

Latvian State Roads Yearbook

2011



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State Roads
Yearbook
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Introduction

In spite of economic crisis and the impact of its overcoming processes, the increase of work volumes in road construction was close to 20 % in 2011, and the biggest contribution to that were the investments in road construction from EU Structural Funds. In total the investments in the construction of state roads amounted up to more than 77 million Lats and 165 kilometres of bituminous pavement were constructed or reconstructed. In the scope of road routine maintenance 400 kilometres of pavements were renewed with surface treatment for 8.5 million Lats.

EU co-financing is a very significant aid for the renewal of specific road sections, however, these funds unfortunately will not be sufficient to stop the overall deterioration of the state roads. If the government and the Parliament will not declare the renewal of roads as one of state budget priorities in the next years, the next planning period of seven years will unfortunately be characterised with further deterioration of the road network. Form of road financing is not even so significant, it is important to proclaim the road renewal as a priority in political level and provide stable long term financing. Investments in state roads so far have not corresponded to road deterioration and this process continues at an increasing rate.

When describing the road sector in general, it should be noted that in 2011 prices of oil products continued to grow and that significantly increased the costs of construction works, even to the point of suspension of works and breaching of contracts. This was not experienced in previous years. Overview shows that the number and volume of tenders is decreasing and the competition grows. Last year the four biggest companies working in the road sector administrated more than half of the state road construction market.

Although financing of state roads was insufficient, safe traffic was provided in 2011.

State Road Network

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General information

Territory of Latvia – 64 589 km².

Population as at December 31, 2011 – 2 067 887.

Total length of roads and streets – 72 444 km.

Average road network density – 1.122 km per 1 km².

The total length of roads under the supervision of SJSC “Latvian State Roads” – 20 119 km.

Average state road network density – 0.311 km per 1 km².

SJSC “Latvian state roads” is responsible for 938 bridges, out of which 877 are made of reinforced concrete, 14 – stone, 42 – steel and 5 – timber. The total length of all bridges is 30 247 metres.

Number of registered vehicles – 786 058.

Number of registered vehicles per 1000 inhabitants – 380.

Number of registered cars – 612 321.

Number of registered cars per 1000 inhabitants – 296.

Increase since 2000 (%):

number of registered vehicles	6
average annual traffic intensity on state main roads	59
including trucks	18

Classification of roads

Classification of roads	Road length as at December 31, 2011, km			
	Bituminous pavement	Crushed stone and gravel pavement	Without pavement	Total
State roads:	8 458	11 661	-	20 119
Main roads (A)	1 651	-	-	1 651
Regional roads (P)	4 190	1 127	-	5 317
Local roads (V)	2 617	10 533	-	13 150
Municipal roads and streets:	5 644	33 039	-	38 683
Roads	1 056	29 593	-	30 649
Streets	4 588	3 446	-	8 034
Forest roads	-	6 216	3 926	10 142
Private roads	500	3 000	-	3 500
Total roads and streets	14 602	53 916	3 926	72 444

Map of state roads



Road traffic

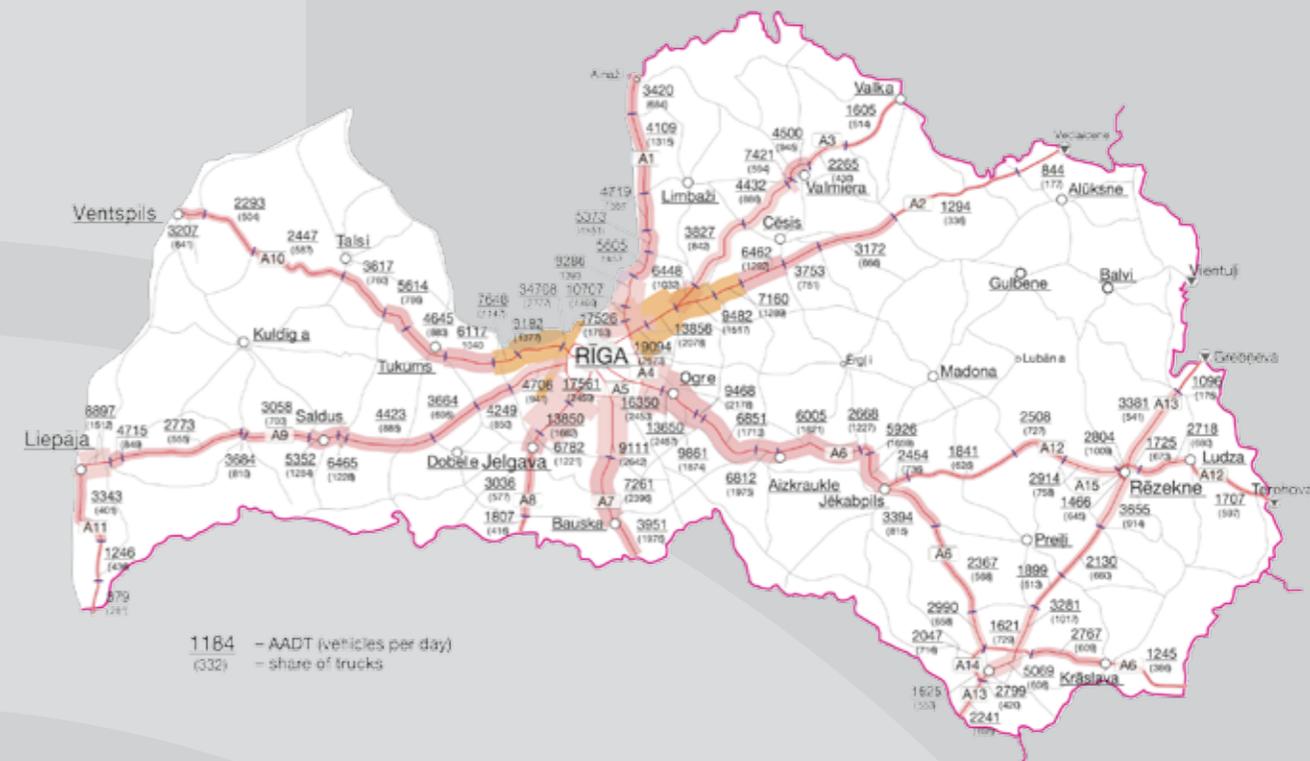
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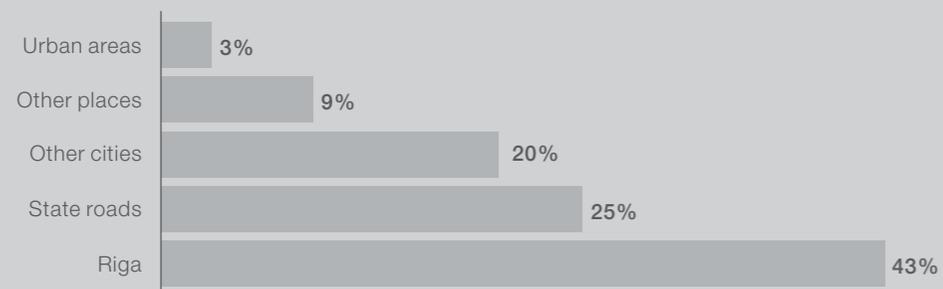
Average annual daily traffic intensity



