roads and motorways in the czech republic

2007

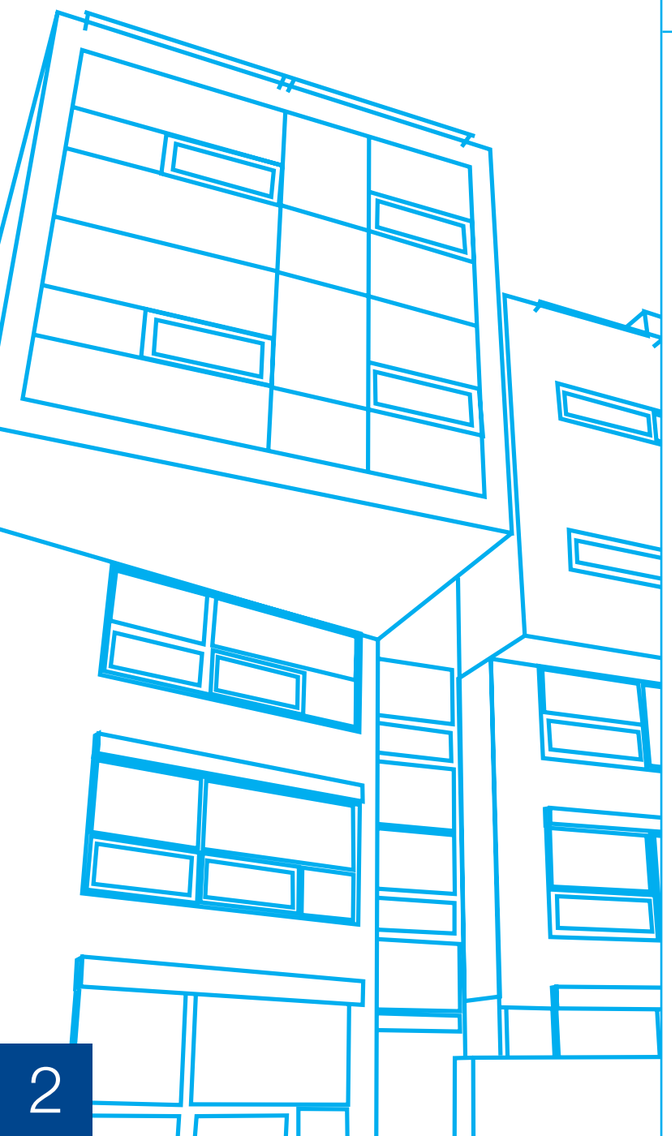
ŘEDITELSTVÍ SILNIC A DÁLNIC ČR

RMD

The Road and Motorway Directorate of the Czech Republic is the investor and manager of motorways (633 km), expressways (329 km) and other class I roads (5 843 km). The organisation has its headquarters in Prague and apart from the General Directorate there are another two motorway branches in Prague and in Brno, 13 Regional Road Administrations and 16 Motorway Administration and Maintenance Centres.

GENERAL DIRECTOR

- Department of the Security Secretary
- The Independent Internal Audit Department
- The Independent Dept. - Office of the General Director
- The Director of the Electronic Toll Operator Section
- Executive Director
  - Director of the Construction Section
  - Director of the Operational Section
  - Director of the Commercial-Economic Section
- Branches
  - Prague
  - Brno
- Administrations
  - Prague
  - České Budějovice
  - Plzeň
  - Karlovy Vary
  - Chomutov
  - Liberec
  - Hradec Králové
  - Pardubice
  - Jihlava
  - Brno
  - Olomouc
  - Zlín
  - Ostrava



basic data

The D1 motorway near Nezamyslice

The motorways and trunk roads carry the largest proportion of transport and connect the most important political, economic and recreational centres. With the density of 0,70 km of roads and motorways per 1 square km the Czech Republic ranks among the leading European countries.

general data about the czech republic

area (as of 1/1/2006)	**78 866** km²
population (as of 30/9/2006)	**10 280 968** inhabitants
gross domestic product (2006)	**3 204,1 milliard** czk
national budget (incomes 2006)	**923,1 milliard** czk
(expenditures 2006)	**1 020,6 milliard** czk

motorways as of 1/1/2007

communications	length (km)
D1	248
D2	61
D3	9
D5	152
D8	78
D11	86
total	**633**

expressways as of 1/1/2007

communications	length (km)
R1	17
R4	32
R6	33
R7	17
R10	71
R35	54
R46	38
R48	11
R52	20
R55	3
R56	12
R63	7
total	**329**

The D11 motorway near Chýště

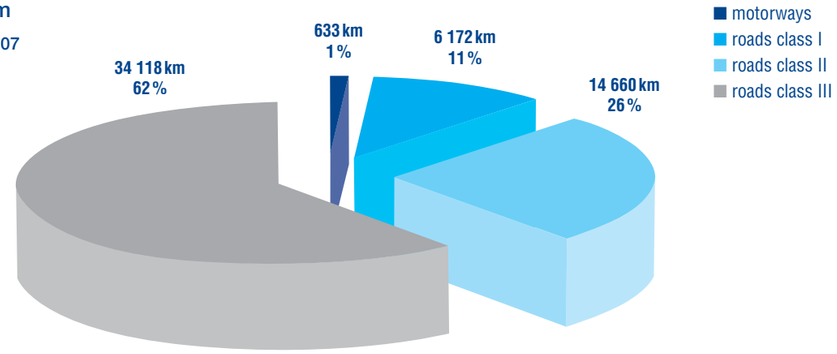
an overview of lengths of roads and motorways as of 1/1/2007 [km]

