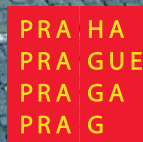


THE TECHNICAL ADMINISTRATION OF ROADS OF THE CITY OF PRAGUE
Department of Transportation Engineering



THE YEARBOOK OF TRANSPORTATION
PRAGUE 2007

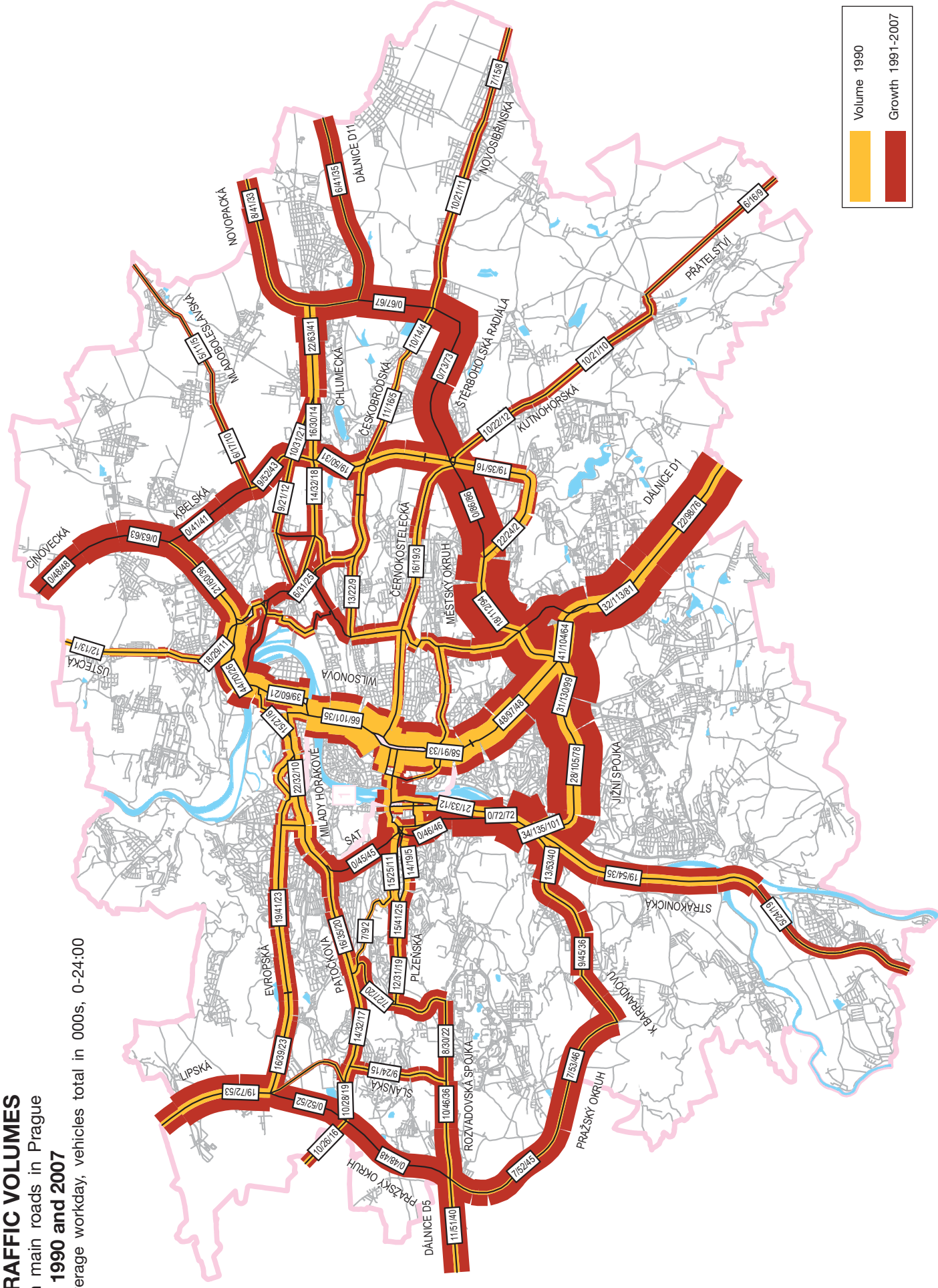


TRAFFIC VOLUMES

on main roads in Prague

in 1990 and 2007

Average workday, vehicles total in 000s, 0-24:00



THE TECHNICAL ADMINISTRATION OF ROADS OF THE CITY OF PRAGUE
Department of Transportation Engineering



THE YEARBOOK OF TRANSPORTATION PRAGUE 2007



Dear Reader,

you have obtained the Yearbook of Transportation which was a regular publication annually prepared by the Institute of Transportation Engineering of the City of Prague. You may have been surprised to read on its cover the booklet was processed by The Technical Administration of Roads of the City of Prague. The reason was a decision of the City Council of the Capital of Prague of 25 October, 2007, on merging the two bodies as of 1 January, 2008, into a successor body to be the allowance organisation The Technical Administration of Roads of the City of Prague under which transportation engineering responsibilities are to be covered by a division of The Technical Administration of Roads of the City of Prague – Department of Transportation Engineering (*ÚDI*). The Yearbook of Transportation has not even this year been withheld from you. On the contrary, the new

condition enables to provide the yearbook with more data.

On the other hand, you might not have been surprised the traffic kept on increasing in 2007 in all types including aircraft (by 7.6 % over 2006), passenger cars (by 3.2 %) and public transport (by 1.0 %). It seems inescapable then that the transportation remained a priority of Prague administration in urban investment development and the regular traffic. The total municipal budget expenditures in transportation exceeded czk 20 billion in 2007.

Owing to it, constructions of the most significant and most demanding transport engineering structures were able to go on in the same pace in 2007, in particular the Metro C line section *Ládví – Letňany*, a portion of the City Ring Road *Malovanka – Pelc-Tyrolka* and the *Vysočany* radial road. A major traffic arrangement measure was the introduction of a new parking regime inside *Praha 2* (a new zone of paid standing) at the close of the year as well as expanding the zone at the left riverbank *Praha 1* neighbourhood. Increased attention was paid to telematics development, especially to what provides current traffic information. Many measures were introduced with regard to enhancing traffic safety and improving the biker and pedestrian mobility.

Last but not least significant transportation investments come by the Government which was directed to road and railway traffic in 2007. They were, primarily, two constructions on the south of the Prague Ring Road (*Slivenec – Lahovice* and *Lahovice – Vestec*), the “New Link” construction and redevelopment of the *Hlavní nádraží* Main Station.

These results achieved in 2007 show the effort of the Capital of Prague municipal administration and its transportation bodies to keep improving the traffic in Prague and, in line with the approved concept, to implement its solution in the fastest and most efficient way possible. I am sure that we will have the privilege to present, in the next yearbook, more key projects important for Prague whose implementation was provided for already in 2007.

A handwritten signature in blue ink, consisting of a stylized first name and a full surname.

Radovan Šteiner
transportation councillor
of the Capital of Prague

Prague, 1 May, 2008

Dear Reader,

the Yearbook of Transportation 2007 you receive was prepared by a rearranged team of Department of Transportation Engineering. Regardless of the restructuring that followed 1 January, 2008, we have given our best effort for you to get the most exact, comprehensive information on the development of transportation in Prague in 2007.

The early chapters of the Yearbook make apparent that, concerning traffic conditions in the Czech Republic, the Capital of Prague is specific in comparison with other Czech cities or motorways and roads in the country. This is manifested in volumes of car traffic and demands for public transport that exceed the average.

In spite of the fact that Prague road network in many places has already reached capacity restricting options for more traffic volume growth inside the city, car traffic volumes exceeded the 2006 figures by more ca. 200 million VKT (i.e. +3.2 %) in 2007. The number of registered motor vehicles, however, went up only by 2.6 % including 1.2 % for passenger cars. It testifies to an increasing effect of the outer car traffic, supported with growing density of car traffic found in middle and outer zones of the city while inner city volumes have stagnated since as early as 1998.

Given the ongoing growth of car traffic in Prague, it is encouraging to find out numbers of injured victims in traffic accidents have kept dropping in the last seven years. The number reached even its fifteen year low in 2007.

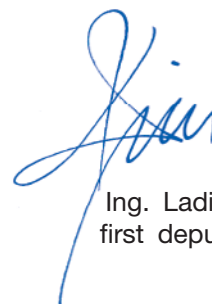
The rise in car traffic is accompanied with increased transportation volumes of public transport, keeping virtually constant the PT to car modal split 57 % to 43 % in favour of public transport since 2000. It is also supported, no doubt, with a high share of public transport in the total transportation expenditures in the municipal budget. It makes for a limited development and innovations in urban PT tracks, fleet renovation and improving conditions for PT vehicle operation on the roadways of the city. By way of example, tram priority was introduced in 7 more and bus priority in 28 more signalled crossroads in 2007, 19 new low-deck 14T trams were purchased as well as two buses with a platform for the handicapped, 45 Metro cars were reconstructed as well as 55 tram cars and 30 buses. Improvement for passengers was also due to a better information system, adjusted traffic islands and carriageways around some tram and bus stops where the car traffic is heavy as well as other transportation engineering measures supporting more regular traffic and enhancing its safety. Expectedly, also new transport constructions went on inside Prague territory and notable funds were earmarked for redevelopment and maintenance of the present property.

Designs of transportation engineering measures to decrease traffic accident rate, optimise the arrangement and control of road traffic, monitoring and evaluation of traffic development and systematic preparation for future evolution of the whole urban mobility system are among the chief responsibilities of transportation engineering. These specialised services, mainly for Prague, are provided, since January 2008, by Department of Transportation Engineering (ÚDI) of The Technical Administration of Roads of the City of Prague.