Registered road traffic accidents

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Registered road traffic accidents	36 468	39 593	45 555	48 912	47 353	52 102	61 383	54 323	35 058	38 343	35 181
Registered road traffic accidents with injured	4 766	5 083	5 379	5 081	4 466	4 302	4 781	4 196	3 160	3 193	3 386
Number of killed	517	518	493	516	442	407	419	316	254	218	179
Number of injured	5 852	6 300	6 639	6 416	5 600	5 404	6 088	5 408	3 930	4 023	4 224

Registered traffic accidents with injured/killed by accident location



Registered road traffic accidents with injured/ killed on state roads

Road	Road traffic accidents											
	with killed/injured				Killed				Injured			
	2008	2009	2010	2011	2008	2009	2010	2011	2008	2009	2010	2011
A1	58	35	32	31	6	8	5	3	96	47	44	50
A2	44	40	41	33	9	9	3	1	64	58	56	45
A3	32	16	21	23	2	1	0	3	50	27	32	32
A4	28	14	15	9	2	3	1	2	39	20	33	16
A5	29	25	12	11	3	6	0	2	42	31	16	20
A6	91	51	52	46	15	10	14	8	148	75	69	67
A7	43	46	26	21	3	8	6	5	69	70	38	55
A8	34	27	20	22	5	3	5	2	39	40	18	27
A9	62	39	40	42	15	13	3	5	95	50	68	62
A10	45	42	33	35	4	3	5	5	65	67	55	58
A11	5	4	4	8	0	1	0	2	8	7	9	15
A12	25	34	35	28	5	2	8	5	28	56	52	33
A13	26	21	37	22	5	5	10	5	32	23	48	35
A14	3	1	0	4	3	0	0	1	4	2	0	4
A15	1	0	1	0	0	0	1	0	1	0	0	0
Total (A1–A15)	526	395	369	335	77	72	61	49	780	573	538	519
Total on regional roads	491	337	277	307	80	60	36	38	660	439	400	447
Total on local roads	306	266	201	191	36	38	28	17	457	372	290	270
Total	1323	998	847	833	193	170	125	104	1897	1384	1228	1236

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

- On state roads
- 24.6 % of all road accidents with injured/killed were registered;
 - 58.1 % of all killed were registered;
 - 29.3 % of all injured were registered.

Traffic counting

The following technical parameters are measured by Parametre Measurement Department of the Road Laboratory of LSR in order to estimate the technical condition of state roads:

- traffic registration;
- road surface evenness;
- road surface rut depth;
- road surface skid resistance;
- road surface bearing capacity;
- road visual inspection.

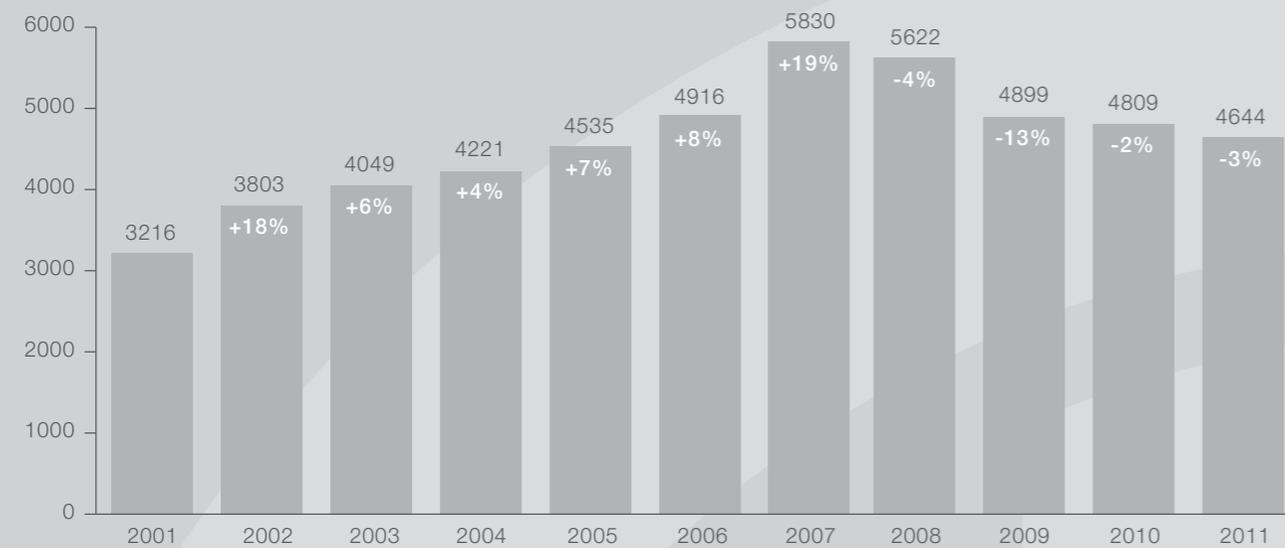
Regularity in gathering the technical data would be necessary to enable objective assessment and comparison of the condition of entire state road network but it depends from financial and technical possibilities. Considering these restrictions most of the planned measurements are performed on state main and regional roads. On local roads measurements are performed in cases of necessity and within the framework of quality testing of construction works.

Traffic data

Traffic counting is performed with various devices and in different regularity. State main roads are equipped with stationary traffic counting points some of which perform automatic data transmission and service. Other traffic counting systems are placed periodically. Stationary traffic counting devices are located on roads of regional importance, as well as, high intensity local roads and they perform periodical registration. In other road sections mobile counting devices are used and visual counting method is applied.