	motorways	expressways	class I.	class II.	class III.	total
Prague	11	21	10	30	–	**72**
Central Bohemian Region	192	132	647	2 367	6 259	**9 597**
South Bohemian Region	9	–	662	1 639	3 818	**6 129**
Pilsner Region	110	–	419	1 510	3 091	**5 130**
Karlovarský Region	–	12	210	568	1 251	**2 040**
Ústecký Region	52	7	485	899	2 743	**4 187**
Liberecký Region	–	18	311	487	1 615	**2 430**
Královéhradecký Region	16	–	437	895	2 425	**3 773**
Pardubický Region	8	–	454	906	2 222	**3 590**
Vysočina Region	93	–	420	1 631	2 949	**5 094**
Jihomoravský Region	135	29	419	1 481	2 437	**4 500**
Olomoucký Region	8	84	348	923	2 205	**3 568**
Zlínský Region	–	3	338	574	1 206	**2 121**
Moravskoslezský Region	–	24	684	750	1 895	**3 352**
total	**633**	**329**	**5 843**	**14 660**	**34 118**	**55 583**

an overview of constructions by type as of 1/1/2007 [km]

communications	bridges		underpasses		railway level crossings		tunnels	
	no.	length [m]	no.	length [m]	no.	length [m]	no.	length [m]
motorways	711	37 452	403	2 173	–	–	6	6 244
roads class I	3 467	114 405	1 029	11 824	224	2 307	10	3 563
roads class II	4 481	65 890	515	6 965	699	6 777	1	41
roads class III	8 028	82 362	830	10 882	1 685	14 052	2	28
total	**16 687**	**300 108**	**2 777**	**31 843**	**2 608**	**23 136**	**19**	**9 876**

the length of the road and motorway network



D8 Motorway near Doksany

development in transport

development in personal transport

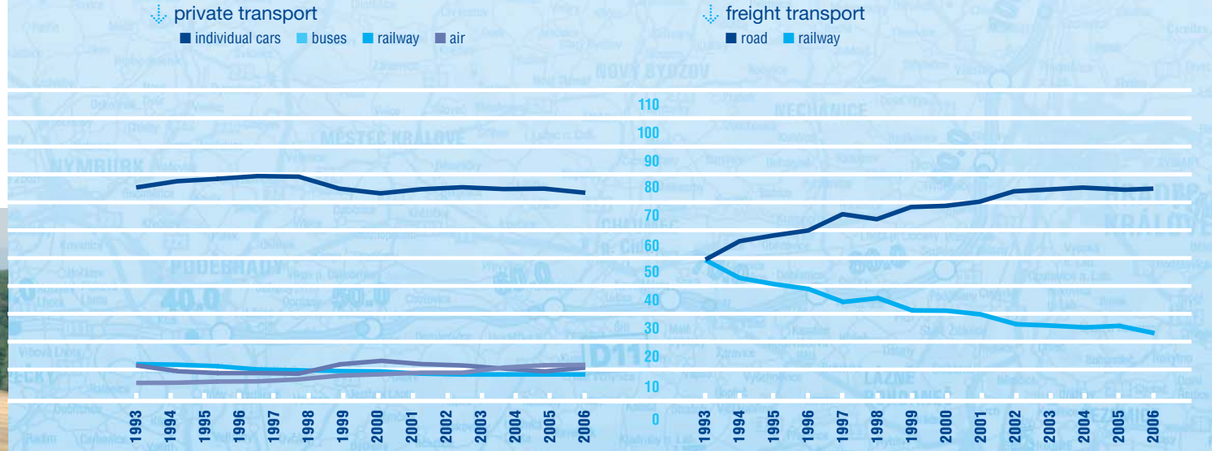
transport (mld. person km)	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006*
total	**68,90**	**71,01**	**73,23**	**75,51**	**76,13**	**77,49**	**79,56**	**86,45**	**87,78**	**88,46**	**90,44**	**91,51**	**92,76**	**96,28**
total public transport	19,896	19,31	18,73	17,61	17,13	16,69	17,26	22,51	24,31	23,17	23,08	23,94	24,12	26,44
railway	8,55	8,48	8,02	8,11	7,72	7,02	6,96	7,30	7,30	6,60	6,52	6,59	6,67	6,92
bus	9,09	8,20	7,67	6,32	5,88	5,98	5,95	9,35	10,61	9,66	9,45	8,52	7,70	9,28
internal waterways	0,006	0,03	0,01	0,01	0,01	0,01	0,01	0,01	0,01	0,02	0,02	0,02	0,02	0,01
air	2,25	2,60	3,03	3,17	3,52	3,68	4,34	5,85	6,40	6,89	7,10	8,81	9,74	10,23
passenger car transport[1)]	49,00	51,70	54,50	57,90	59,00	60,80	62,30	63,94	63,47	65,29	67,36	67,57	68,64	69,84
road transport total	58,09	59,90	62,17	64,22	64,88	66,78	68,25	73,29	74,08	74,95	76,81	76,09	76,34	79,12
proportion of transport (%)														
railway	12,41	11,94	10,95	10,74	10,14	9,06	8,75	8,45	8,32	7,47	7,21	7,20	7,19	7,19
bus	13,19	11,55	10,47	8,37	7,72	7,72	7,48	10,82	12,10	10,93	10,45	9,31	8,30	9,64
air	3,27	6,66	4,14	4,20	4,62	4,75	5,45	6,77	7,30	7,80	7,85	9,63	10,50	10,62
passenger car transport[1)]	71,13	72,81	74,44	76,69	77,52	78,47	78,32	73,96	72,28	73,80	74,48	73,84	74,00	72,54

development in freight transport

transport (mld. t/km)	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006*
total	**51,65**	**53,72**	**56,48**	**58,27**	**62,42**	**53,50**	**54,61**	**57,34**	**57,87**	**61,49**	**62,98**	**61,56**	**59,17**	**66,24**
railway	25,14	22,70	22,63	22,34	21,01	18,71	16,71	17,50	16,88	15,81	15,86	15,09	14,87	14,89
road	25,26	29,81	32,50	34,55	40,64	33,91	36,96	39,04	40,26	45,06	46,56	46,01	43,45	50,37
internal waterways	1,22	1,18	1,32	1,35	0,74	0,82	0,91	0,77	0,70	0,59	0,51	0,41	0,81	0,94
air	0,03	0,03	0,03	0,03	0,027	0,06	0,03	0,04	0,03	0,03	0,04	0,05	0,05	0,05
proportion of transport (%)														
railway	48,68	42,24	40,06	38,34	33,66	35,04	30,60	30,51	29,17	25,71	25,19	24,52	25,12	22,48
road	48,91	55,49	57,54	59,30	65,11	63,33	67,67	68,08	69,57	73,28	73,94	74,74	73,43	76,04
internal waterways	2,36	2,22	2,34	2,32	1,19	1,53	1,67	1,34	1,21	0,96	0,81	0,66	1,37	1,41
air	0,05	0,05	0,06	0,04	0,04	0,10	0,06	0,07	0,05	0,05	0,07	0,08	0,08	0,07

