routes the works of previous years will be continued. In addition to the provision of safer and more convenient traffic the improvements on state 1st class roads will boost economic activities in several segregated urban areas and districts.

The state 2nd class road programme was prepared and implemented according to the regulations approved by the Cabinet of Ministers on the improvement of 2nd class roads for regional support. These regulations stipulate that the annual consolidated budget for regions is divided in correspondence to the total length of 2nd class roads in region vs. the total length of these roads in country. Prior to the preparation of this programme the municipalities submitted a priority list of 2nd class road sections to be improved in each particular administrative region. Projects are included in the programme and implemented considering the priority list and financing available for the region.

Subsidies transferred for municipal roads and streets in 2008 amounted up to 70.8 million Lats.

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