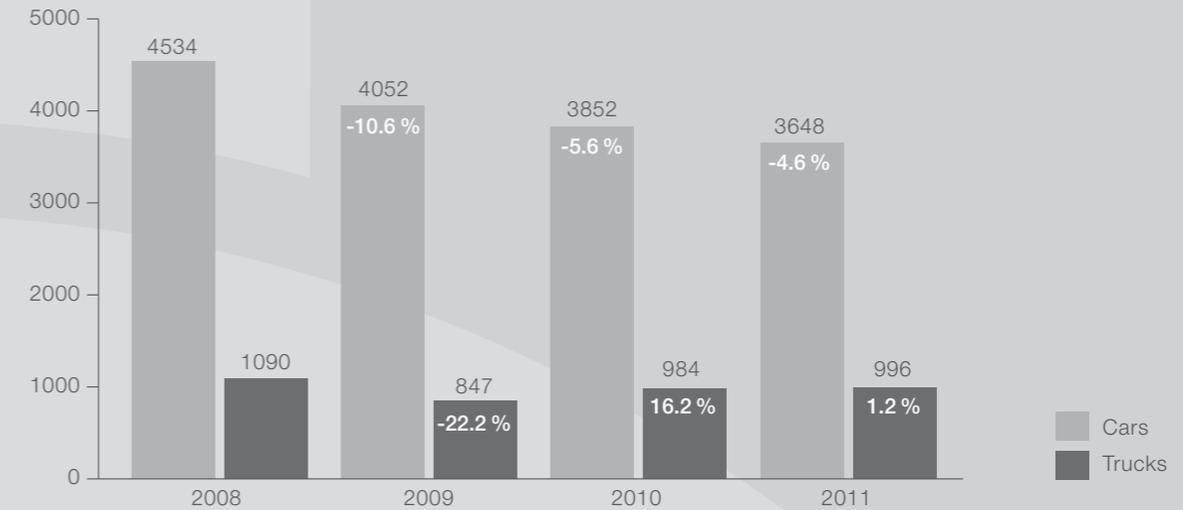
Changes in average daily traffic on state main roads

Summarized traffic counting data for 2011 shows the decrease of total traffic flow for the fourth year in the row and it is now at the level of 2005 and 2006.



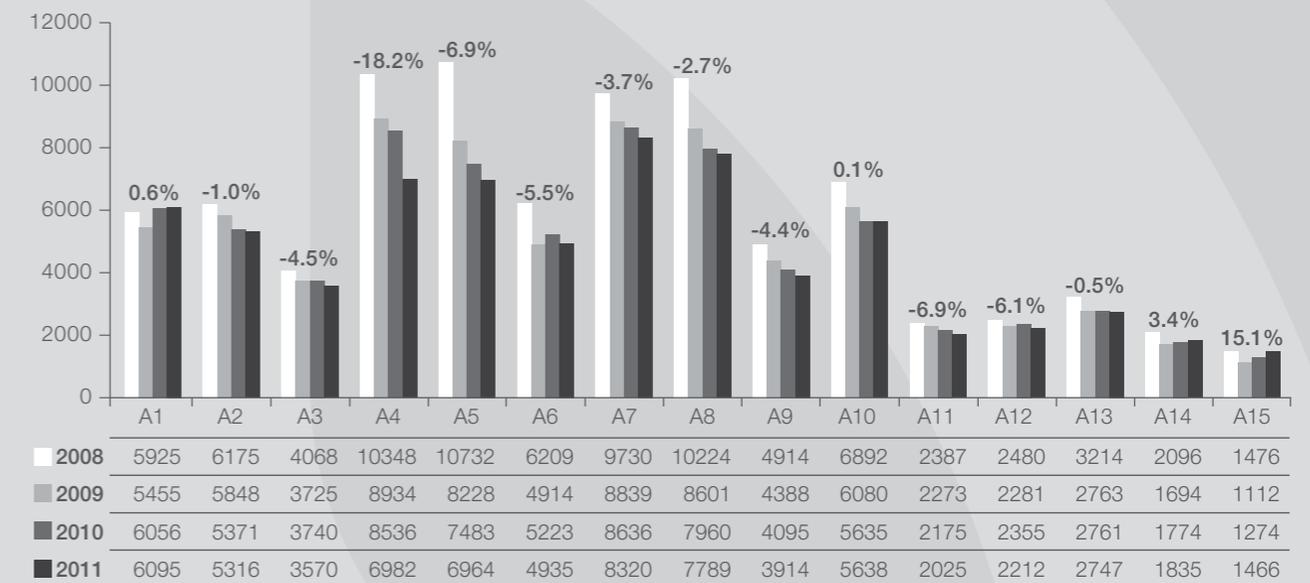
Changes in car and truck traffic on state main roads

However, similarly to 2010 opposite changes may be observed in the groups of commercial transport and passenger transport. Truck traffic has increased by 1.2 %, whereas car traffic has decreased by 4.6 %.



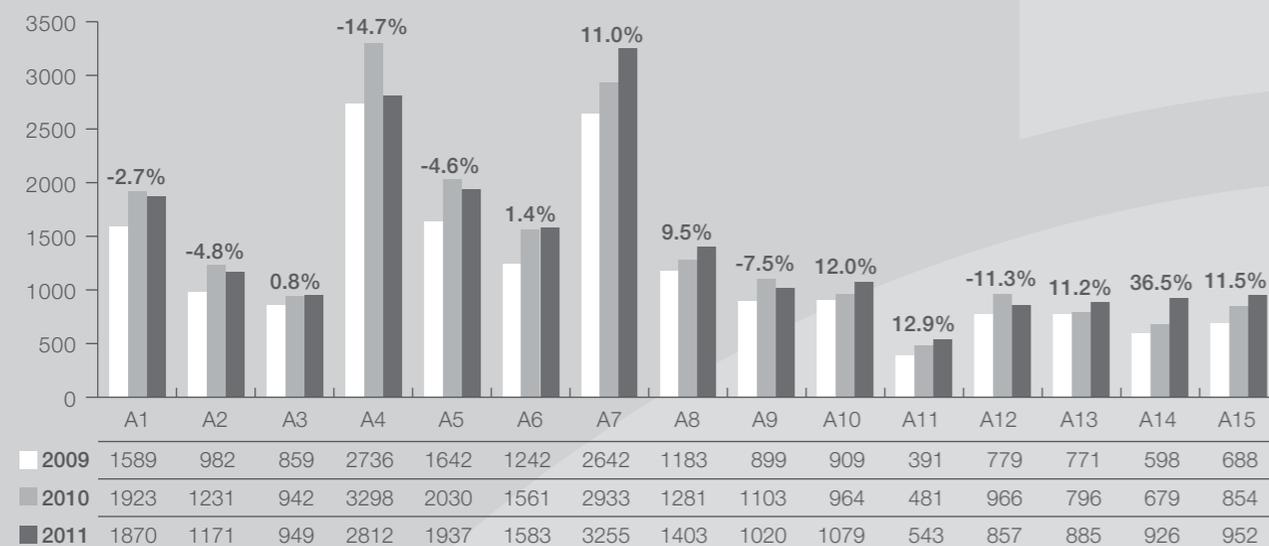
Changes in average daily traffic on state main roads

When evaluating state main roads separately, the most loaded road is A7 Riga – Bauska – Lithuanian border (Grenctāle). The highest decrease in per cent in traffic intensity is observed on road A4 Riga bypass (Baltezers – Saulkalne) and it could be related to the change of driving route in Riga area and road works in 2011.