Prague, 1 May, 2008



Ing. Luděk Dostál
director



Ing. Ladislav Pivec
first deputy director

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1.1 The Capital of Prague

Selected data on the Capital of Prague as of 31. 12. 2007

City area	.....	496 km ²	
Population	.....	1 212 000	
Total road network	.....	3770 km	
specifically, motorways within the city	.....	10 km	
other urban motor roads	.....	76 km	
Number of bridges in the road network	.....	580	
specifically, bridges across the river	.....	27	
grade-separated intersections	.....	205	
underpasses	.....	120	
Number of road tunnels (total length 4 553 m)	.....	7	
All motor vehicles	.....	780 738	
including passenger cars	.....	612 879	
Motor vehicles per head			
in vehicles per 1 000 inhabitants	.....	644	
Passenger cars per head			
in cars per 1 000 inhabitants	.....	506	
Metro (underground) network (in operation)	.....	54.7 km	
Tram network	.....	140.9 km	
specifically, dedicated trackbed	.....	52 %	
Public Transport bus network	.....	685 km	
Traffic lights	.....	504	
specifically, separate pedestrian crossings	.....	78	
Vehicle kilometres travelled (VKT) throughout motor car traffic			
in an average workday	.....	20.9 mil. VKT	
annually	.....	6.9 bn. VKT	
Modal split (based on all trips in the city on a workday)			
public transport	.....	43 %	57 %
car transport	.....	33 %	43 %
bicyclists	.....	1 %	
pedestrians	.....	23 %	
Traffic accidents	.....	33 484	
Traffic accident injuries			
fatal	.....	33	
serious	.....	352	
slight	.....	1 923	
Relative accident rate (accidents per 1 million VKT)		4.8	

1.2 Prague compared with the Czech Republic

	Prague	CZ	Prague/CZ (%)
Area (km ²)	496	78 864	0.6
Population (mil.)	1.212	10.381	11.7
specifically, the workforce (mil.)	0.633	4.967	12.7
Motor vehicles (000s)	781	5882	13.3
specifically, passenger cars (000s)	613	4269	14.4
Motor vehicles per head	(motor vehicles per 1000 persons)	567	-
	(persons per 1 motor vehicle)	1.8	-
Passenger cars per head	(passenger cars per 1000 persons)	411	-
	(persons per 1 passenger car)	2.4	-



The Rohanské embankment



Husitská street

Vehicle kilometres 1990 – 2007 (mil. VKT / avg. workday 0-24 h)

Year	Prague*	CZ+
1990	7.3	80.9
2000	16.6	131.2
2005	19.9	148.5
2006	20.3	156.6
2007	20.9	163.0**
Index 07/90 (%)	287.0	201.5**
Index 07/06 (%)	103.2	104.1**

* throughout the whole network

+ motorways & roads, class 1, 2 & 3 incl. sections inside Prague

** preliminary data



The Patočkova – Střešovicá crossroad



Bělohorská street

2.1 Development in number of motor vehicles and cars

The total number of motor vehicles registered in Prague rose steeply until 1999, then the rise has slowed down.

Registered motor vehicles in 1961 – 2007 (100 % = 1990)

Year	PRAGUE					Czech Republic (Czechoslovakia till 1971)				
	Populat.	Motor vehicles		Passenger cars		Populat.	Motor vehicles		Passenger cars	
	(000s)	number	%	number	%	(000s)	number	%	number	%
1961	1 007	93 106	22	44 891	13	13 746	1 326 801	-	291 680	-
1971	1 082	203 519	48	133 129	40	14 419	2 931 629	-	1 041 137	-
1981	1 183	367 007	86	284 756	85	10 306	3 449 300	85	1 872 694	79
1990	1 215	428 769	100	336 037	100	10 365	4 039 606	100	2 411 297	100
1995	1 210	641 590	150	535 805	159	10 321	4 728 859	117	3 113 476	129
2000	1 181	746 832	174	620 663	185	10 267	5 230 846	129	3 720 316	154
2005	1 180	749 786	175	602 339	179	10 247	5 401 917	134	3 954 769	164
2006	1 188	761 071	178	605 774	180	10 287	5 613 943	139	4 098 114	167
2007	1 212	780 738	182	612 879	182	10 381	5 882 312	146	4 269 231	177

Numbers of motor vehicles and cars per head, 1961 – 2007

Year	PRAGUE				Czech Republic (Czechoslovakia till 1971)			
	Vehicles per head		Passenger cars per head		Vehicles per head		Passenger cars per head	
	Veh. per 1 000 pers.	Pers. per 1 vehicle	Cars per 1 000 pers.	Pers. per 1 car	Veh. per 1 000 pers.	Pers. per 1 vehicle	Cars per 1 000 pers.	Pers. per 1 car
1961	92	10.8	45	22.4	97	10.4	21	47.1
1971	188	5.3	123	8.1	203	4.9	72	13.8
1981	310	3.2	241	4.2	335	3.0	182	5.5
1990	353	2.8	276	3.6	390	2.6	233	4.3
1995	530	1.9	443	2.3	458	2.2	302	3.3
2000	632	1.6	525	1.9	510	2.0	362	2.8
2005	635	1.6	510	2.0	527	1.9	386	2.6
2006	640	1.6	510	2.0	546	1.8	398	2.5
2007	644	1.6	506	2.0	567	1.8	411	2.4

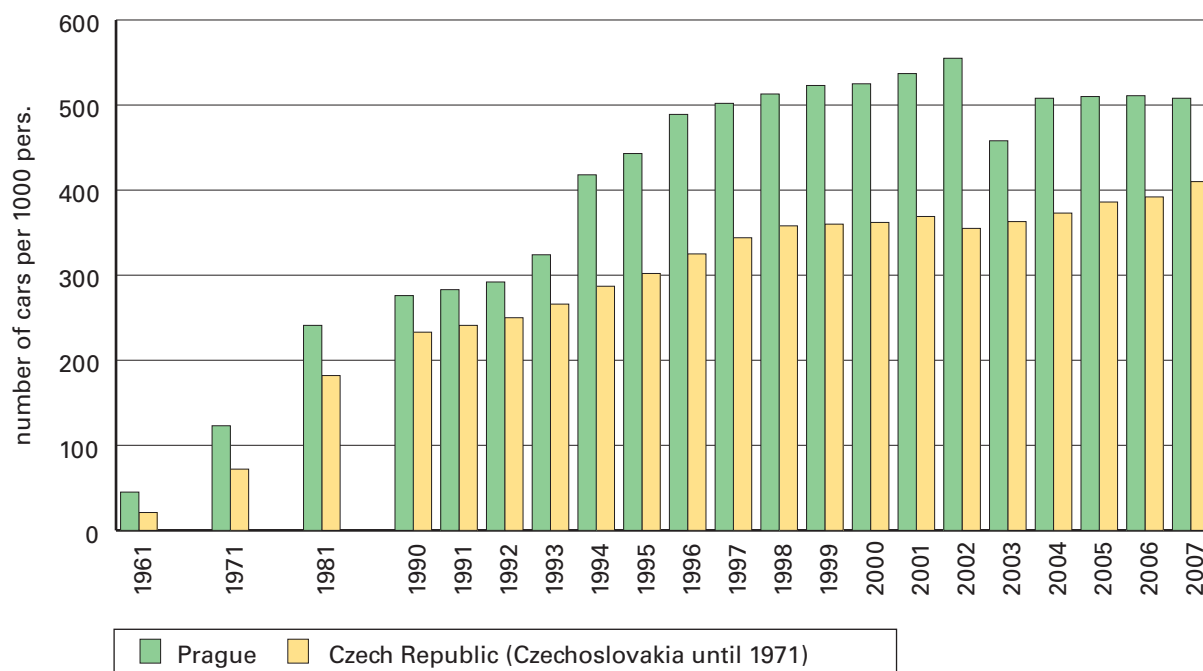


The Palackého square



The Jiráskův bridge crossroad at Smíchov

Passenger cars per head, 1961 – 2007



2.2 Motor car traffic volumes on workdays

An increase in car traffic with its impacts started to show in Prague as early as in 1930s. The city saw a drop in car traffic for a time due to the World War II and the post-war development (e.g. the 1937 figures of 1 passenger car in 32 persons in Prague were achieved again following the war and post-war decline only in 1959).

Since 1960s, the number of motor cars started to grow significantly in Prague, causing problems in traffic mainly due to insufficient capacities of key crossroads. Up to late 1980s, however, these issues affected only a small number of crossroads, most of them in the city centre, and occurred chiefly during traffic peaks. The explosion rise in car traffic in 1990s created a new condition. It was especially from 1992 to 1997 when the car traffic grew in the city with a rate unparalleled in European cities, except the ones in the former East Germany.

The capital of Prague assumes a special position in the Czech Republic in car traffic, manifested in extraordinary densities and VKT in comparison with other Czech cities or motorways and roads in the country.

The basic aggregated parameter for the development of car traffic in Prague is VKT (vehicle kilometres travelled) throughout the road network. The VKT is monitored by the Institute of Transportation Engineering of the City of Prague from as early as 1978, utilizing an in-house developed database software, *IDIS* (Transportation Engineering Information System).

In addition to VKT, Prague car traffic development trends are monitored by means of cordon surveys, i.e. periodic traffic counts taken on spots which together make a rounded-off cordon over all the important in-roads entering a defined area. The inner city traffic development is monitored via the central cordon, the extra-urban traffic development is monitored through the outer cordon. The two cordons' time arrays have been collected and available at the Institute of Transportation Engineering since 1961.

Note: all VKT data relate to a 24 h average of a normal workday; all car traffic data exclude public transport buses.

Motor vehicles covered the total of 20 929 000 km VKT throughout the whole Prague area around the clock on an average workday. The passenger cars' share of it was 19 016 000 km VKT i.e. 91 %. Comparing with the previous year, it means motor cars covered 651 000 km

VKT more in Prague daily in 2007 which is 3.2 % above 2006. Comparing with 1990, car traffic in the city increased by 187 % i.e. almost three times before 2007. Comparing with the car traffic growth on motorways and roads in the Czech Republic, the growth in Prague was approximately 1.5 times higher in the period.

In the greater central area of the city, the volume of car traffic was stagnant; comparing it with the previous year, it was virtually the same. The intensity of car traffic in the greater city centre area rose annually until 1998 when it reached its peak and, since then, it has stagnated with slight variations in both directions. 315 000 vehicles including 301 000 passenger cars entered the greater inner city area during the 24 h of an average workday between 6. a.m. and 10 p.m. in 2007.

In the middle zone of the city, the car traffic volume increased by 2 to 5 % over the previous year. The traffic in this zone has been growing steadily and significantly since 1990. It has multiplied three to four times on some roads over 1990.

In the outer zone of the city, the car traffic volume grew by 3.1 % over the previous year. Comparing it with 1990, 3.6 times more vehicles (+260 %) entered Prague daily from its environs (suburban zone, other regions in the nation, abroad). The car traffic in the outer zone of the city has been rising steadily since 1990. About 277 000 vehicles including 241 000 passenger cars entered Prague around the clock on an average workday of 2007.