[1)] expert estimate, *preliminary data

development in the proportion of transport



transport intensity development

Motorway D5 near Mlýnce

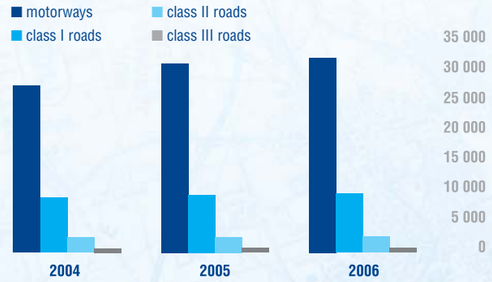
development of the vehicle

	trucks	passenger	moto	total
1965	100 694	370 615	757 723	**1 229 032**
1970	135 499	685 426	719 013	**1 539 938**
1975	165 333	1 198 613	574 492	**1 938 438**
1980	217 000	1 779 425	542 256	**2 538 681**
1985	244 118	2 041 809	473 355	**2 759 282**
1990	293 224	2 365 172	450 048	**3 108 444**
1995	320 790	3 035 576	440 721	**3 797 087**
2000	316 545	3 438 870	317 619	**4 073 034**
2001	339 619	3 529 791	317 456	**4 186 866**
2002	370 835	3 647 067	316 411	**4 334 313**
2003	393 400	3 706 012	313 276	**4 412 688**
2004	424 779	3 815 547	317 688	**4 558 014**
2005	468 248	3 958 708	333 962	**4 760 918**
2006	510 679	4 098 114	342 674	**4 951 467**

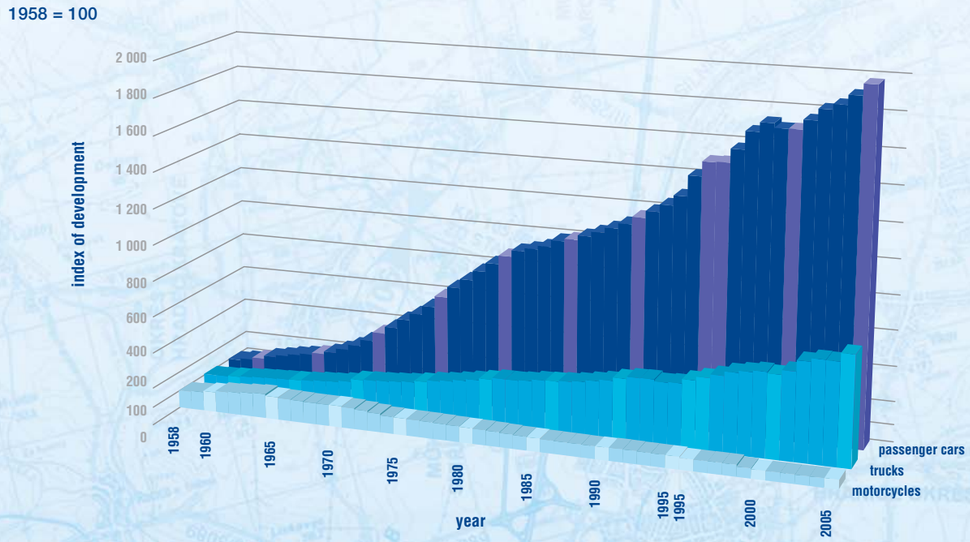
since 2000 new methods have been employed by
the ministry of transport to record vehicles

development in average transport intensity

	motorways	class I roads	class II roads	class III roads
2004	27 984	9 140	2 480	649
2005	31 690	9 668	2 567	686
2006	32 641	9 861	2 618	700