E10 changes within state main road network

Road loading may be also characterised by traffic flow expressed in equivalent 10 tonne axle loads or E10. Traditionally the most loaded sections may be found on the route E67 around Riga. The highest increase in per cent and also the highest numerical value is observed on road A7 Riga – Bauska – Lithuanian border (Grenctāle).

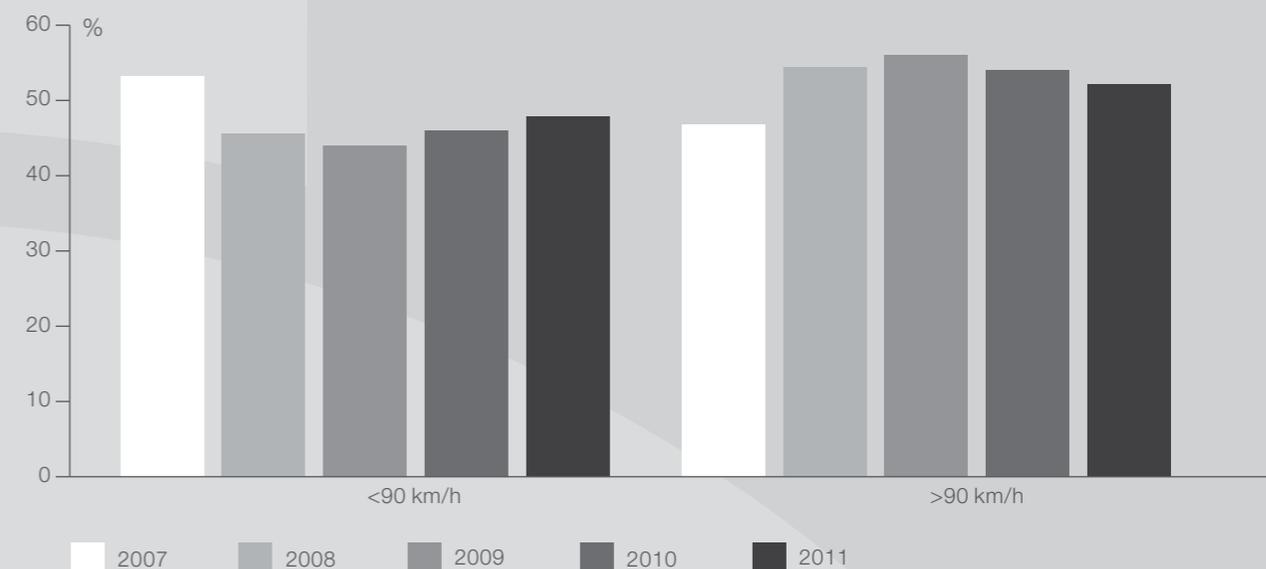


Vehicle mileage on state roads, billion km



Changes in vehicle speed on state main roads

Vehicle speed is another important parameter in traffic counting process. When analysing the speed of total traffic flow, tendency of the last three years may be observed – the number of drivers who exceed 90 km/h speed limit decreases.



Results of visual assessment of roads and bridges

In 2011 more than 27 % or 2 306 km of roads with bituminous pavement may be regarded as deteriorated and they need complete reconstruction of pavement. In 2010 the respective value was 25 % or 2 078 km.

Technical condition of bituminous pavement, % of total length

Pavement condition	Main roads	Regional roads	Local roads	Total
Very good	17.5	5.4	7.3	8.5
Good	15.4	17.5	14.6	16.2
Satisfactory	19.0	22.7	30.8	24.5
Poor	27.4	21.5	24.5	23.6
Very poor	20.7	32.8	22.9	27.3

39 % or 4 633 km of gravel roads may be regarded as deteriorated and they need complete reconstruction of pavement. In 2010 the respective value was 38 % or 4 519 km.

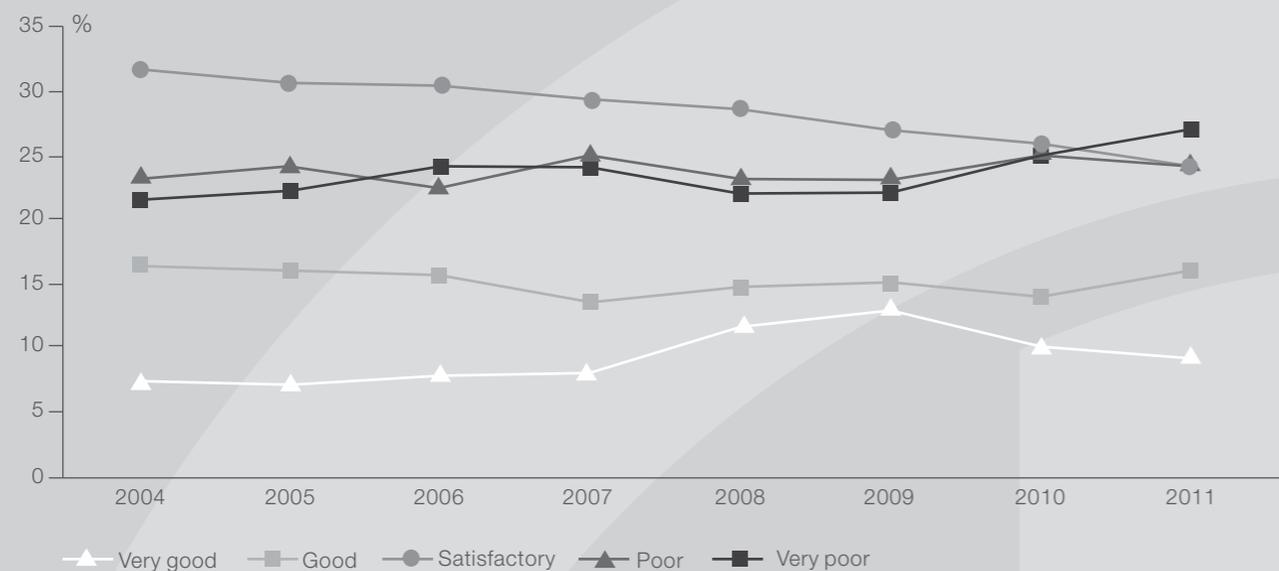
Technical condition of gravel roads, % of total length