The D1 motorway close to Chodov



The Poděbradská – Kbelská crossroad

The heaviest volumes in sections of Prague road network in 2007 were carried by *Barrandov Bridge* with its 135 000 vehicles passing daily (0-24 h), the heaviest split-level junction was the *5. května – Jižní spojka* (Southern Connection) junction (220 000 vehicles daily) and the heaviest level-junction was *Poděbradská – Kbelská* (76 000 vehicles daily).

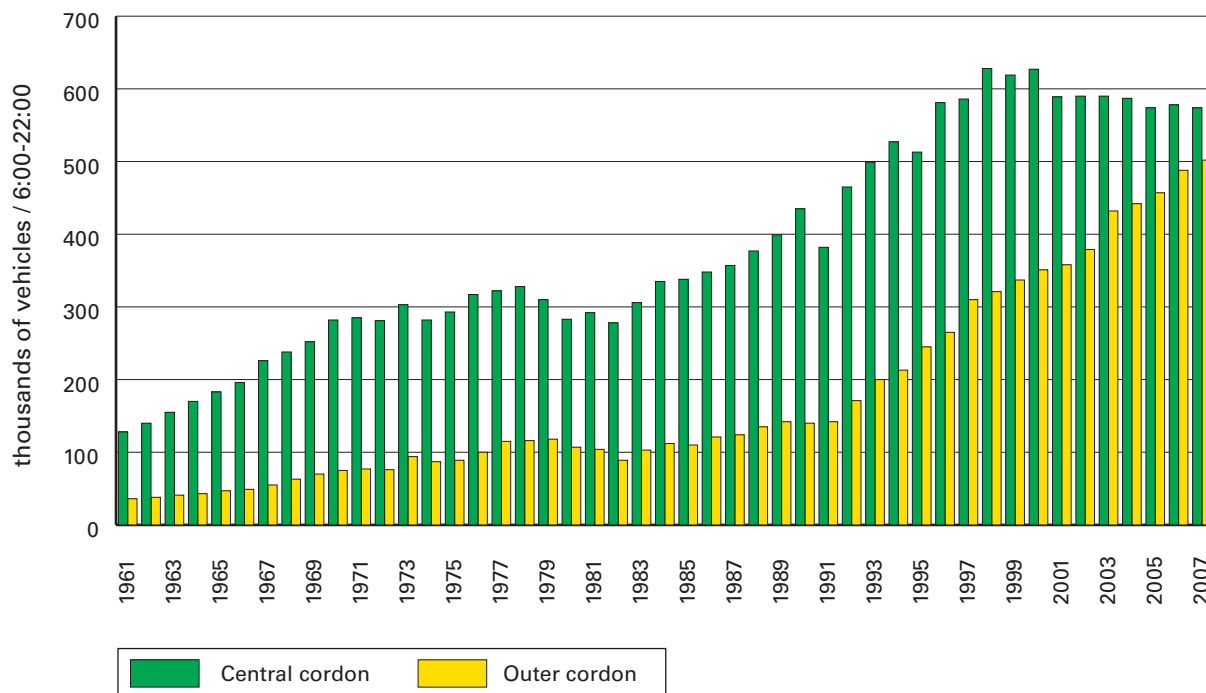
Traffic volume on central and outer cordon, 1961 – 2007

Workday, both directions total, 6 a.m. to 10 p.m.

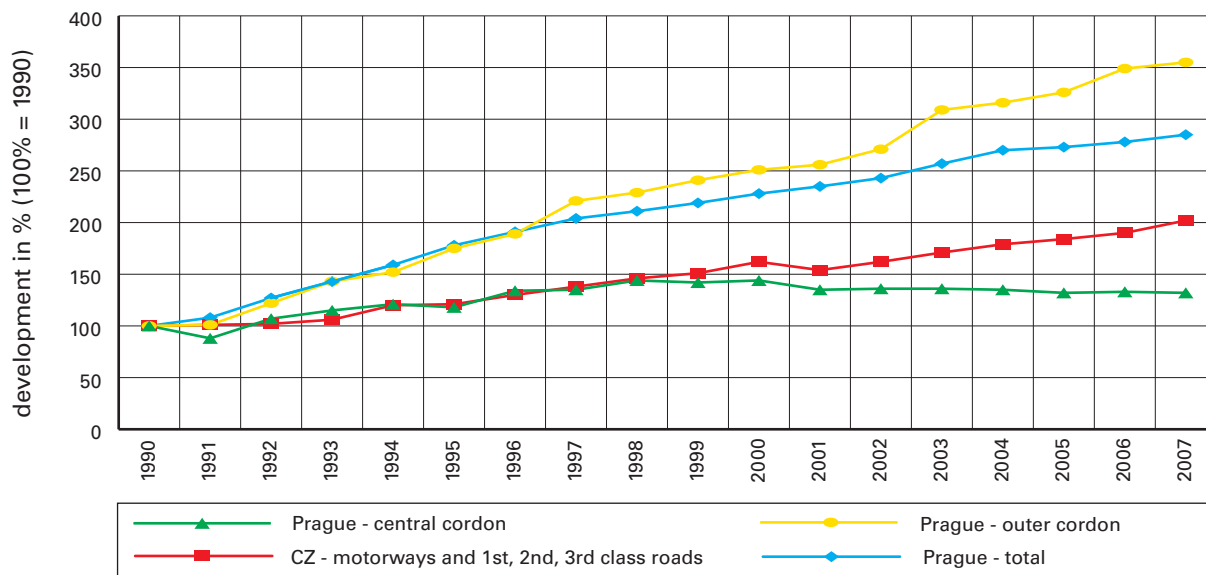
Year	Central cordon						Outer cordon					
	Passenger cars		Lorries		All vehicles		Passenger cars		Lorries		All vehicles	
	number	%	number	%	number	%	number	%	number	%	number	%
1961	69 000	18	32 000	82	128 000	29	14 000	14	14 000	41	36 000	26
1971	241 000	63	38 000	97	299 000	69	50 000	50	23 000	68	77 000	55
1981	247 000	64	39 000	100	292 000	67	67 000	66	31 000	91	104 000	74
1990	385 000	100	39 000	100	435 000	100	101 000	100	34 000	100	140 000	100
1995	474 000	123	31 000	79	513 000	118	204 000	201	36 000	106	245 000	175
2000	594 000	154	23 000	59	627 000	144	304 000	301	43 000	126	351 000	251
2005	547 000	142	17 000	44	574 000	132	394 000	390	56 000	165	457 000	326
2006	551 000	143	15 000	38	578 000	131	421 000	417	60 000	176	489 000	349
2007	547 000	142	15 000	38	573 000	132	438 000	434	59 000	173	504 000	360

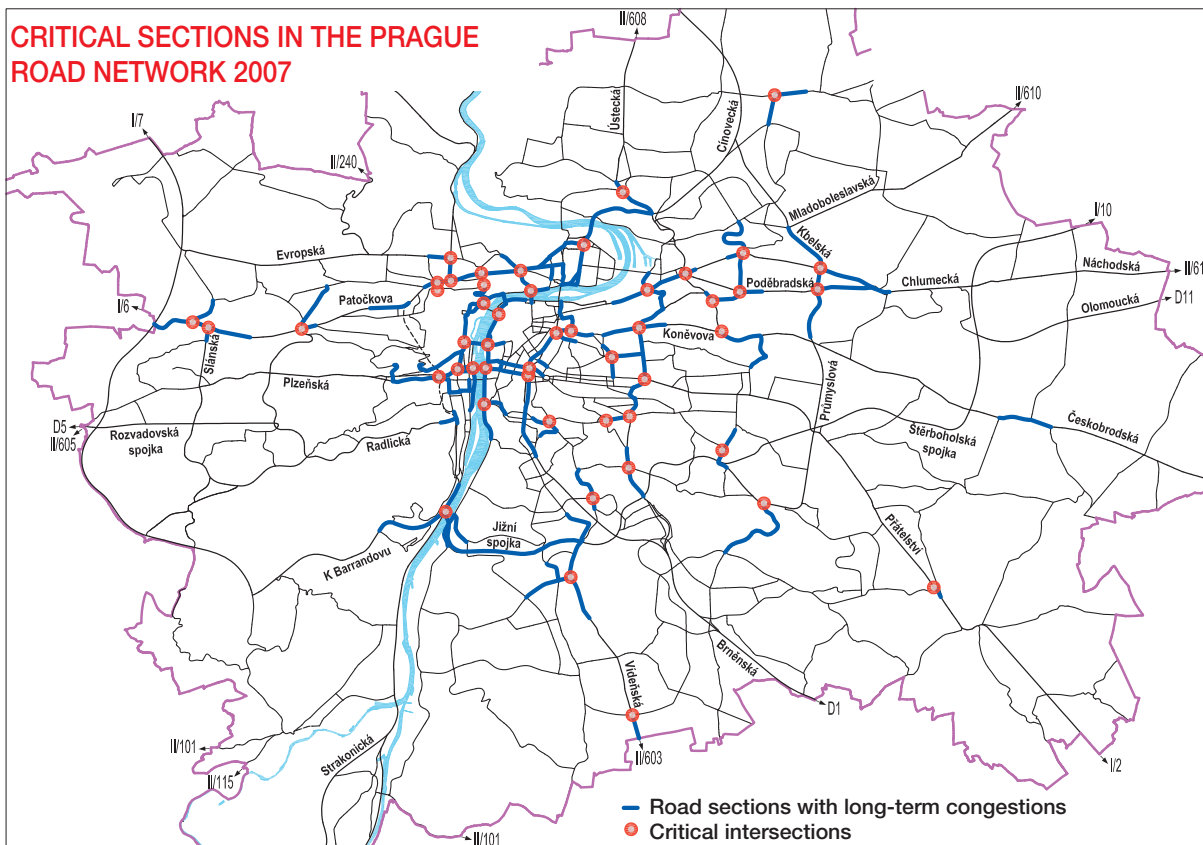
100 % = 1990

Traffic volumes on central and outer cordon, 1961 – 2007
An average workday, both directions total, 6 a.m. to 10 p.m.