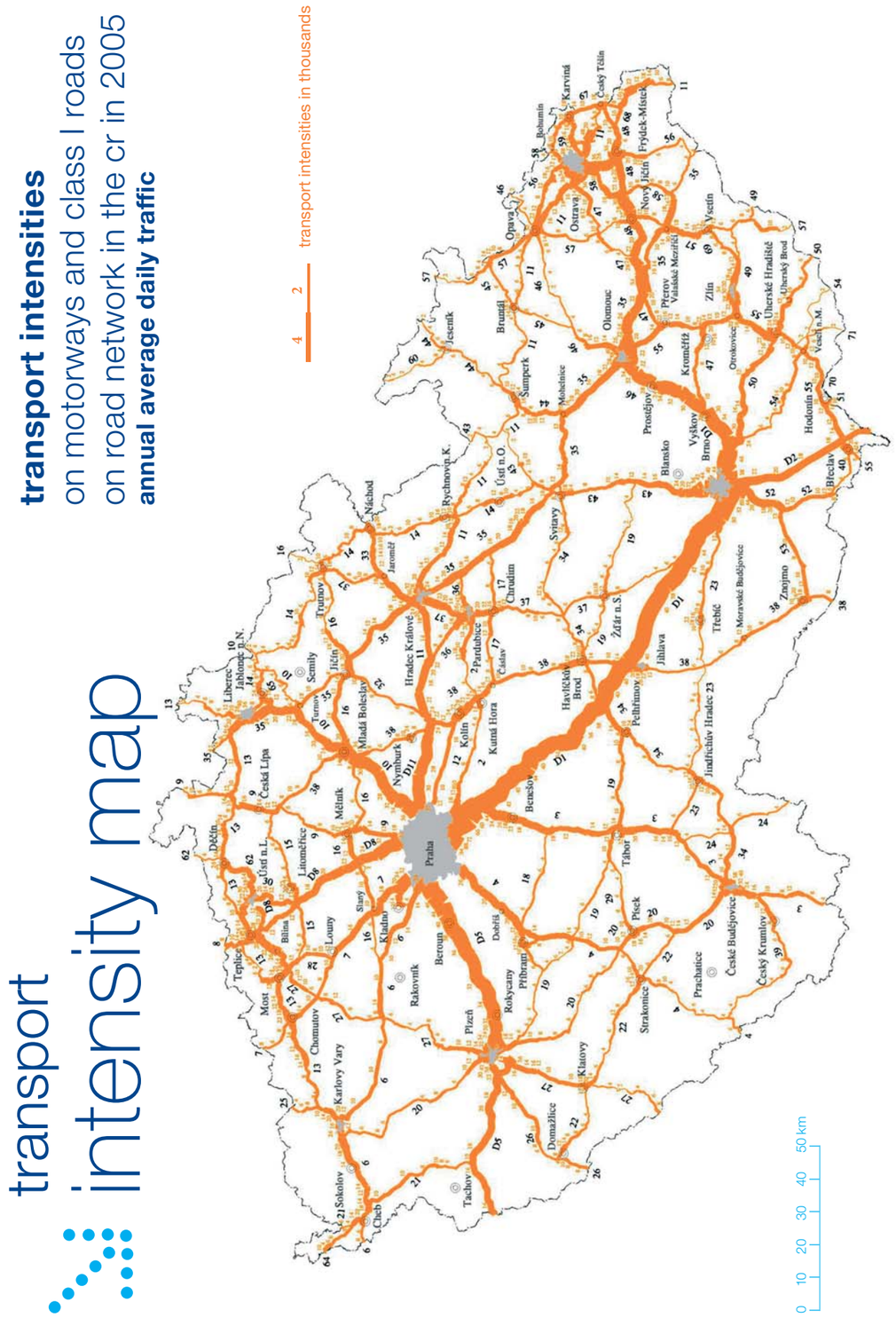


index of motorization development since 1958



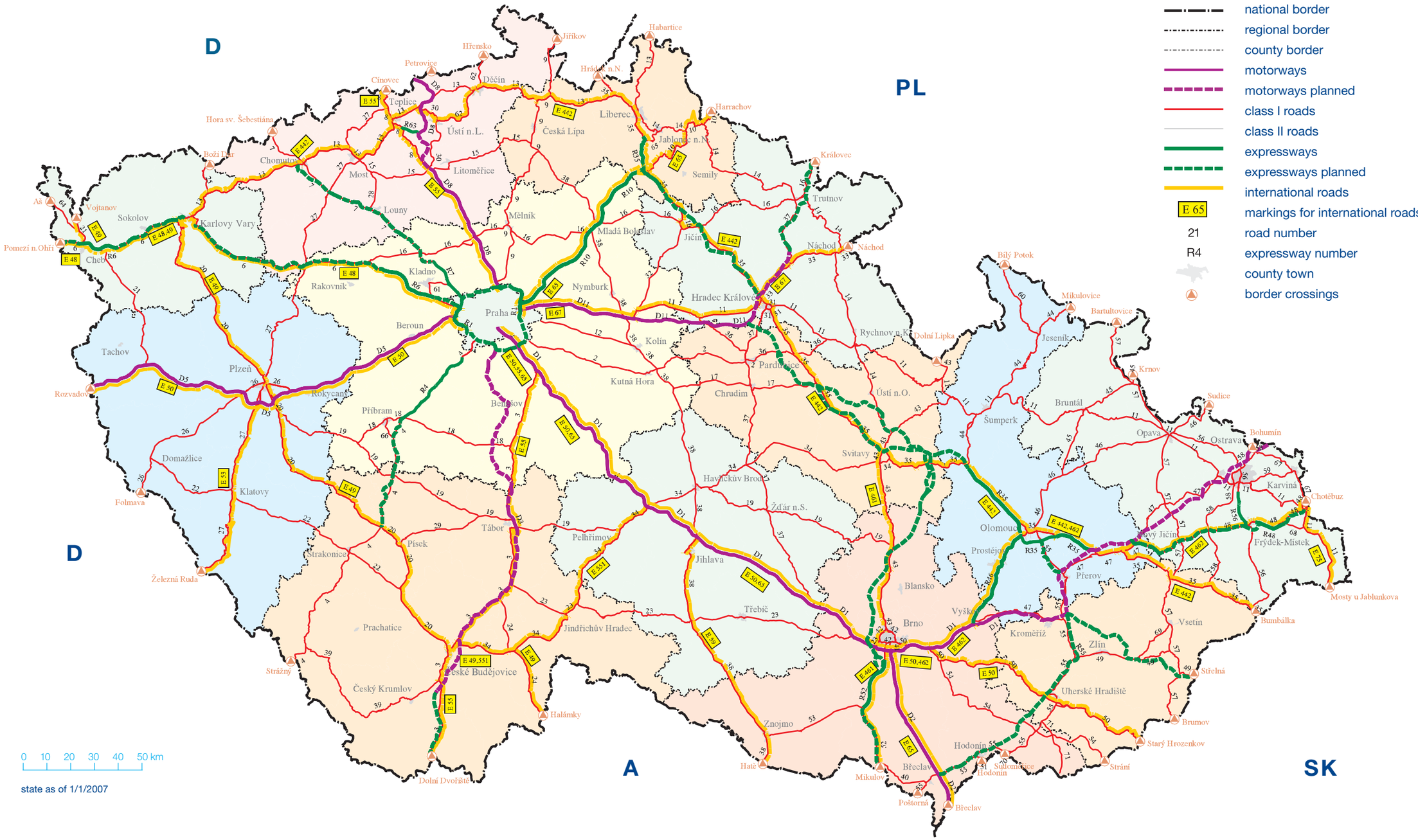
transport intensity map

transport intensities
on motorways and class I roads
on road network in the cr in 2005
annual average daily traffic



