

Bulgaria - Road Sector - Performance Indicators

Note: The data in item (i) and item (iii) are within the competence of the Directorate of National Police Service. REA has requested the information and is waiting for.

(i) Number of Motor Vehicles

Please provide data for each indicator for the following years, where available:

Number of Vehicles	2000	2001	2002	2003
Passenger cars				
Buses				
Trucks				
TOTAL				

(ii) Paved and Unpaved Roads

Please provide data for each indicator for the following years, where available:

	Unit	2000	2001	2002	2003
Paved Roads					
Paved Roads: total road network:	km				
- including IV class roads		34 335,2	34 345,8	-	-
- excluding IV class roads		18 788,2	18 789,1	19 007,5	18 956,5
Paved Roads: Motorways	km	323,8	328,2	328,2	328,2
Paved Roads: Main roads (I class roads)	km	2 989,8	2 991,2	2 991,1	2 939,8
Paved Roads: Secondary roads (II+III class roads)	km	11 664,6	15 469,8	15 688,2	15 688,5
Un-paved Roads					
Un-paved Roads: total road network	km				
- including IV class roads		2 965,5	2 949,9	-	-
- excluding IV class roads		275,1	272,1	272,1	308,2
Un-paved Roads: Motorways	km	-	-	-	-
Un-paved Roads: Main roads(I class roads)	km	20,9	20,9	20,9	20,9
Un-paved Roads: Secondary roads(II+III class roads)	km	254,2	251,2	251,2	287,4

(iii) Accidents

Please provide data for each indicator for the following years, where available:

Accidents	Unit	2000	2001	2002	2003
Number of injuries in road motor vehicle accidents	Number Per year				
Number of fatalities in road motor	Number				

vehicle accidents	Per year				
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(iv) Expenditure on Roads (US\$ per annum)

Please provide data for each indicator for the following years, where available:

Actual Expenditure

Actual Annual Road Expenditure	Unit	2000	2001	2002	2003
Routine maintenance and repair	US\$/year	28 295 800	35 208 847	62 139 114	85 700 469
Rehabilitation	US\$/year	49 841 159	66 743 645	40 585 866	31 710 786
New Construction	US\$/year	50 035 283	25 363 298	28 072 433	56 976 848
Others*	US\$/year	28 984 566	39 423 049	57 621 258	78 868 158
Total Road Sector	US\$/year	157 156 808	166 738 839	188 418 671	253 256 263

Note: please specify 'other' categories where available

*Others:	28 984 566	39 423 049	57 621 258	78 868 158
Loan Interests (EBRD, EIB)	4 099 638	8 554 653	8 891 086	10 056 310
Loan Payments (EBRD, EIB)	5 584 462	11 116 736	12 543 846	14 394 994
REA maintenance costs	19 300 466	7 749 351	10 695 188	14 094 110
Municipalities	-	6 856 711	17 706 005	23 145 976
Bulgarian State Railways	-	2 201 184	3 978 864	15 498 269
Project Bulgaria (Ministry of Regional Development and Public Works)	-	2 944 414	2 237 828	374 865
Natural Disasters	-	-	1 568 441	1 303 634

Required/ Needed Expenditure

Required Annual Road Expenditure		2000	2001	2002	2003
Routine maintenance and repair	US\$/year	NA	47 520 584	67 893 002	110 064 964
Rehabilitation	US\$/year	NA	74 093 700	41 506 985	35 490 673
New Construction	US\$/year	NA	32 054 597	31 285 196	60 419 429
Other	US\$/year	NA	42 535 267	58 206 450	78 917 008
Total Road Sector	US\$/year	NA	196 204 148	198 891 633	284 892 074