Car traffic volume development in Prague and the Czech Republic, 1990 – 2007
An average workday





Intersections and sections with critical traffic in 2007

The pace of the VKT growth in car traffic in Prague was the highest after 1990 as shown by comparison of the average year-on-year growth of the daily VKT throughout the overall urban road network:

1981 – 1990	y-o-y	+192 000 VKT/day
1991 – 1995	y-o-y	+1 134 000 VKT/day
1996 – 2000	y-o-y	+736 000 VKT/day
2001 – 2007	y-o-y	+613 000 VKT/day

Most of the rise in the car traffic in Prague following 1990 has been due to passenger cars. During 1991 to 2007, the VKT per vehicle in Prague grew as follows:

passenger cars	+225 %
lorries and buses	+32 %
all vehicles	+187 %

The car traffic grows differently in different city zones. From 1991 to 2007 the car traffic increased in the following way:

all-network average	+187 %
the greater inner city	+32 %
the outer zone	+260 %
the middle zone of the city	+100 to +300 %

Vehicle kilometres travelled in Prague, 1961 – 2007 (100 % = 1990)

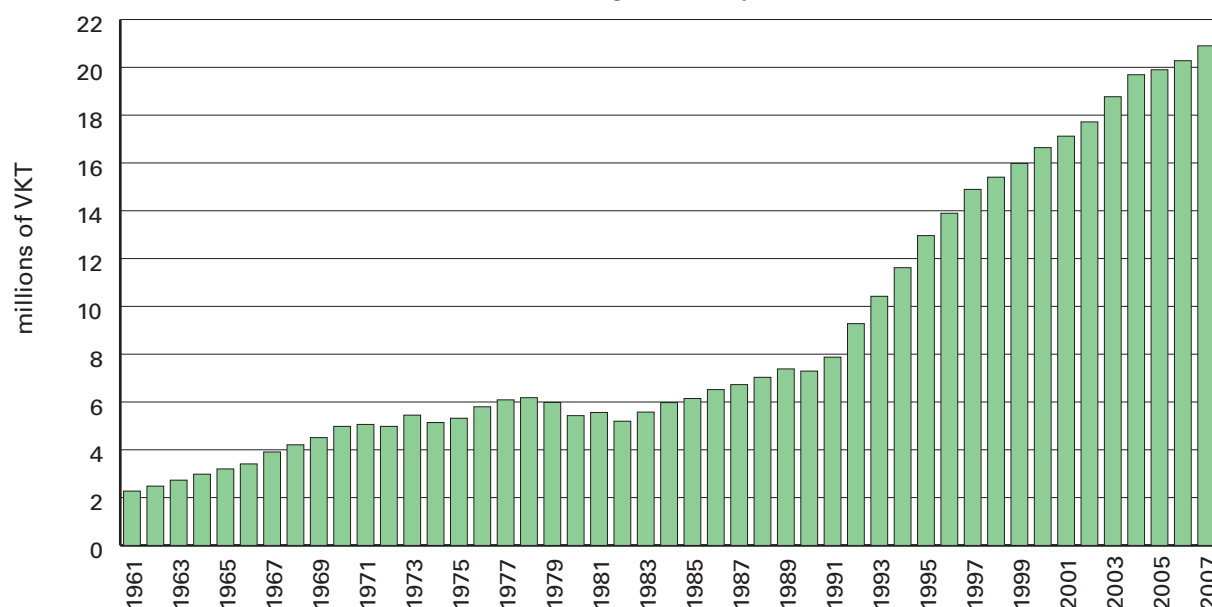
All roads, an average workday, 0-24 h

Year	All motor vehicles		Passenger cars only		VKT percentage of passenger cars
	millions VKT	%	millions VKT	%	
1961	2.273*	31	1.273*	23	56
1971	5.061*	69	3.543*	65	70
1981	5.562	76	4.338	79	78
1990	7.293	100	5.848	100	80
1995	12.961	178	11.509	197	89
2000	16.641	228	15.131	259	91
2005	19.899	273	18.023	308	91
2006	20.278	278	18.330	313	90
2007	20.929	287	19.016	325	91

* an estimate from volume trends on the central and outer cordon (VKT is monitored in Prague since only 1978)

Vehicle kilometres travelled in Prague 1961 – 2007

All roads, an average workday, 0-24 h



Average Vehicle Occupancy (AVO) – persons per passenger car

Year	Inner city (central cordon)	Outer zone (outer cordon)	all Prague
1990	1.57	1.90	1.71
1995	1.45	1.60	1.50
2000	1.37	1.49	1.44
2005	1.35	1.42	1.40
2006	1.35	1.40	1.38
2007	1.35	1.39	1.38

2.3 A workday mode share

The traffic flow is made up largely of passenger cars. Concerning the local distribution, the passenger cars get the greater share the closer they are to the city centre. The share in 2007 was:

- in the central cordon 96 %
- in the outer cordon 87 %
- the network average 91 %

Percentage of mode share, 1961 – 2007

Workday, both directions total, from 6 a.m to 10 p.m.

Year	Central cordon				Outer cordon			
	Passenger cars	Motorcycles	Lorries	Buses (exc. PT)	Passenger cars	Motorcycles	Lorries	Buses (exc. PT)
1961	53.7	19.4	29.4	2.0	38.6	22.1	34.4	4.9
1971	79.3	5.6	13.3	1.8	63.2	8.6	25.1	3.1
1981	84.3	0.4	13.2	2.0	65.1	0.6	30.3	4.0
1990	88.6	0.7	9.1	1.6	72.1	0.5	24.0	3.4
1995	92.4	0.3	6.0	1.3	83.4	0.2	14.7	1.7
2000	94.7	0.6	3.7	1.0	86.5	0.2	12.1	1.2
2005	95.4	0.7	2.9	1.0	86.2	0.4	12.2	1.2
2006	95.4	0.9	2.7	1.0	86.0	0.4	12.4	1.2
2007	95.5	0.9	2.6	1.0	86.8	0.3	11.7	1.2



The Jiráskův bridge



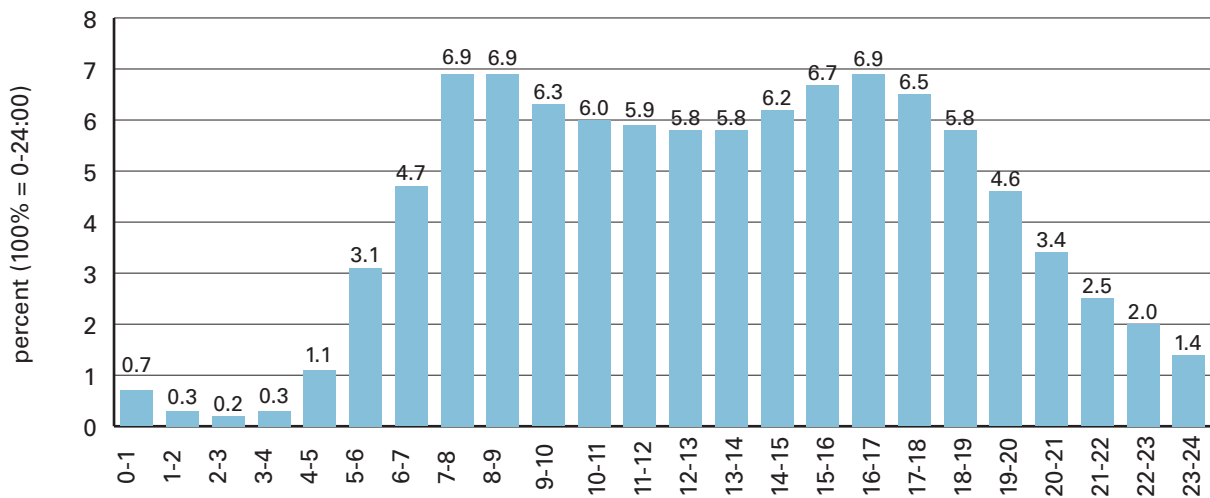
The Průmyslová street

2.4 Temporal patterns in motor vehicle traffic

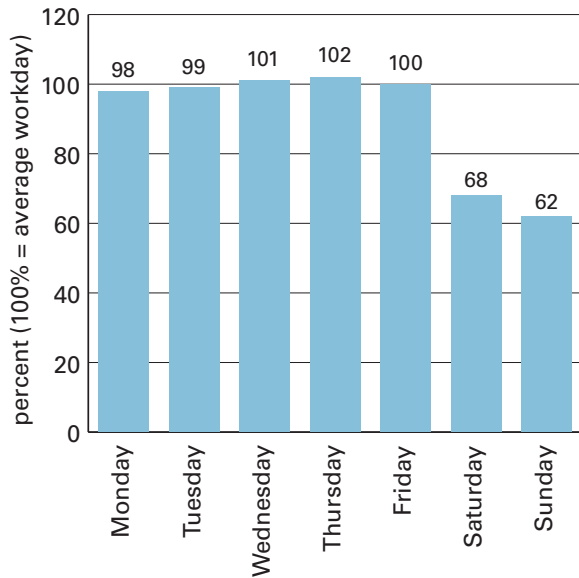
Workday volume variations in motor vehicle traffic show the following characteristics.

- The bulk of the daily traffic volumes is carried out during daylight (75 % from 6 a.m. to 6 p.m., or 80 % from 6 a.m. to 7 p.m.) while the period from 6 a.m. to 10 p.m. covers about 91 %.
- Following 5 p.m., the traffic volume displays a steep and largely linear drop till midnight.
- The morning peak hour comes at 7–9 a.m., the afternoon peak hour is between 4–5 p.m.
- The morning peak hour's share is 6.9 %, the afternoon peak hour's share is 6.9, too (100 % = 0–24 h).
- The differences between peak hour share and off-peak share are not very sharp. The noon sag hour (from noon to one o'clock) is 5.8 per cent of the whole day.
- Daily traffic density variation in lorries and buses (excluding public transport) displays a different characteristic from the overall profile. Their peak hour is 10–11 a.m., making 8.5 % of the all-day goods vehicle and bus volumes. Following 11 a.m. there comes a mild and more or less regular decrease without any sag or next peak until midnight.
- Consequently, the share of lorries and buses in the traffic flow changes significantly during the day:
 - the all-day average is 9 %,
 - it rises up to 15 % in the morning,
 - it descends to 7 % in the afternoon,
 - evening and night values range between 4 to 10 %.