roads and motorways

managed by the RMD



accident rates data

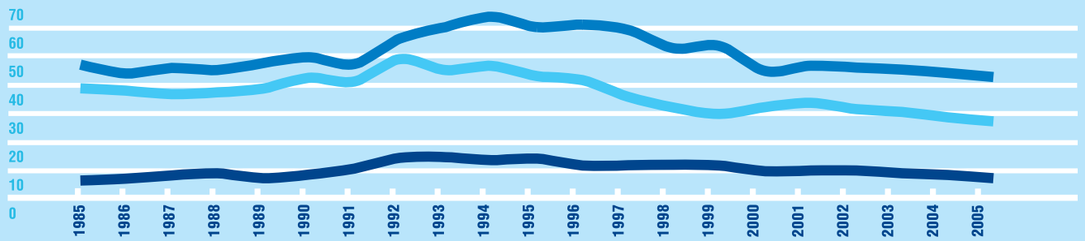
accident rates data in the czech republic

on all ground communications (motorways, roads, local and tertiary roads)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
number of accidents														
– total	152 157	156 242	175 520	201 697	198 431	210 138	225 690	211 516	185 664	190 718	195 851	196 484	199 262	187 965
– material damage	127 007	128 652	146 774	172 357	170 055	182 931	198 772	186 071	1159 638	164 133	168 531	169 968	174 023	165 850
– personal	25 150	27 590	28 746	29 340	28 376	27 207	26 918	25 445	26 026	26 585	27 320	26 516	25 239	22 115
– serious	5 843	6 534	6 511	6 791	6 708	6 193	6 242	5 736	5 622	5 668	5 473	5 111	4 650	4 263
people														
– fatalities	1 355	1 473	1 384	1 386	1 411	1 204	1 322	1 336	1 219	1 314	1 319	1 215	1 127	956
– serious injuries	5 629	6 232	6 298	6 621	6 632	6 152	6 093	5 525	5 493	5 492	5 253	4 878	4 396	3 990
– slight injuries	26 821	29 590	30 866	31 296	30 155	29 225	28 747	27 063	28 297	29 013	30 312	29 543	27 974	24 231

development in the relative accident rate

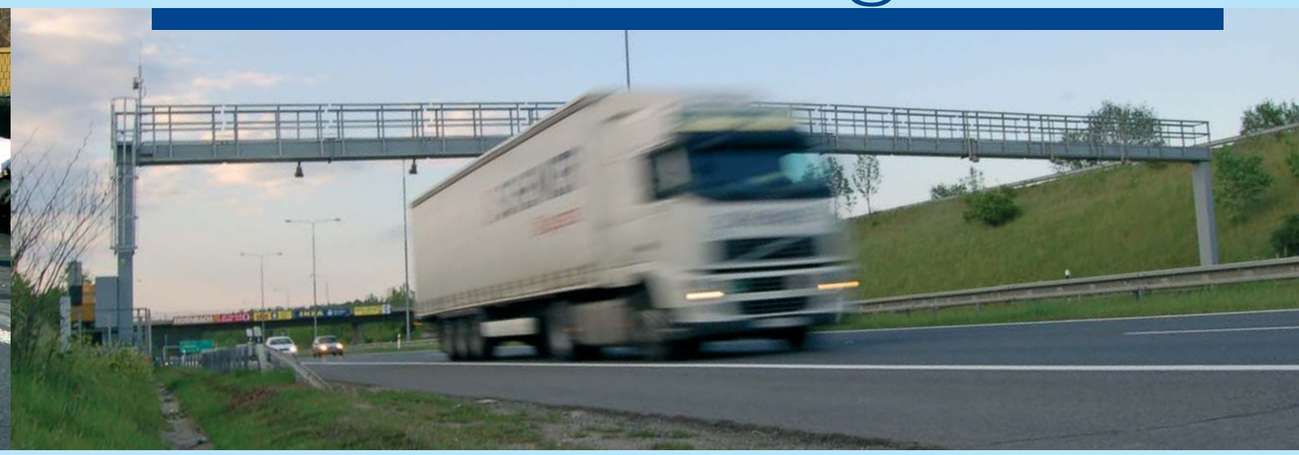
personal accidents per 10 vehicle kilometres/year



EU funds

The Road and Motorway Directorate has successfully used the contributions from the EU funds that were provided both before and after the Czech Republic's accession to the EU, particularly in the framework of the shortened programme period from 2004 to 2006. The main part of the support in the pre-accession period was provided by means of the ISPA instruments and also partially in the framework of the Phare programme. Since the Czech Republic's accession to the EU the opportunity to use resources from the Cohesion Fund and the European Regional Development Fund in the framework of the OP Infrastructure has arisen. The majority of these co-funded constructions are now in operation. The remaining part of the constructions will be gradually completed during coming years. In the period 2007 – 2013 the financial resources from the EU will be drawn in the framework of the Operational Programme "Transport." The RMD, as the final beneficiary of this aid, can request financial support from the OP Transport in the framework of Priority 2 "The Construction and Modernisation of the Road and Motorway Network TEN-T" (supported by the Cohesion Fund) and Priority 4 "The Modernisation of Class I Roads not covered by TEN-T" (support from the European Regional Development Fund – ERDF). The finances allocated in the framework of priority 2 are 1 607 696 540 EUR (ca 48 mld. CZK at an exchange rate 1 EUR = 30 CZK). For Priority 4 the allocation has been designated to 976 016 928

motorway charges



tolls

The national electronic toll system on selected communications "MYTO CZ" has been in operation since the 1st of January 2007. Toll collecting began on motorways and expressways of overall length of almost 1000 km. This toll collecting system for heavy vehicles of maximum permissible weight higher than 12 tonnes has been built based upon the Government Decision from May 2004.

Construction of number of distribution sites (about 200) and contact points(15) providing users of the system with a number of necessary services was a part of the project.