Note: please specify 'other' categories where available

(v) Road Network Condition and Length

Road Type	Road Condition			Road Length
	Poor (km)	Fair (km)	Good (km)	Total (km)
Motorway	12,7	84,9	230,6	328,2
Main (I class roads)	909,5	540,1	1 490,2	2 939,8
Secondary(II + III class roads)	6 094,0	5 103,8	4 490,7	15 688,5
Other	-	-	-	-
TOTAL	7 016,2	5 728,8	6 211,5	18 956,5

Year 2003

(vi) Traffic Mix – Average Number of Vehicles per Day by Road and Vehicle Type

Road Type	Average Number of Vehicles by Vehicle Type			
	Passenger Cars (vpd)	Buses (vpd)	Trucks (vpd)	Total (vpd)
Motorway	8 595	289	4 152	13 036
I class roads	3 056	242	1 963	5 261
II class roads	1 813	75	927	2 815
III class roads	1 234	26	575	1 835
TOTAL	14 698	632	7 617	22 947

Year 2003

Vpd = vehicles per day

(vii) Vehicle Operating Cost (\$/vehicle-km) – submitted by hand to Mr. Kerali by Central Roads and Bridges Laboratory

Please provide this data for the year 2003, or the most recent year available. Please provide best estimates for this information if precise data is not available.

Vehicle Type	Cost per Vehicle km (US\$ per vehicle-km)		
	Poor Condition Roads	Fair Condition Roads	Good Condition Roads
Passenger Cars			
Buses			
Trucks			
Other			

Definitions

Annual Road Expenditure	The total amount of expenditure on new construction and extension of existing roads, including reconstruction, maintenance, renewal and major repairs of roads per year as percentage of GDP. Road maintenance expenditure includes the total expenditure that would be required to keep roads in working order. This includes maintenance, patching and running repairs (work related to roughness of carriageways wearing course, roadsides, etc).
Fatalities in Motor Vehicle Accidents	Number of fatalities from road motor vehicle accidents resulting in at least one person killed (with 30 days of the accident's occurrence). Included in the accidents are: collisions between road vehicles, between road vehicles and pedestrians, between road vehicles and animals or fixed obstacles and with one road vehicle alone. Included are collisions between road and rail vehicles. Multi-vehicle collisions are counted as only one accident provided that no successive collisions happen at very short intervals.
Main Roads (also termed highways or national roads)	A-level roads that are outside urban areas and other roads outside urban areas. A-level roads are roads outside urban areas that are not motorways but belong to the top-level road network. A-level roads are characterized by a comparatively high quality standard, either non-divided roads with oncoming traffic or similar to motorways. In most countries these roads are financed by the federal or national government.
Motorways	Roads specifically designed and built for motor traffic, which does not serve properties bordering on it, and which (a) is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other, either by a dividing strip not intended for traffic, or exceptionally by other means, (b) does not cross at level with any road, railway or tramway track, or footpath, (c) is specially sign-posted as a motorway and is reserved for specific categories of road motor vehicles. Entry and exit lanes of motorways are included irrespectively of the location of the signposts.
Paved Roads	The length of all roads that are surfaced with crushed stone (macadam) and hydrocarbon binder or bitumen agents with concrete or with cobblestones.
Required Road Maintenance Expenditure	Road maintenance requirement includes the amount of financing required per year to keep roads in working order. This includes maintenance, patching and running repairs (work related to roughness of carriageways wearing course, roadsides, etc).
Roads in Fair Condition	Roads in fair condition include paved roads with defects and weakened structural resistance. They require resurfacing of the pavement, but without the need to demolish the existing pavement. Unpaved roads, which require grading and additional new gravel, plus drainage repair in some places.
Roads in Good Condition	Roads in good condition include paved roads, largely free of defects, requiring only routine maintenance and perhaps surface treatment. Unpaved roads which need only routine grading and localized repairs.
Roads in Poor Condition	Those roads which are not classed as good or fair condition.
Secondary Roads (also termed regional roads)	Roads that are feeder routes into, and provide main links between highways, main or national roads.

Source: REDI: Transport (17 Jan 2004)