Pavement condition	Regional roads	Local roads	Total
Good	16.7	9.3	10.0
Satisfactory	40.7	51.7	50.6
Poor	42.6	39.0	39.4

Technical condition of bridges

Technical condition	Bridge quantity	Including			% of total number
		Main roads	Regional roads	Local roads	
Good	193	58	87	48	21
Satisfactory	220	46	76	98	23
Poor	379	41	106	232	40
Very poor	146	27	50	69	16
Total	938	172	319	447	100

Changes in road pavement condition in comparison to previous years



Road financing

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Financing of state road programme, million Lats

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Financing from state consolidated budget	41.4	47.9	56.2	53.6	57.1	99.5	136.1	164.9	93.4	73.2	68.0*
EU financed projects	2.9	0.04	8.9	23.2	84.6	86.7	74.7	69.8	35.4	32.0	83.5
Total	50.4	47.9	65.1	76.8	141.7	186.2	210.8	234.7	128.8	105.2	151.5

* Including financing from state budget for unforeseen cases 6.3 million Lats.

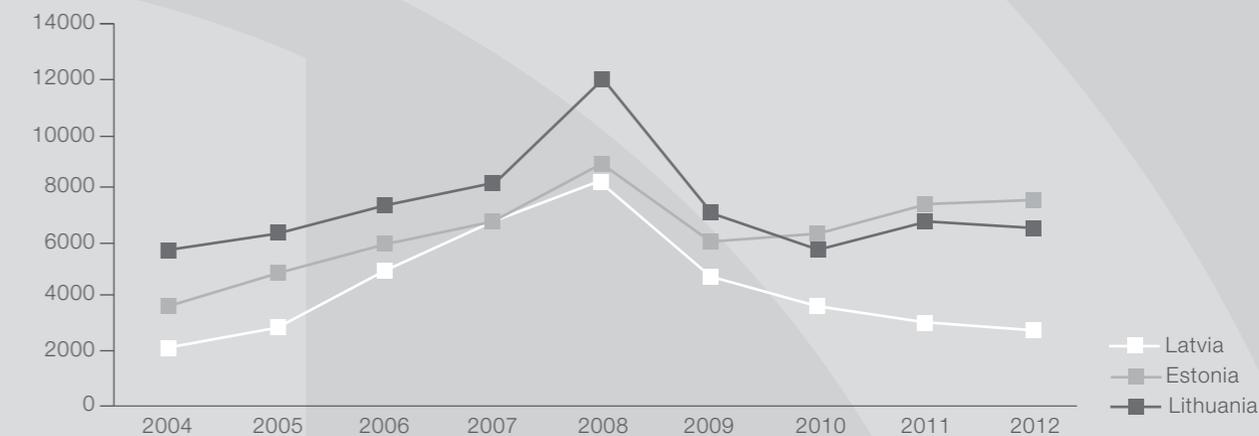
Subsidies to municipal roads (streets), million Lats

2005	2006	2007	2008	2009	2010	2011	2012
20.9	31.8	58.2	70.9	28.3	20.4	23.8*	16.1**

* Including financing from state budget for unforeseen cases 3.4 million Lats.

** Planned

Financing for one km of state roads from the state budget, Lats



State road financing in 2011

No.	Programmes	Thousand Lats
1	2	3
1.	MAINTENANCE AND MANAGEMENT COSTS	57 119.61
1.1.	MAINTENANCE	51 085.34
1.1.1.	Routine maintenance	50 342.29
1.1.1.1.	Routine maintenance works within state road network	45 056.88
1.1.1.2.	Maintenance of horizontal markings	1 962.20
1.1.1.3.	Surface treatment	2 690.29
1.1.1.4.	Renewal of gravel pavements	632.92
1.1.2.	Co-financing for routine maintenance of urban transit streets	636.54
1.1.3.	Co-financing for routine maintenance of roads over <i>Latvenergo</i> hydro – technical structures	15.94
1.1.5.	Maintenance of road weather stations	64.37
1.1.6.	Maintenance of Traffic Information Centre	16.25
1.1.7.	Maintenance of traffic counting system	9.94
1.2.	MANAGEMENT	6 034.27
1.2.1.	Management of road network	5 353.45
1.2.2.	Inventory of state roads	21.98
1.2.3.	Standardisation	31.85
1.2.4.	New technology research programme	31.35
1.2.5.	State road land management and registration in the Land Register	121.90
1.2.6.	Services in connection with land procurement	53.03
1.2.7.	State road studies and construction designs of 2009	208.19
1.2.8.	Bridge studies, testing, inspections	115.28
1.2.10.	State and Private Partnership projects	0.45
1.2.11.	Interest payment to State Treasury	78.49
1.2.12.	Administration of vehicle annual tax	18.30
2.	CAPITAL INVESTMENTS	4 577.07
2.1.	ROADS	1 158.90
2.1.1.	State main roads	785.50
2.1.1.1.	Renewal of pavements on state main road	638.10
2.1.1.2.	Strengthening and reconstruction of pavements on state main road	147.40
2.1.2.	State regional roads	85.84
2.1.2.1.	Renewal of pavements on regional road	78.86