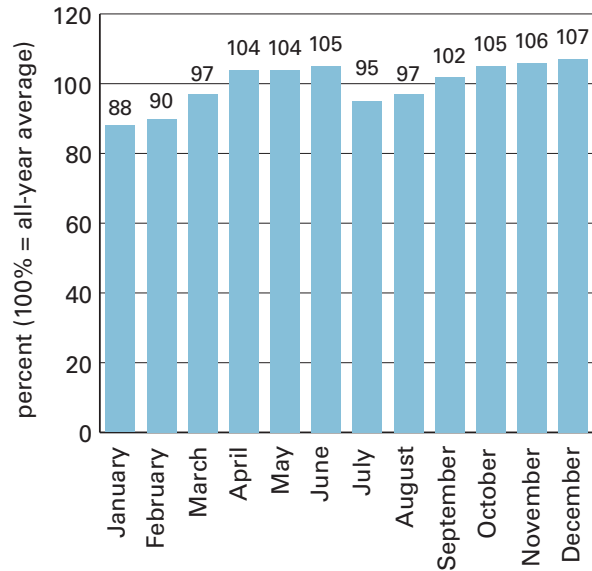
Daily variation, 2007 – Prague, all network



Weekly variation, 2007 – Prague, all network



Annual variation, 2007 – Prague, all network



The K Barrandovu street



The Ke Kříži street

2.5 Weekend car traffic

The annual traffic volume surveys include counting weekend traffic on the urban outer limit. Weekend departures occur mostly on Friday afternoons between 3 to 7 p.m., Saturday between 8 to 11 a.m. and partially also on Sunday mornings. On the other hand, weekend arrivals concentrate in a narrow period of Sunday return time from 2 to 10 p.m. These are also the times for periodic holiday traffic monitoring to take place during the spring survey time on the outer cordon. The weekend car traffic development is available since 1973.

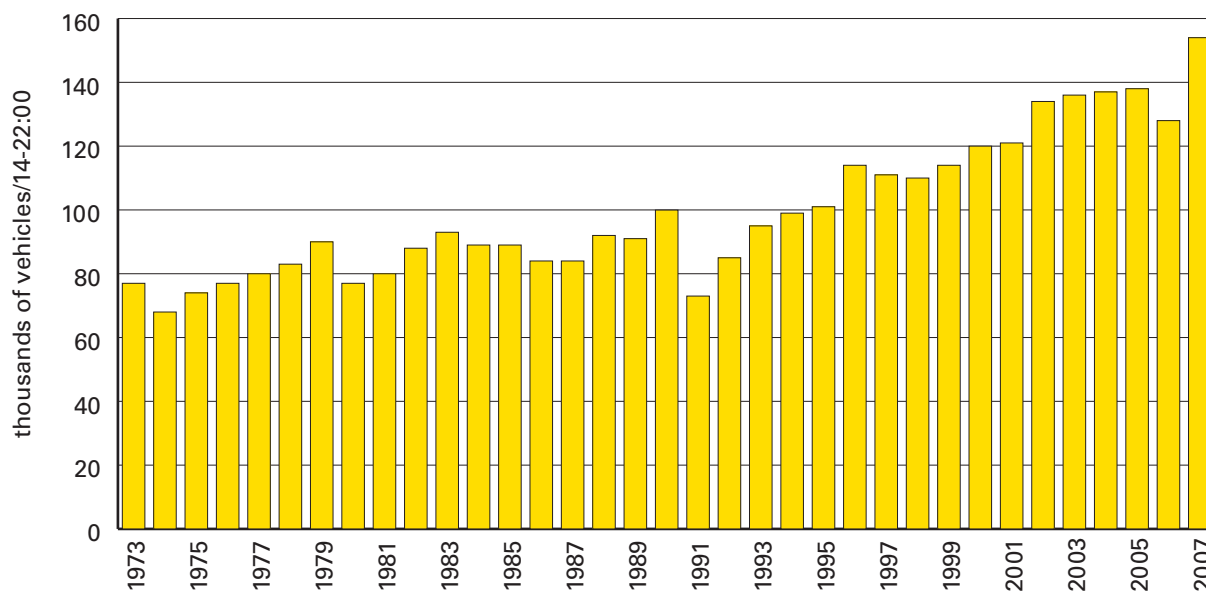
Weekend traffic volumes, 1973 – 2007

Sunday, outer cordon, Prague bound, from 2 p.m. to 10 p.m.

Year	Passenger cars		All vehicles	
	number	%	number	%
1973	70 000	74	77 000	77
1981	77 000	82	80 000	80
1990	94 000	100	100 000	100
1995	98 000	104	101 000	101
2000	116 000	123	120 000	120
2005	132 000	140	138 000	138
2006	123 000	131	128 000	128
2007	148 000	157	153 000	153

100 % = 1990

Weekend traffic volume development, 1973 – 2007



The weekend traffic modal share is clearly far the greatest for passenger cars; it was 97 % in 2007.

The average passenger car occupancy in weekend traffic in 2007 was 1.96 persons per car.

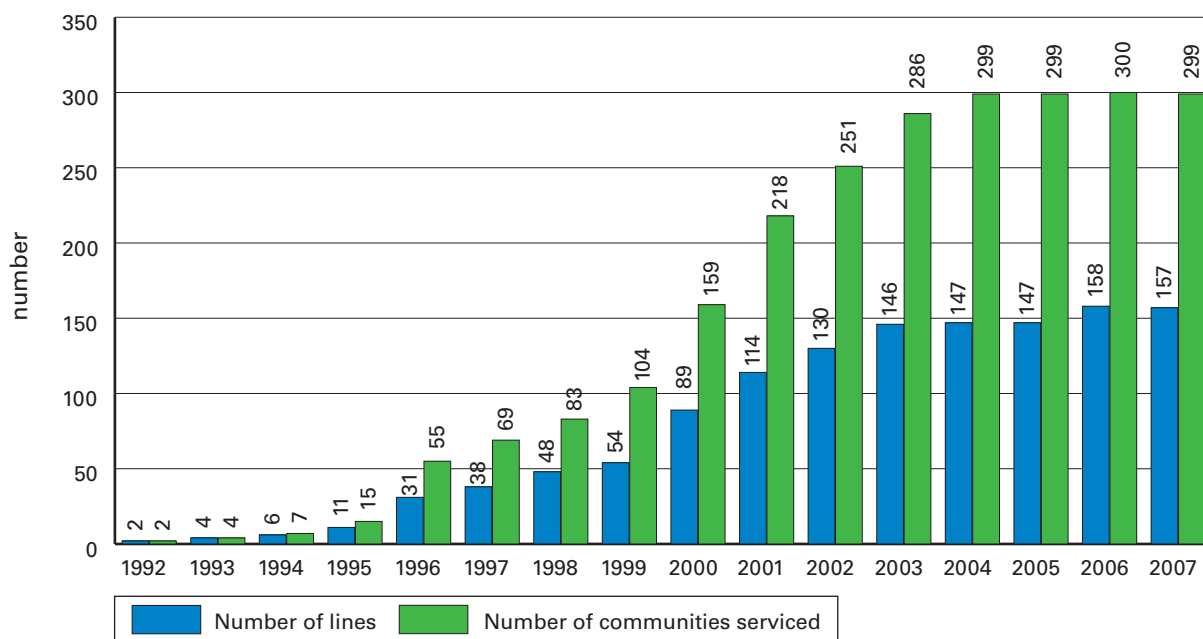
3.1 Prague Integrated Transport (*PID*)

3.1.1 Basic data

Prague Integrated Transport across the region of the city includes the Metro (underground), trams, urban and suburban bus lines, railway, the funicular to the *Petřín* hill and ferries. In 1990s, it began to be gradually covered with a unified transfer tariff that enables to make a trip on a single ticket regardless of the means of transport and the carrier.

Prague Integrated Transport System is organized by Prague Integrated Transport Regional Organizer (*ROPID*), an allowance organization established by the Municipality of Prague in 1993. Its chief carriers are the Prague Public Transit Co. Inc. (*Dopravní podnik hl. m. Prahy, a. s.*) that operates the Metro (underground), trams, funicular and most of the bus lines, and Czech Railways (*České dráhy, a. s.*) operating the railways. Twelve more private carriers share in operating bus lines. Also three river ferries are included in the integrated transport.

Development of suburban *PID* bus lines

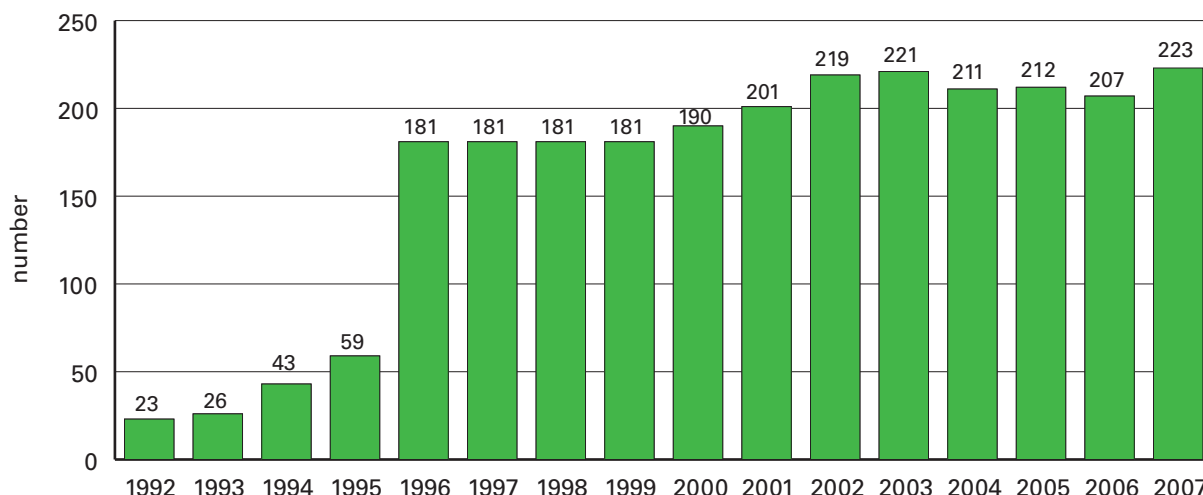


The redeveloped Strančice railway station



A suburban PID line No. 356 on the Evropská street

Number of railway stations and stops integrated in PID



A total of 187 bus lines were operated on the territory of the city at the end of 2007. The number included 13 overnight lines, 17 school lines and 2 lines for limited mobility persons. Additionally, 157 regional bus lines were operated, out of them 88 lines provided city-to-country transport, 7 lines for overnight operation and 62 lines covered solely an extra-urban region.