The Road and Motorway Directorate of the Czech Republic is the operator of the electronic toll system. In the first half year of functioning the hauliers paid 2.715 billion CZK, 40 % of which is from the D1 motorway. The number of active OBU units was 202 thousand, 60 % of the total amount of the toll was paid by Czech users and the rest was paid by foreign users.

motorway vignettes

Since 1995 the use of motorways in the Czech Republic has been subject to charges in the form of motorway vignettes. In 2006 the drivers paid a total of 3 259 172 750 CZK. Vehicles up to 3 tons paid 1 790 510 600 CZK from this amount, vehicles between 3,5 and 12 tonnes paid 260 042 700 CZK and vehicles over 12 tonnes paid 1 208 619 450 CZK (since 2007 these vehicles are charged according to their performance).

in the period 1993–2005

phare	1 806 mil. czk
cohesion fund	5 382 mil. czk
ispa	3 809 mil. czk
structural funds	1 157 mil. czk

in the period 2007–2013

cohesion fund	48 210 mil. czk
structural fund	29 298 mil. czk

EUR (cca 29 mld. CZK). The support in priority axis 2 will be aimed at sections of the motorway and road network that are included in the TEN-T network, which is very important for Czech economy as its realisation will enable to offer a high capacity transport infrastructure for strong traffic flows. The modernisation and development of other motorways and class I roads lying on the TEN-T network will also be supported. Support in the framework of Priority 4 will be aimed at construction and modernisation of expressways which are not a part of the TEN-T network and other class I roads. Improvement of the network of class I roads not included in the TEN-T network will add to the network of motorways and trunk expressways, the realization of which will contribute to improvement of accessibility to all regions in the CR and also to improvement of conditions of traffic flows transiting the territory of the CR. Construction of by-passes around municipalities situated on class I roads outside of the TEN-T network or removal of spot defects in order to increase road safety and modernization of other class I roads in order to achieve a standard level are also among the potential interventions in this priority axis. The implementation of these actions should help to reduce the negative influence of heavy road traffic on inhabitants. Increase of traffic flow fluency will contribute to amelioration of the impact of transportation on environment and to lowering energy consumption as well.

constructions of roads and motorways

Construction of the D5 near Plzeň

Further development of motorways and roads must, in compliance with the aims of the Transportation Policy of the Czech Republic for years 2005 – 2013, approved by the Government Resolution No. 882 from 13.7.2005 and consequential General Plan of Development of the transportation Infrastructure, result from satisfying the demands of international and domestic road transport, from creation of conditions for development of particular regions and from needs to increase road safety and environmental protection of their surroundings.

Main emphasis must aim at:

- gradual construction and reconstruction of the TEN-T network in the CR
- connection of all the regions to a quality network of motorways and expressways
- improvement of road connection with the neighbouring states
- improvement of transport situation and environment in municipalities, especially by construction of by-passes on frequented roads
- increase of road safety particularly on class I through roads in municipalities
- creation of conditions for connection of strategic industrial zones
- solution of situation of bridges in poor construction condition and of localities dangerous to traffic safety
- improvement of the overall quality of class I roads (road surfaces)

In the framework of these priorities the following have been prepared:

- construction of motorways D1, D3, D8, D11 and D47
- construction of the R1 ring road around Prague and the expressways R6, R7, R35, R48, R52 and R55
- construction of by-passes for municipalities on class I roads and modernising the international roads

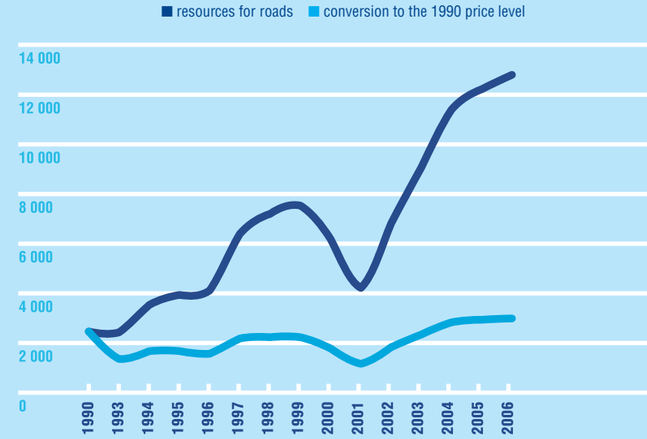
Assuring financial funds and improvement of present legislation are prerequisites for meeting these aims. The support for realising these projects will come from the Czech Republic and from loans from the European Investment Bank and resources from the European Union, the Cohesion Fund and the Structural Funds. It is also desirable to have a greater level of ensuring financial funds for the road infrastructure by direct link to costs of road and motorway users in the form of taxes (road tax, consumer tax from hydrocarbon fuels etc) and in the form of charges for using certain road and motorway networks. It will also be desirable to use private capital (PPP projects) during the construction of road and motorway constructions.

Construction of the D11 near Chýště

resources for road constructions [mil. czk]

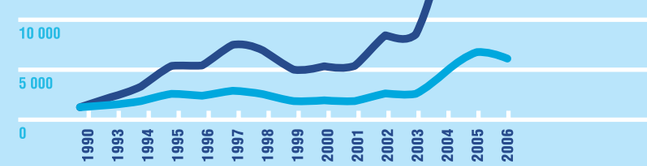
	resources for roads	conversion to the 1990 price level
1990	2 406	2 406
1993	2 369	1 287
1994	3 472	1 608
1995	3 867	1 606
1996	4 038	1 501
1997	6 323	2 110
1998	7 114	2 171
1999	7 449	2 174
2000	6 113	1 708
2001	4 143	1 105
2002	6 745	1 774
2003	8 973	2 270
2004	11 306	2 762
2005	12 125	2 870
2006	12 707	2 926

since 2002 only class I roads



resources for motorway constructions [mil. czk]

	resources for motorways	conversion to the 1990 price level
1990	674	674
1993	1 648	896
1994	2 761	1 278
1995	4 857	2 017
1996	4 880	1 814
1997	6 972	2 327
1998	6 401	1 960
1999	4 437	1 295
2000	4 809	1 343
2001	4 837	1 291
2002	7 934	2 051
2003	8 005	2 026
2004	17 540	4 284
2005	26 386	6 246
2006	24 265	5 587



Construction of the road I/37 near Pardubice

Information table of the construction

motorway and road maintenance

The RMD guarantees asset management, maintenance and repairs of motorways and roads of the class I. It performs maintenance of motorways and some expressways by own employees from fifteen Centers of motorway management and maintenance (SSUD) and one Centre of expressway management and maintenance (SSURS).