1	2	3
2.1.2.2.	Strengthening and reconstruction of pavements on regional road	6.982.1.4.
2.1.4.	Preparation of road projects	287.56
2.1.4.2.	Road designs and construction designs	287.56
2.2.	BRIDGES	1 070.37
2.2.1.	Renewal and reconstruction of bridges, building of new bridges	1 056.88
2.2.1.1.	Renewal of bridges	545.04
2.2.1.2.	Reconstruction of bridges and building of new bridges	511.84
2.2.2.	Preparation of bridge designs	13.49
2.2.2.2.	Bridge construction designs	13.49
2.3.	TRAFFIC ORGANISATION AND TRAFFIC SAFETY	524.46
2.3.1.	Renewal of traffic organisation equipment	291.45
2.3.2.	Traffic safety improvements	73.13
2.3.3.	Preparation of traffic safety designs	53.91
2.3.4.	Development of weather condition forecast system on roads	60.89
2.3.5.	Development of technical equipment of Traffic Information Centre	8.86
2.3.6.	Development of traffic counting system	36.22
2.4.	OTHER INVESTMENTS	1 823.33
2.4.1.	Construction of truck control points	6.71
2.4.2.	Co-financing to renewal of urban transit streets	96.47
2.4.3.	Co-financing to periodic maintenance and reconstruction of <i>Latvenergo</i> bridges	26.57
2.4.4.	Project management for EU co-financed projects	1 468.13
2.4.6.	Payments for land acquisition	13.32
2.4.7.	Payments for development of road inventory system	212.13
TOTAL		61 696.68

EU co-financing in 2011

No.	Co-financing sources	Thousand Lats
1.	Road projects co-financed from the EU Cohesion Fund	53 549.96
2.	Implementation of ERDF co-financed programmes	28 881.72
3.	Projects of ERDF Interreg programme	1 049.88
TOTAL		83 481.56

Results achieved

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Routine road maintenance

In 2010 routine maintenance works were performed on 20 272 kilometres of state roads for 54.49 million Lats or for 1 % less than in 2010. The total length of roads is longer as it includes roads with dual carriageways, two level junctions (cloverleaf junctions) and exit ramps.

Expenditures for routine state road maintenance works, million Lats. Programme 1.1.1.1.

Type of works	2007	2008	2009	2010	2011
Road winter maintenance	11.718	18.032	17.783	20.830	14.241
Maintenance of bridges, interchanges and culverts	0.685	0.712	0.763	0.742	1.121
Traffic organisation	1.648	2.034	1.622	1.020	1.078
Pavement routine maintenance	19.891	21.149	18.956	16.182	16.971
Road treatment, inspection and other works	6.020	7.775	5.695	5.189	5.350
Road weather station maintenance	0.057	0.114	-	-	-
Bituminous pavement routine maintenance (surface treatment)	-	3.682	0.196	1.026	8.588
Horizontal marking maintenance	-	6.430	4.604	6.202	4.425
Gravel pavement maintenance	-	4.801	0.107	2.119	0.400
Programme management and work control	1.742	2.539	1.727	1.742	2.316
Elimination of ruts and depressions in bituminous pavements	0.956	-	-	-	-
Total:	42.717	67.267	51.453	55.052	54.490

In 2011 the main routine maintenance task was fulfilled – to ensure continuous traffic on state roads according to the Regulations No. 224 of March 9, 2010, of the Cabinet of Ministers "Regulations on state and municipal road routine maintenance requirements and implementation control" and in respect to maintenance classes approved by the Ministry of Transport. In 2011 the unit prices for state road routine maintenance works remained in the level of 2010.

Winter maintenance requirements were similar in the winters of 2010/2011 and 2011/2012 but in 2011 state road routine maintenance works were performed for 6.589 million Lats less than in 2010. The winter in 2010/2011 started in the middle of November. Precipitation with large amounts of snow and snowstorms was observed almost every day. Rainfalls in December caused freezing rain. Changing weather conditions were more frequent (28 days in December) than during previous winters (average 15 times per month). In many places thick cover of snow formed and in Latgale trees were bent down to road carriageways because of rain and snow and it made road use and maintenance difficult. Winter of 2011/2012 had less precipitation and changing weather conditions thereby it was not necessary to perform state road maintenance in the same amounts as in the previous winter.

The deficit for bridge periodical maintenance and repair works is still great. In 2011 to maintain bridges, interchanges and culverts only the most emergent routine maintenance works were performed for 1.121 million Lats and it is 0.379 million Lats more than in the previous year. Other works were postponed until the end of economic crisis.

1.078 million Lats were spent in 2011 to ensure traffic organisation measures and it is for 0.058 million Lats more than in the previous year. Road signs are still maliciously damaged and stolen. Equipment, especially guard rails, road signs and lightning posts, is damaged also in traffic accidents. In total, damages amounted up to 0.48 million Lats. 47.6 thousand Lats were reclaimed from insurance companies for the damages caused to road equipment.

16.971 million Lats were spent for pavement maintenance and it is 4.7 % more than in 2010. 8.145 million Lats were spent for the maintenance of bituminous pavements or 11.3 % more than in 2010. Repairs of deteriorated bituminous pavements were performed in the area of 575 thousand m² or for 14.7 % more than in 2010. The increase in pothole repairs may be explained with aging of bituminous pavements, as well as, less favourable weather conditions during winter and spring, when the air temperature comparatively often fluctuated above and below zero. Surface renewal was performed on state roads in emergency in the area of 390 thousand m² or in the length of 55.7 km and it is for 12.2 % more than in 2010. For gravel road maintenance 8.826 million Lats or 1.5 % less than in 2010 were spent. Road grading was performed for 3.332 million Lats or 5.7 % less than in the previous year. Road profiling was performed for 2.779 million Lats or 24 % less than in 2010, but for elimination of depressions, holes and sand pits 1.981 million Lats or 28 % more than in 2010 were spent.

In the conditions of insufficient financing road treatment works were performed in the amount of 4.655 million Lats or for 3.5 % less than in 2010. Main works were performed in ditch cleaning and renewal, improvement of shoulders of bituminous pavement, cutting of grass, sprouts and bushes, as well as, improvement of road right-of-way. Most of the collection and utilisation of household garbage was performed on state main and regional roads of Riga district, as well as, on state main roads near borders.