Number of operated PID bus lines (including overnight, school and limited mobility lines)

Carrier	city territory	region territory
DP hl. m. Prahy, a. s.	172	19
Other carriers	15	138
Total	187	157

Basic data on Prague Integrated Transport (PID), 1997 – 2007

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number of communities served by suburban PID buses	69	83	104	159	218	251	278	299	299	300	299
Number of railway stations and stops included in PID	181	181	181	190	200	219	221	211	212	207	223*
Number of suburban PID bus lines	38	48	54	89	114	133	146	147	147	158	157
Millions of VKT in suburban PID bus lines	4.12	5.03	7.99	9.36	12.91	15.79	18.48	20.20	22.2	22.4	23.6
Millions of VKT in all the PID lines except railway (i.e. Metro + tramway + urban and suburban buses)	150	149	156	157	163	161.6	172.9	177.8	178.9	187.1	188.6
Passenger percentage using PID tickets on railway lines included in PID	32.5	35.6	37.2	39.2	43.0	52.1	56.5	57.7	59.7	60.4	63.3

* following the re-operation of the railway line *Hostivice – Tuchoměřice – Podlešín* (only for weekend biker return trains *Praha – Slaný*)

Number of passengers handled in PID, 2007 (in thousand persons/year)

Carrier, means of transport	in the city	outside the city	total
Dopravní podnik, a. s. Metro	537 266	-	537 266
tramway	352 100	-	352 100
buses	294 561	8 999	303 560
Contractor carriers buses	58 529	45 128	103 657
Total	1 242 456	54 127	1 296 583
České dráhy, a.s. (with PID tickets)	17 192	2 782	19 974
Total including railways	1 259 648	56 909	1 316 557

3.1.2 Municipal Public Transport (MHD)

The **Metro** (underground) makes a backbone network of the PT system. It consists of three lines with a total operational length 54.7 km and 54 stations (including three interchanges counted as two stations each).

A barrier-free entry through personal elevators or rail platforms is possible in 29 stations. They are 5 out of 13 stations on the A line, 13 out of 24 stations on the B line and 11 out of 17 stations on the C line. More stations are accessible with adjusted freight elevators.

An average commercial speed of the Metro trains is 35.8 km/h with an average station-to-station distance of 1 072 m. The Metro share in transported persons PT total reached 43.2 % in 2007.



Additional two M1-type Metro trains were put in service in 2007, needed to extend the C line as far as the *Letňany* station. The extension is to be launched in spring 2008. The operational fleet currently counts as much as 48 trains of the M1 type. 45 cars, type 81-71 (81-71M), were refurbished. An average age of the cars in Metro operation is 6.5 years.

The Metro fleet in 2007

Fleet	Inventory	Operation
81 – 71	206	102
81 – 71M	295	225
M 1	240	240
Total	741	567



An M1-type Metro train at the Vyšehrad station



An 81-71M-type Metro train close to the Hostivař depot station

The **tramway network** was 140.9 km long in the end of 2007. 52 % of the length was run on a dedicated trackbed (a raised embankment in roads, and in some places, on separate track lanes led outside of road). The average stop distance throughout the network is 542 m. The tramway transportation shared 28.3 % of all persons transported in 2007.

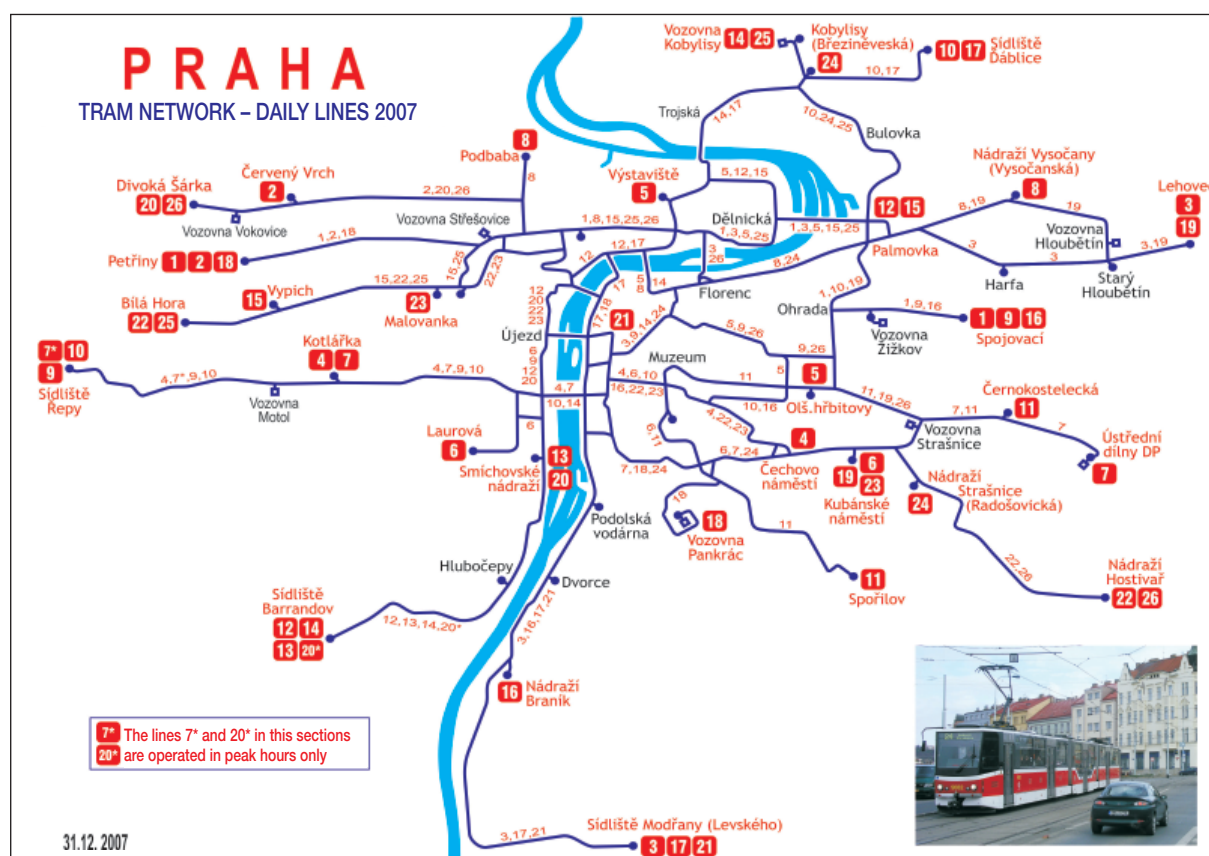


A KT8N2-type tramway at the Palackého square



A 14T-type tramway training ride practiced by new drivers

As of 31. 12. 2007, Prague was served with 26 daytime tram lines (operating from about 4:00 a.m. till about 0:30 after midnight), their line numbers ranging from 1 to 26; and 9 overnight tram lines (operating from about 0:30 a.m. till about 4:00 a.m.), their line numbers ranging from 51 to 59.



In 2007, the Prague tram fleet was being expanded with new low-floor cars of the 14T type whose number counted 24 as of 31. 12. 2007. The fleet of all low-floor cars, inventorial and operated, was 51. The average age of the tram fleet in service is 13.5 years.

The tram fleet in 2007

Fleet	Inventory	Operation
standard (T3, T3M, T3R, T3R.PV, T6)	889	869
low-floor (T3R.PLF)	5	5
standard articulated (KT8D5)	29	26
low-floor articulated (KT8N2, RT6N)	22	22
low-floor articulated (14T)	24	24
Total	969	946

The **bus transport** makes a complementary network to the Metro and trams, providing a coverage service across certain areas as well as important tangential links, especially in the outer zone of the city. The operational length of the bus transportation network within the city territory is 685 km. An average distance between stations and stops is 650 m. The bus share of the total *PID* transported persons was 28.4 % in 2007.



A low-floor articulated bus on the Bělohorská street



An E91 midibus on the line 128 Hlubočepy – Žvahov

The daytime bus lines (operating from about 4:00 a.m. till about 0:30 a.m.), serving on lines 100 to 291 entirely inside Prague area, counted 155 in December 2007. Overnight bus lines (operating from about 0:30 a.m. till about 4:00 a.m.), serving on lines 501 to 513 also entirely inside Prague area, counted 13. Moreover, in the end of 2007, there were 17 school lines in operation while two lines marked 1 and 3 were available to service limited-mobility and restricted-orientation persons.

Prague Public Transit buses, 2007

Fleet	Inventory	Operation
standard	542	531
articulated	271	271
standard low-floor	331	328
articulated low-floor	53	53
E91 midibus	6	6
Total	1 203	1 189

An average age of the buses operated by Prague PT as of 31. 12. 2007 was 7.7 years.

The **funicular** provides a connection between the *Újezd* street and the *Petřín* hill (via a mid-point stop, *Nebozízek*). Two tow-line cars in capacities of 100 passengers move along a railway 510 m long with an average speed of 6.12 km/h, climbing to the height of 130.45 m. The funicular transported almost 2.03 million passengers in 2007.



The Petřín funicular



The P1 ferry access at the Sedlec bank of the Vltava

Ferries across the *Vltava* river are the most recent addition to the *PID* transportation system, being auxiliary by nature. Three ferries were in service in 2007, one of them the *P1* ferry Sedlec – Zámky (launched 1. 7. 2005), another the *P2* ferry Podbaba – Podhoří (launched 1. 7. 2006), and also the *P3* Lihovar – Veslařský ostrov ferry (launched 17. 7. 2007).



The P2 Podbaba – Podhoří ferry with the ship used



A transport ship at the pier of the P3 ferry at the Veslařský island

The former two ferries are in service all year round, keeping the current timetable. The latter *P3* ferry is seasonal. Additional passages are possible on demand in between the planned ones provided they do not interfere with the scheduled passages.

The *P1* and *P2* ferries transport passengers on small boats (transfer of bikes and prams is also possible in limited numbers). The *P3* ferry offers a capacity ship providing transportation of passengers, bikes, prams etc. in greater numbers. It was operated from July to the end of October in 2007 (it is planned to operate from as early as beginning of April in 2008). The total transport in 2007 for all the ferries was 231 150 persons; out of them 71 550 persons by the *P1* ferry Sedlec – Zámky, 106 600 persons by the *P2* ferry Podbaba – Podhoří and 53 000 persons by the seasonal *P3* ferry Lihovar – Veslařský ostrov in 4 months of its service.