The asset management and repairs of the class I roads are guaranteed by 13 regional RMD administrations, maintenance is performed on the contractual basis after evaluation of a selection procedure.

Since October 2007 there will be changes of organization of class I roads. In regions, where there are regional centres of road maintenance (SUS) guaranteeing maintenance of roads of the class II and class III, these SUS will perform maintenance of the class I roads as well, on the basis of a direct contract with the Ministry of Transportation of the Czech Republic. In other regions (Central Bohemian, Karlovarsky, Hradecky, Southern Moravian, Zlinsky) and statutory cities (Brno, Ostrava, Plzen) maintenance of the class I roads will be further guaranteed on the basis of selection procedures with individual companies.

One of the main tasks in the area of maintenance is guaranteeing winter maintenence, which takes up to 30 – 40% overall costs of maintenance. Currently obtaining precise meteorological data and forecasts is among top priorities of winter maintenance, in order to be able to apply preventive maintenance more effectively, which would enable to increase fluency of the traffic flow and to reduce accident rate. In 2006 the first three motorway tunnels were opened to traffic including control centres, which has a considerable influence on maintenance costs increase.

The ongoing lack of funds for large-scale maintenance and repairs in the last few years accompanied by increasing transport intensities and number of heavy vehicles has had a negative effect on the construction condition of the roads and bridges of both motorways and class I roads.

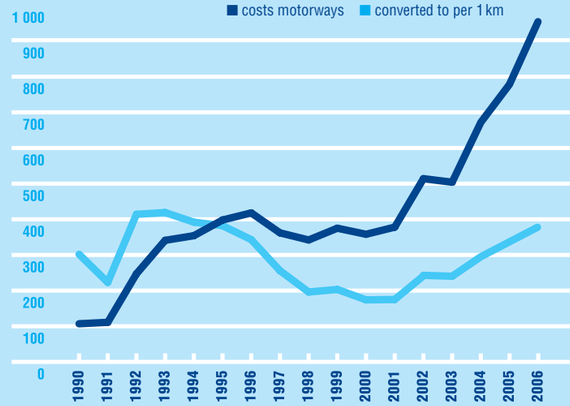
As for motorway pavements, particularly pavements of the oldest motorways D1 and D2, where first sections have been in operation 36 and 29 years resp., are in a critical construction condition. As for the class I roads some variable parameters are unsatisfactory almost at 30% of the entire network.

Unfavourable condition of bridges is amply known. The RMD endeavours to create a bridge programme, which would commence with systematic solution.

During 2007 the Ministry of Transportation in cooperation with the State fund of traffic infrastructure considerably increased the maintenance and repair budget. Most of the financial funds, however, is still allocated into construction of the trunk motorway network and it can be therefore generally stated that finance funds for maintenance, repairs and reconstructions of existing motorway and road network should be even more considerably consolidated.

costs of the centres of motorway and expressway management and maintenance (SSUD, SSURS) and the operation section of the RMD and the branches [mil. czk]

	1	2	3	4
	mil. czk	km		mil. czk
year	motorway costs	average km	indexed to 1990	costs per km
1990	107,5	338,9	1,000	0,317
1991	109,5	356,8	0,638	0,196
1992	245,0	363,9	0,574	0,387
1993	326,7	372,3	0,475	0,417
1994	353,4	390,6	0,432	0,391
1995	397,9	407,2	0,396	0,387
1996	418,2	427,5	0,364	0,356
1997	361,8	446,1	0,336	0,272
1998	341,9	508,4	0,303	0,204
1999	374,7	524,8	0,297	0,212
2000	358,4	531,3	0,286	0,193
2001	377,7	542,7	0,273	0,190
2002	513,7	551,8	0,268	0,250
2003	504,3	556,1	0,268	0,243
2004	673,1	584,8	0,261	0,300
2005	784,1	588,3	0,256	0,341
2006	941,7	620,6	0,249	0,379



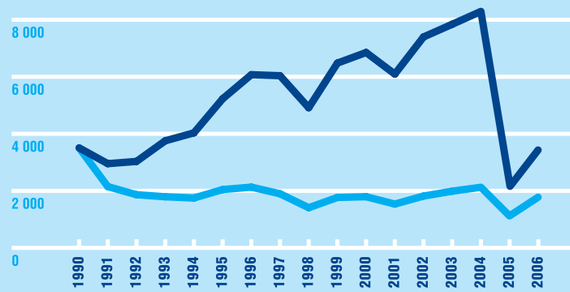
Legend:

1 • Non-investment costs of the SSUD and the Operating Section of the RMD and the branches, without depreciation. The SSUD costs include wages
2 • Statistic kilometres according to the days in operation in the given year
3 • Index of prices to 1990 on the basis of the Czech Statistical Office
4 • Costs per 1 km [2] corrected according to the index [3] to 1990 prices

Source: Annual Reports and the CSO

contributions for road maintenance and repairs [mil. CZK]

	1	2	3
	mil. czk		mil. czk
year	road contributions	indexed to 1990	in 1990 prices
1990	3 507	1,000	3 507
1991	2 953	0,638	1 884
1992	3 032	0,574	1 742
1993	3 754	0,475	1 785
1994	4 033	0,432	1 743
1995	5 227	0,396	2 071
1996	6 073	0,364	2 212
1997	6 037	0,336	2 026
1998	4 914	0,303	1 490
1999	6 480	0,297	1 924
2000	6 851	0,286	1 958
2001	6 094	0,273	1 664
2002	7 396	0,268	1 983
2003	7 814	0,268	2 093
2004	8 292	0,261	2 161
2005	2 026	0,256	518
2006	3 745	0,249	934