State road routine maintenance works and costs in 2011

Performed by JSC *Latvijas autoceļu uzturētājs*

Maintenance works	Unit	Amount	Costs, Lats
1	2	3	4
Winter maintenance of roads, bridges, interchanges, culverts, pedestrian and bicycle paths			14 240 621
Installation, removal and storage of direction markers	item	501	1 797
Road cleaning from snow and snow removal			6 247 589
De-icing			5 075 978
Culvert covering and de-icing or clearing	culvert	19	4 963
Road inspection in winter	km	149 894.45	103 115
Road operative treatment in winter	km	37 493.42	153 064
Winter service duty	hour	116 159	440 920
Maintenance of pedestrian and bicycle paths		1 259.77	4 350
Maintenance of roads according to maintenance class			2 210 141
Bridge, intersection, culvert and pedestrian tunnel maintenance			1 121 263
Bridge and interchange maintenance			143 080
Culvert and pedestrian tunnel maintenance			978 183

1	2	3	4
Traffic organisation			1 078 391
Maintenance of bus stops, pavilions and rest areas			160 055
Road sign maintenance			501 450
Maintenance of road markings	m ²	6 376.1	39 656
Signal post replacement, washing and installation of reflectors			122 598
Guard rail washing, replacement of damaged guard-rails, repairs of fallen guard-rails and installation of reflectors			167 589
Dismantling of concrete poles	item	124	796
Pavement maintenance			16 970 728
Bituminous pavement maintenance			8 144 747
Unbound pavement maintenance			8 825 981
Road treatment			4 619 728
Elimination of scouring			643 204
Ditch cleaning, profile renewal and strengthening			706 965
Cleaning and maintenance of covered systems for rainwater drainage	time	4	21 740
Shoulder grading, profiling and repairs			1 073 932
Bush clearing in ditches, slopes and road lanes, sprout cutting			871 536
Grass cutting			610 816
Tending of greenery			455 516
Operative road treatment in summer	km	54 410.62	369 008
Treatment of road right-of-way	km	3 642.28	138 580
Treatment of household waste containers	m ³	3 204.7	116 296
Road inspection			312 039
Total			38 342 770

Works of other contractors

Maintenance of electric devices (traffic lights, lightning, etc.)			128 049
Electric power supply			162 336
Treatment of right-of-way and maintenance of waste containers and bio toilets			35 121
Maintenance of sewage pump stations			1 481
Maintenance of pavilions, rest areas, tunnels and pedestrian paths			14 303
Pavement maintenance			60 586
Renewal of pedestrian tunnel stairs			9 325
Replacement of damaged guard rails, vertical markings, signal posts and reflectors			7 776
Programme management and work control			1 780 325
1. 1. 1. Programme in total			40 542 071

Works implemented in other programmes

Programme	Unit	Amount	Costs, Lats
1.1.1.2. Maintenance of horizontal markings, including:	m ²	765 847	4 254 724
Axis line,	m ²	402 673	
Edge line,	m ²	266 001	
Manual works	m ²	52 677	
Programme management and work control			170 189
Programme 1.1.1.2., total			4 424 913
1.1.1.3. Bituminous pavement maintenance (surface treatment), including:	km	395	8 460 371
State main roads	km	21	
Regional roads	km	335	
Local roads	km	40	
Programme management and work control			338 415
Programme 1.1.1.3., total			8 798 786
1.1.1.4. Gravel pavement renewal, including:	km	34	397 373
Regional roads	km	11	
Local roads	km	24	
Programme management and work control			15 895
Programme 1.1.1.4., total			413 268
Routine maintenance works, grand total			54 490 000

Road maintenance in winter and summer

State road maintenance during winter 2010/2011

During winter 2010/2011 winter road maintenance was ensured in accordance with maintenance classes approved by the Regulations No. 01.1.-63/173 of September 16, 2010, of the Ministry of Transport:

Maintenance class	Main roads, km	Regional roads, km	Local roads, km	Total, km
A	579	34	-	613
A1	1 160	821	58	2 039
B	-	2 052	415	2 467
C	-	2 420	10 480	12 900
D	-	9	2 238	2 247
Total, km	1 738	5 337	13 191	20 266

Maintenance classes of state main and regional roads in winter 2010/2011



State road maintenance during summer 2011

During summer 2011 road maintenance was ensured in accordance with maintenance classes approved by the Regulations No. 01.-03/54 of the Ministry of Transport of February 24, 2011:

Maintenance class	Main roads, km	Regional roads, km	Local roads, km	Total, km
A	1 740	985	50	2 776
B	-	2 061	470	2 531
C	-	2 281	9 558	11 839
D	-	9	3 117	3 126
Total	1 740	5 337	13 195	20 272

State road maintenance during winter 2011/2012

During winter 2011/2012 winter road maintenance was ensured in accordance with maintenance classes approved by the Regulations No. 01.1-63/165 of the Ministry of Transport of September 9, 2011:

Maintenance class	Main roads, km	Regional roads, km	Local roads, km	Total, km
A	579	34	-	613
A1	1 157	901	58	2 116
B	-	2 066	417	2 483
C	-	2 308	10 556	12 864
D	-	9	2 138	2 148
Total, km	1 735	5 318	13 170	20 224

Maintenance classes of state main and regional roads in winter 2011/2012



State road maintenance level during winter according to class

Maintenance class	2008/2009	2009/2010	2010/2011	2011/2012
A (km):	996	613	613	613
A1 (km):	2 900	1 995	2 039	2 116
B (km):	1 756	2 499	2 467	2 483
C (km):	12 886	12 334	12 900	12 864
D (km):	1 759	2 838	2 247	2 148
Total, km	20 296	20 279	20 266	20 224

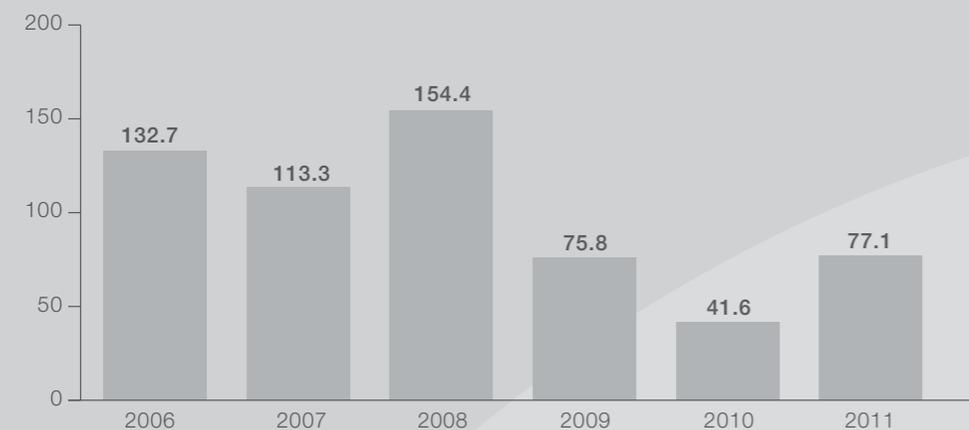
State road maintenance level during summer according to class

Maintenance class	2009	2010	2011
A (km):	3 804	2 776	2 880
B (km):	2 094	2 531	2 449
C (km):	11 846	11 839	11 839
D (km):	2 554	3 126	3 112
Total, km	20 298	20 272	20 244