Basic data on Prague Integrated Transport, 2007 (operated by *DP hl. m. Prahy, a. s.*)

	Metro	Trams	Buses	Total
Operational network length (km)	54.7	140.9	685.0	880.6
– including on dedicated trackbed (%)	100	52	-	-
Operational network length outside Prague (km)	-	-	135.2	135.2
Average station/stop distance (m)	1 072.5	542	650	-
Average commercial speed (km/h)	35.8	18.8	25.7	-
Annual VKT in Prague (000s)	47 110	49 411	61 038	157 559
Annual VKT outside Prague (000s)	--	-	1 502	1 502
Annual passengers transported in Prague (000s)	537 266	352 100	294 561	1 183 927
Annual passengers transported outside Prague (000s)			8 999	8 999
Employees of <i>DP hl. m. Prahy, a. s.</i>	12 250			
Revenue from tickets (mil. czk)	3 922			
Operational costs (mil. czk)	15 368			
Revenue/costs ration (%)	25.5 %			

Development of selected characteristics of public transport (operated by *DP hl. m. Prahy, a. s.*)

Year	Operational network length (km)+			Average commercial speed (km/h)			Traffic and transport performance on an average workday	
	Metro	Trams	Buses	Metro	Trams	Buses	Seat-km (mil.)	Passengers (000s)
1981	19.3	122.9	545.0	32.2	15.7	23.8	46.7	3 638
1990	38.5	130.5	607.3	34.6	18.7	23.7	57.6	4 189
1995	43.6	136.2	671.4	34.9	19.0	23.3	53.4	3 409
2000	49.8	136.4	812.4*	35.7	18.9	25.2*	56.0*	3 290++
2001	49.8	137.5	806.8*	35.4	19.2	25.9*	56.8*	3 468++
2002	49.8	137.5	818.0*	35.4	19.5	25.9*	56.4*	3 492++
2003	49.8	140.9	819.8*	35.7	19.6	26.3*	58.3*	3 530++
2004	53.7	140.9	822.1*	34.6	19.3	26.1*	61.3*	3 599++
2005	53.7	140.9	810.6*	34.6	18.7	25.9*	62.8*	3 774++ (3 628)
2006	54.7	140.9	817.0*	34.6	18.9	25.8*	63.1*	3 900++ (3 747)
2007	54.7	140.9	820.2*	35.8	18.8	25.7*	63.0*	3 970++ (3 783)

+ The operational length is the total length of regularly operated lines that are available to passengers (i.e. without service tracks, sidings, lay-bys, depots, yards, etc.), measured along the line axis, or street axis with bus lines. With Metro, it is the total length of the lines from terminal to terminal platform midpoint.

* incl. suburban *PID* lines operated by Prague Public Transit Co. Inc. (*DP hl. m. Prahy, a. s.*)

++ persons transported inside Prague (in parentheses: persons transported only by *DP hl. m. Prahy, a. s.*).

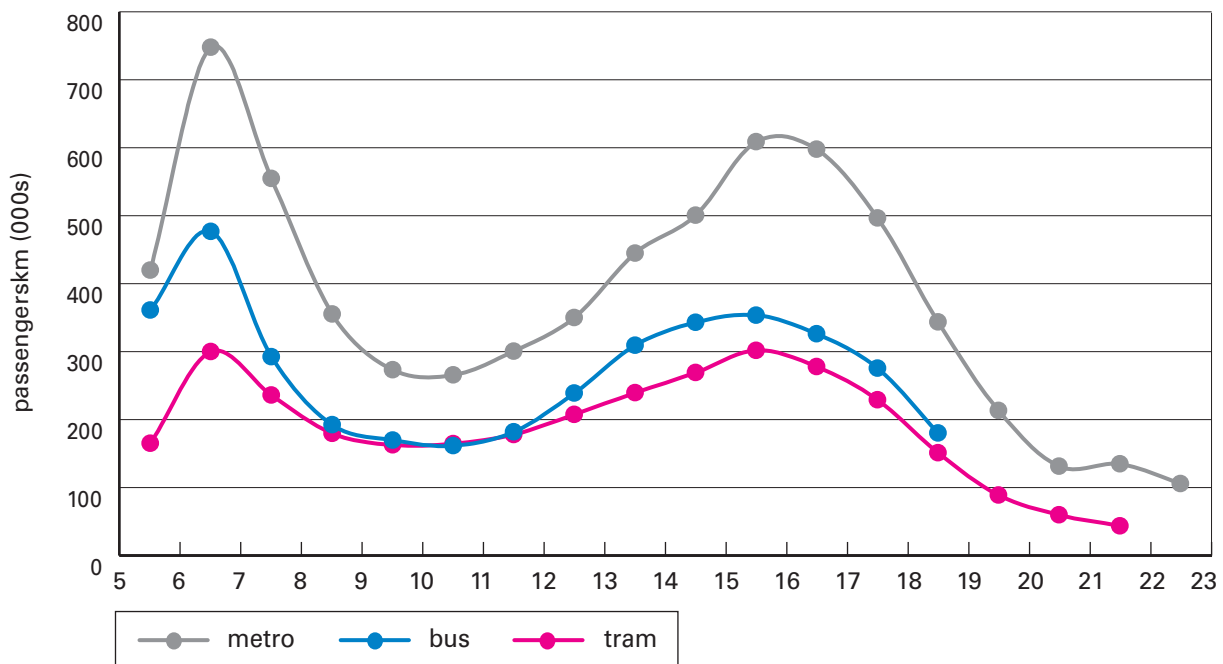


PT buses at the Budějovická Metro station



A KT8D5-type tramway on the Svobodova street

Public transport daily variations



3.1.3 Suburban public transport inside Prague

The suburban public transport that is included in *PID* (i.e. the transport which extends beyond the territory of the Capital) is provided by railway and bus lines.

The suburban railway transport is operated by Czech Railways, Co. Inc. (*České dráhy, a. s.*) on all the 10 railroads entering Prague. 8 railroads are completely incorporated into the Integrated Transport System in Prague. A complete incorporation means the lines acknowledge both abonement coupons and individual *PID* tickets (the stations are equipped with yellow validating machines). The length of the railroads throughout Prague territory is 160 km, with 43 stations and stops. The highest volumes transported are achieved by the railways on the lines *Praha – Kolín* and *Praha – Beroun*.

Number of passengers in Prague transported by railways with *PID* tickets

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007
Passengers (000s)	8 093	10 048	14 932	15 700	16 032	15 998	16 584	16 531	17 192



A suburban City Elephant train at Krejčárek



A suburban 451 series train at the Praha-Uhřetěves station

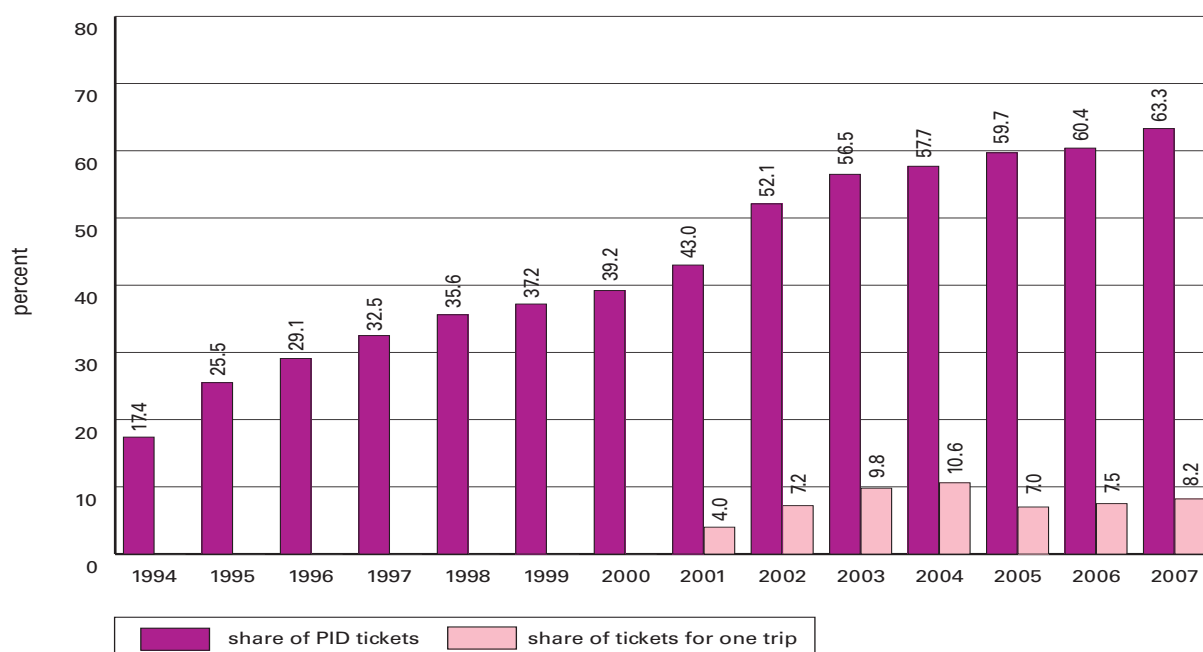
Using railways for trips to the inner city is very time-efficient for passengers travelling from the outskirts of Prague. The transport duration and frequency in traffic peaks are given in the following table for the five most important directions:

Transport characteristics on the most important sections of Prague railways

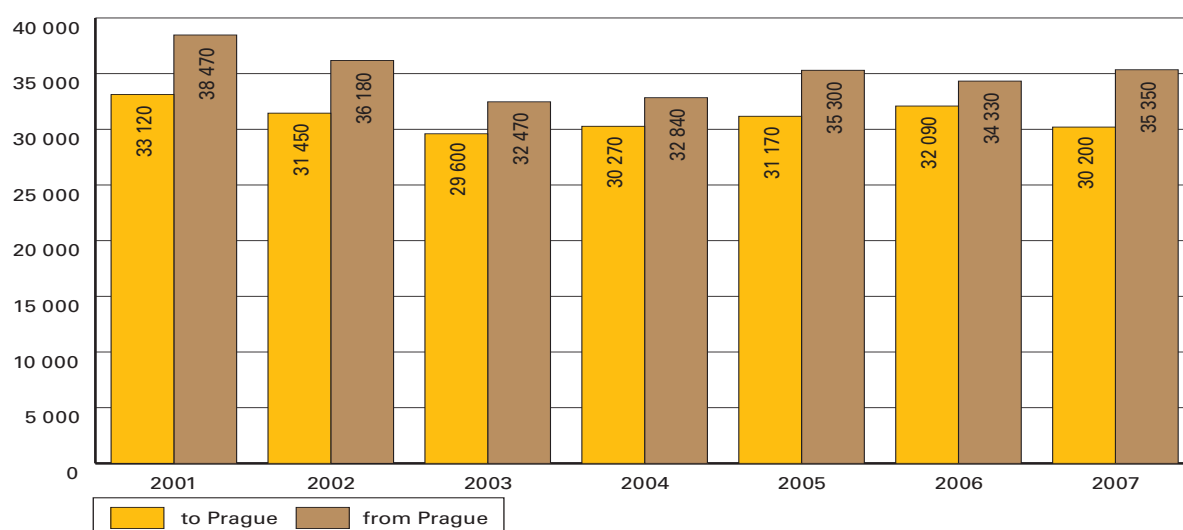
Railway line	Average peak frequency	Average travel duration	Distance
<i>Praha-Klánovice – Praha-Masarykovo nádraží</i>	30 min	30 min*	18 km
<i>Praha-Kolovraty – Praha-Hlavní nádraží</i>	30 min	23 min	17 km
<i>Praha-Radotín – Praha-Hlavní nádraží</i>	30 min	18 min	13 km
<i>Praha-Sedlec – Praha-Masarykovo nádraží</i>	30 min	13 min	9 km
<i>Praha-Horní Počernice – Praha-Masarykovo nádraží</i>	30 min	22 min	15 km