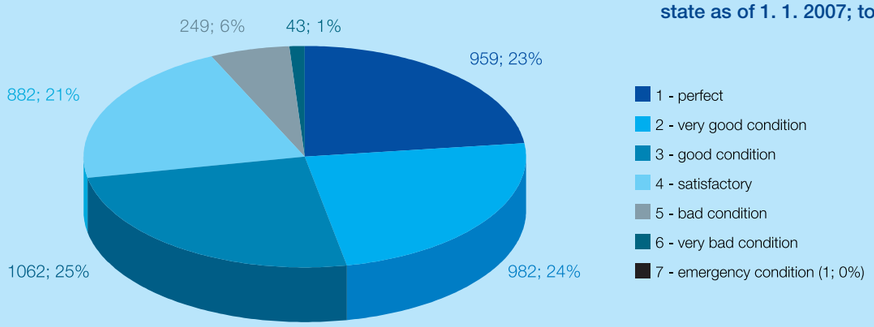
Legend:

1 • Non-investment contributions made for road maintenance, since 2005 only class I roads. Since 2005 the regional budget is used to finance class II and III roads.
2 • Index of prices to 1990 on the basis of the CSO
3 • Amount of contributions [1] corrected according to the index [2] to 1990 prices

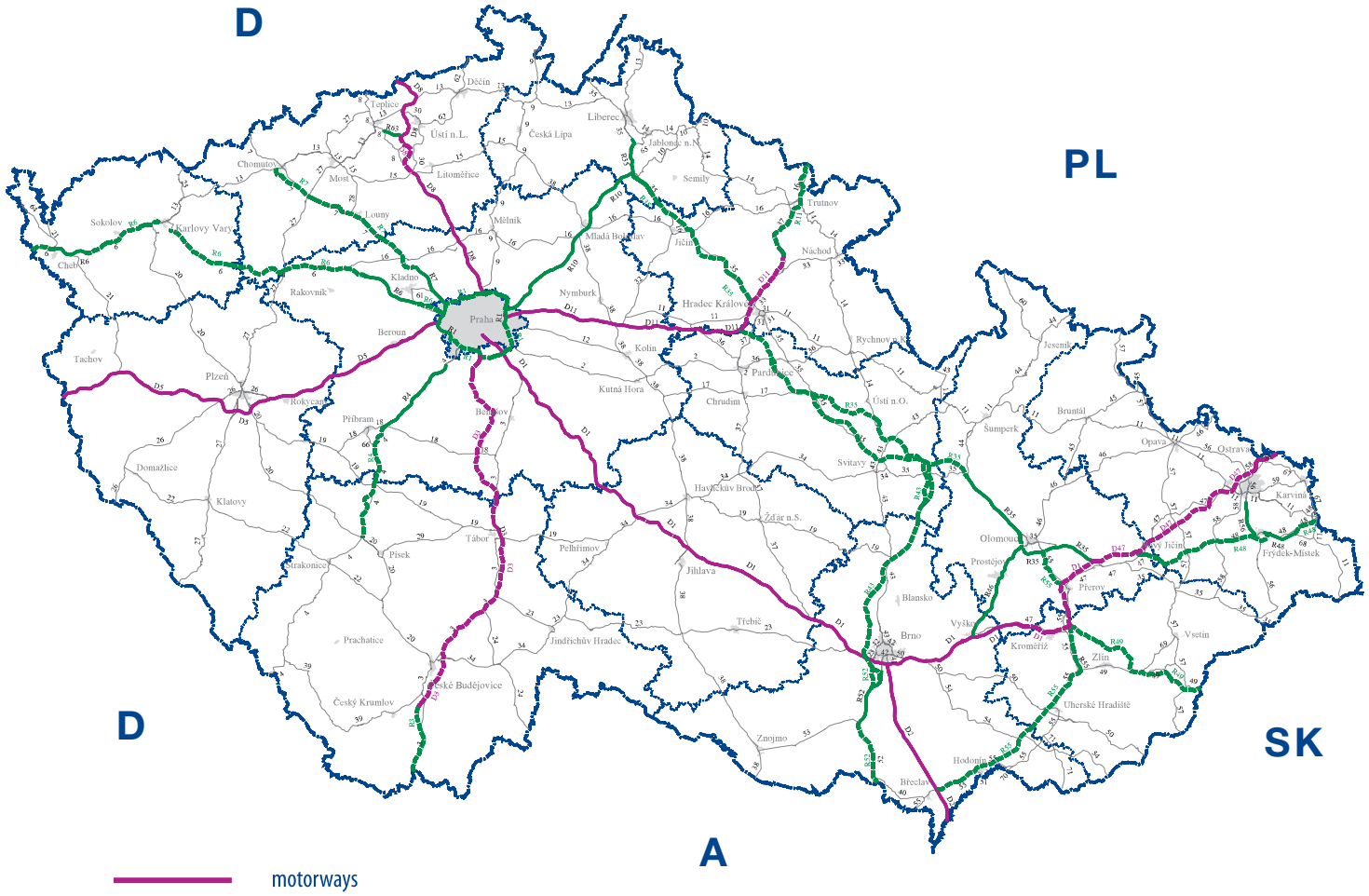
Source: Annual reports, the CSO and the brochure – roads and motorways in the CR 2005

number of bridges on class I roads and motorways in the CR according to the structural state of the load-bearing construction

state as of 1. 1. 2007; total of 4 178 bridges



present and planned
motorways and expressways



motorways

planned motorways

expressways

planned expressways

class I roads

0 10 20 30 40 50 km

state: June 2007

roads and motorways
in the czech republic **2007**

Road and Motorway Directorate of the Czech Republic
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