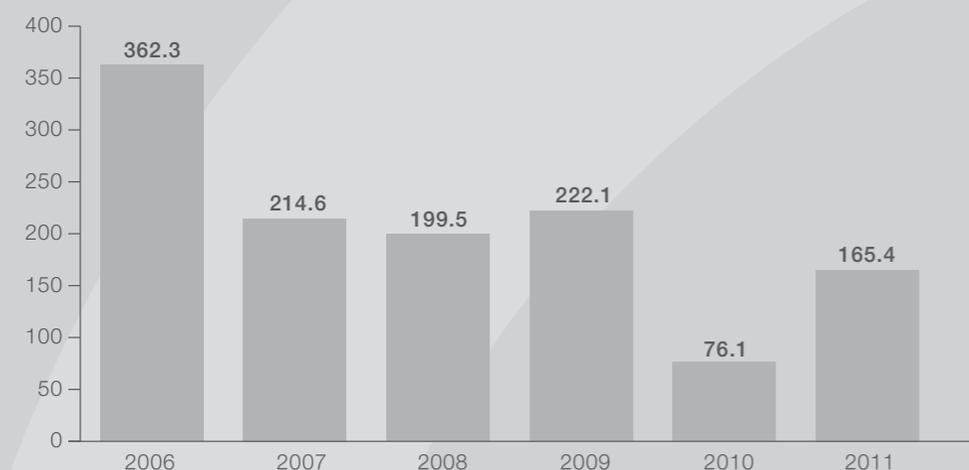
Construction works

In 2011 the works on state roads were performed for 77.139 million Lats and bituminous pavements were reconstructed, renewed or built in the length of 165.4 km.

Construction works, million Lats



Renewal and construction of bituminous pavements, km



Accomplished construction works

Programme	Million Lats, incl. VAT	Constructed km	Projects
Cohesion Fund projects	50.66	60.7	Completed works are related to the programme of strengthening of pavement of state main roads; construction works continue in sections of E22 Tīnuži – Koknese and Ludza – Terehova
Projects co-financed from European Development Fund (ERDF)	24.92	97.5	
State main roads	0.52	7.2	A6 Rīga – Daugavpils – Krāslava – Byelorussian border (Paternieki) 39.02 – 46.24 km
Renewal of bridges	0.46		9 bridges in the length of 294 m
Reconstruction of bridges and building of new bridges	0.23		Dīvāja bridge is completed on road A6 Daugavpils – Krāslava – Byelorussian border (Paternieki) at km 73.1
Renewal of traffic organisation equipment	0.27		Safety barriers on road A2 in Sēnīte and Garkalne intersection and on road P85 in Ķegums area
Traffic safety improvements	0.08		Pedestrian traffic lights on road A7 in Ķekava parish and on road A5 in Babīte; works on signal-controlled pedestrian crossing continue on road A8 at km 22.97 (access to Olaine railway station)

In 2011 the following construction works were completed within the framework of the pavement strengthening programme, co-financed by EU Cohesion Fund:

- road A5 Rīga bypass (Salaspils – Babīte), section from km 2.76 to km 6.98,
- road A7 Rīga – Bauska – Lithuanian border (Grenctāle), section from km 42.90 to km 44.80,
- road A10 Rīga – Ventspils, section from km 68.60 to km 79.50,
- road A4 Rīga bypass (Baltezers – Saulkalne), section from km 0.70 to km 12.48,
- road A9 Rīga (Skulte) – Liepāja, section from km 9.90 to km 22.90, and
- road A10 Rīga – Ventspils, section from km 145.48 to km 164.36.

The following construction works were completed within the framework of the programme “Improvement of state regional roads” with co-financing from ERDF:

- road P57 Malta – Sloboda, section from km 10.81 to km 21.08,
- road P4 Rīga – Ērgļi, section from km 81.00 to km 90.70,
- road P62 Krāslava – Preiļi – Madona, section from km 126.58 to km 139.96,
- road P121 Tukums – Kuldīga, section from km 12.97 to km 21.90,
- road P33 Ērgļi – Jaunpiebalga – Saliņkrogs, section from km 35.16 to km 41.20,
- road P36 Rēzekne – Gulbene, section from km 65.6 to km 76.3,
- road P76 Aizkraukle – Jēkabpils, section from km 13.00 to km 24.32,
- road P124 Ventspils – Kolka, section from km 39.95 to km 50.10,
- road P32 Līgatne – Skrīveri, section from km 13.98 to km 16.88,
- road P124 Ventspils – Kolka, section from km 67.30 to km 74.80 and road P131 Tukums – Mērsrags – Kolka, section from km 107.07 to km 107.47, and
- road P124 Ventspils – Kolka, section from km 50.10 to km 56.30.

Traffic organisation

Traffic organisation equipment

Replacement of guard rails were performed within the framework of the programme on:

- road A2 Riga – Sigulda – Estonian border (Veclaicene), Sēnīte intersection at km 38.10 and Garkalne intersection at km 24.40 10355m;
- road P85 Riga HPS – Jaunjelgava in Ķegums area from km 31.155 to km 31.990 in the length of 1761 m.

Traffic safety improvement projects

The following works started in 2010 were completed:

- Installation of pedestrian traffic lights on road A7 Riga – Bauska – Lithuanian border (Grenctāle) in intersection with Pļavniekkalna Street in Ķekava parish, at km 11.94;
- Installation of pedestrian traffic lights on road A5 Riga bypass (Salaspils – Babīte) at km 40.56 in Babīte.

Summary of traffic organisation works

No.	Works	Unit	2009	2010	2011
1.	Traffic safety improvement projects	item/thousand Lats	7/4825	4/363	2/73
2.	Reconstructed intersections	item	16	1	0
3.	Eliminated "black spots"	item	3	1	0
4.	Constructed pedestrian and cycling paths	running m	10 791	2 753	3 230
5.	Constructed pedestrian crossings in separate grades	item	1	0	0
6.	Constructed pedestrian crossings with traffic lights at grade	item	2	1	2
7.	Lightning installation	running m	12 601	1 120	3 543
8.	Painting of horizontal markings	m ²	609 674	765 847	723 979
	Axis line	m ²	402 400	426 506	405 034
	Edge line	m ²	159 860	285 750	266 158
	Manual painting	m ²	47 414	53 591	52 787
9.	Renewed road signs	item	1 792	237	2 523
10.	Installed guard-rails	running m	89 929	36 722	42 012
11.	Constructed pedestrian guard-rails	running m	3 335	2 241	674
12.	Installation of signal posts	item	7 354	332	4 637



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