* travel prolonged due to the "New Link" construction

The PID ticket share development in Prague railways

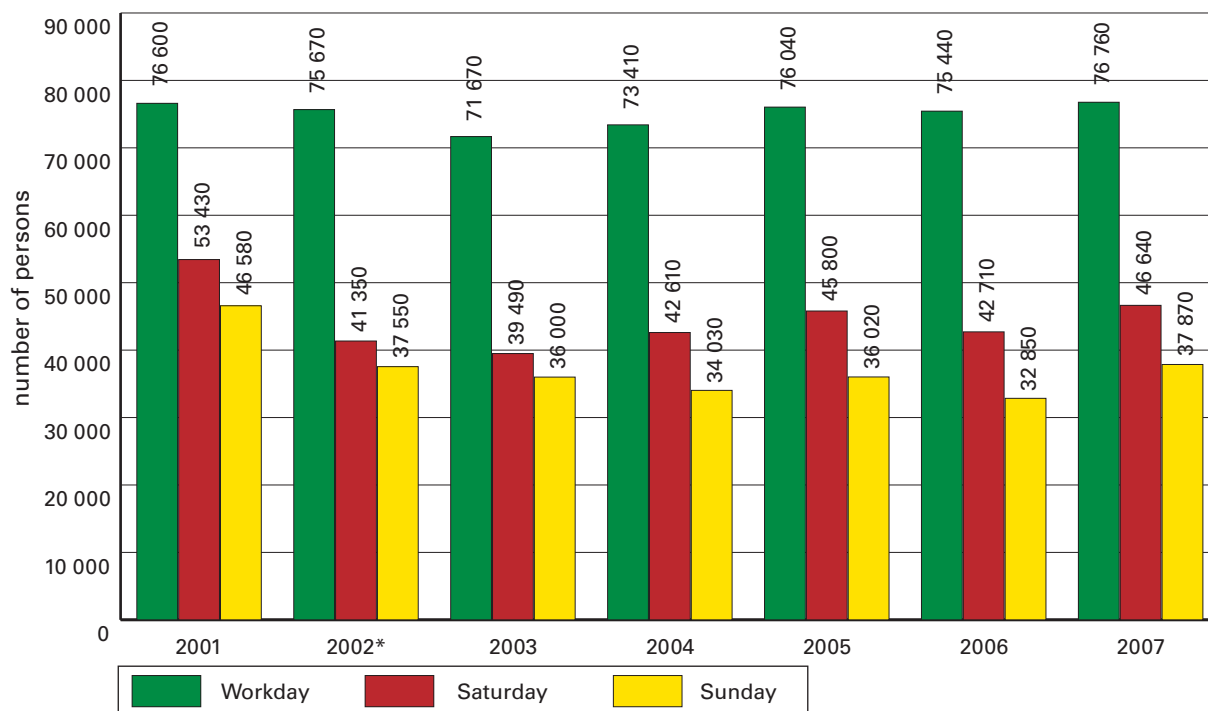


Numbers of passengers crossing into Prague in PID system trains on a workday (0–24 h)



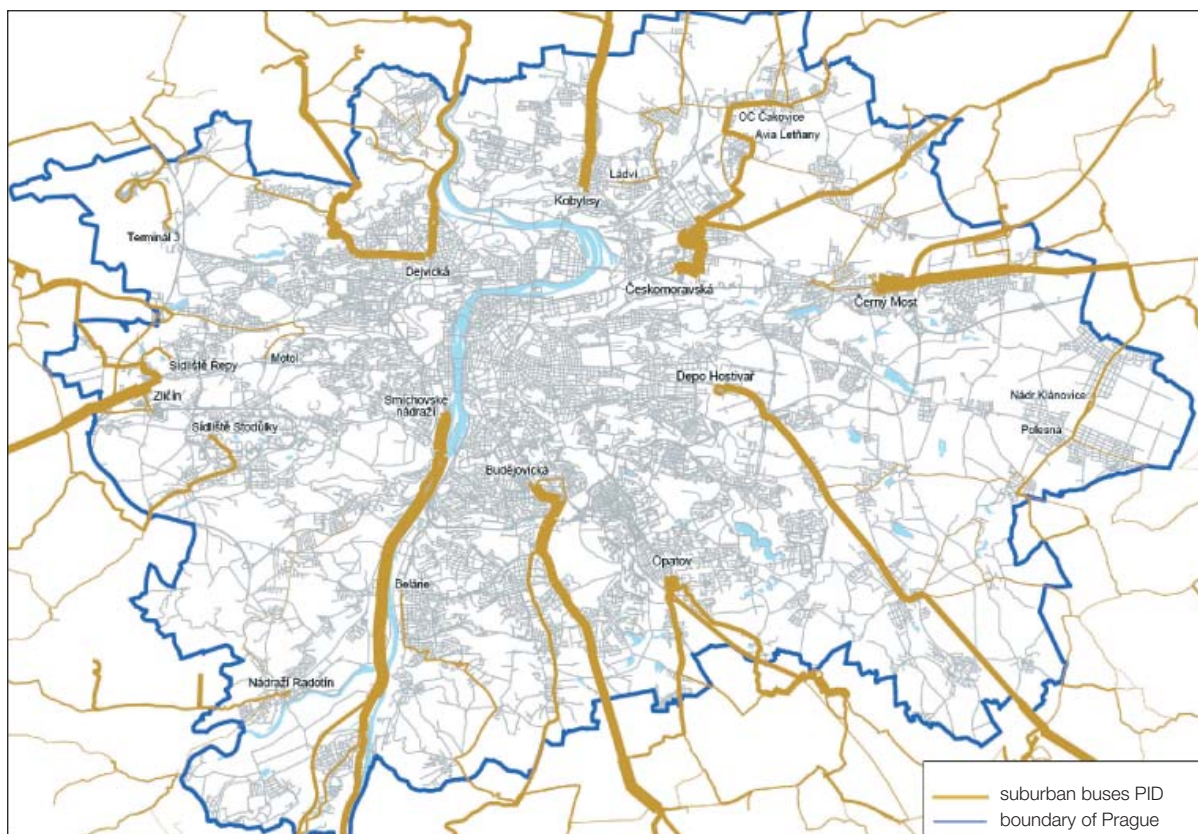
The total number of persons commuting daily to Prague from outside on PID trains is approximately 30 200 (an average workday value). The entry profile with the heaviest usage in 2007 was the section *Černošice – Praha-Radotín* with 13 400 passengers daily both ways and the section *Úvaly – Praha-Klánovice* with 13 320 passengers daily both ways.

**Number of transported persons in Prague (zones P+0)
in 24 hours by trains included in PID**



* The data does not include shuttle transport launched due to the Floods.

The suburban **PID bus transport** consisted of 157 lines, out of which 88 provided connection to the Capital of Prague. Almost 3 580 connections crossed the city borders both ways on the lines on an average workday in 2007. The lines transported the total of approximately 87.8 thousand passengers.



Routes, terminals and number of connections of suburban bus lines PID on the Prague territory

The suburban *PID* bus transport used 20 locations inside Prague for their start/end terminals to service the outside in 2007. The most important terminals of the suburban *PID* bus transport inside Prague were the terminals *Zličín* (12 lines, circa 490 connections and approximately 12 000 handled passengers in both directions in 24 hours on a workday), *Černý Most* (10 lines, circa 430 connections and approximately 11 700 handled passengers) and *Dejvická* (8 lines, circa 400 connections and approximately 11 300 handled passengers). These terminals handle circa 37 % of all connections of the suburban lines and also 40 % of all passengers crossing the border of the Capital of Prague.



A PID line 386 close to the *Rajská zahrada* Metro station



A PID line 375 on the *Vysočany* elevated road

3.2 Public transport in Prague not included in *PID*

Additionally, public transport of passengers is provided in Prague apart from the *PID* system. It is the bus transport servicing the airport *Praha-Ruzyně* (the AE line) and serving large shopping parks and centres.

The AE line connects the *Praha-Holešovice* railway station with the *Ruzyně* airport. Since 2007, it has had a mid-point stop at the *Dejvická* Metro station available only for airport-bound passengers to get on, while on return it was available only to get out. The base rate was CZK 45 for the whole AE route (CZK 25 for children under 15). It was also included in long-distance Czech Railways tickets in 2007. The AE line transports approximately 530 passengers daily (October 2007 survey).



An AE line leaves the bus terminal at the *Holešovice* railway station



An AE line at the *Ruzyně* Airport stop

The bus lines serving large shopping parks and centres are offered to passengers free of charge. At the end of 2007, they were 16 in total in Prague and headed for the following shopping centres: *Letňany*, *Zličín*, *Štěrboholy*, *Černý Most*, *Stodůlky*, *Šestka-Ruzyně*, *Butovice*.

3.3 Outer public transport

3.3.1 Railway transportation

The railway transportation covers primarily the transport relations between Prague and places outside by means of local and long-distance trains. The engineering infrastructure of the transportation is provided by the governmental Railway Track Authority (*Správa železniční dopravní cesty*), the operation is run by Czech Railways, Co. Inc. (*České dráhy, a. s.*).



An express train on the Praha-Libeň station gridiron



A Praha – České Budějovice express at the Hlavní nádraží

Number of trains dispatched from Prague railway stations, 2002 – 2007

		2002	2003	2004	2005	2006	2007
Trains	outgoing	162 578	170 706	159 681	159 524	161 193	160 360
	incoming	162 990	170 324	160 888	160 731	163 510	160 665
	total	325 568	341 030	320 569	320 255	324 703	321 025



A limited access to the Hlavní nádraží platforms due to redevelopment

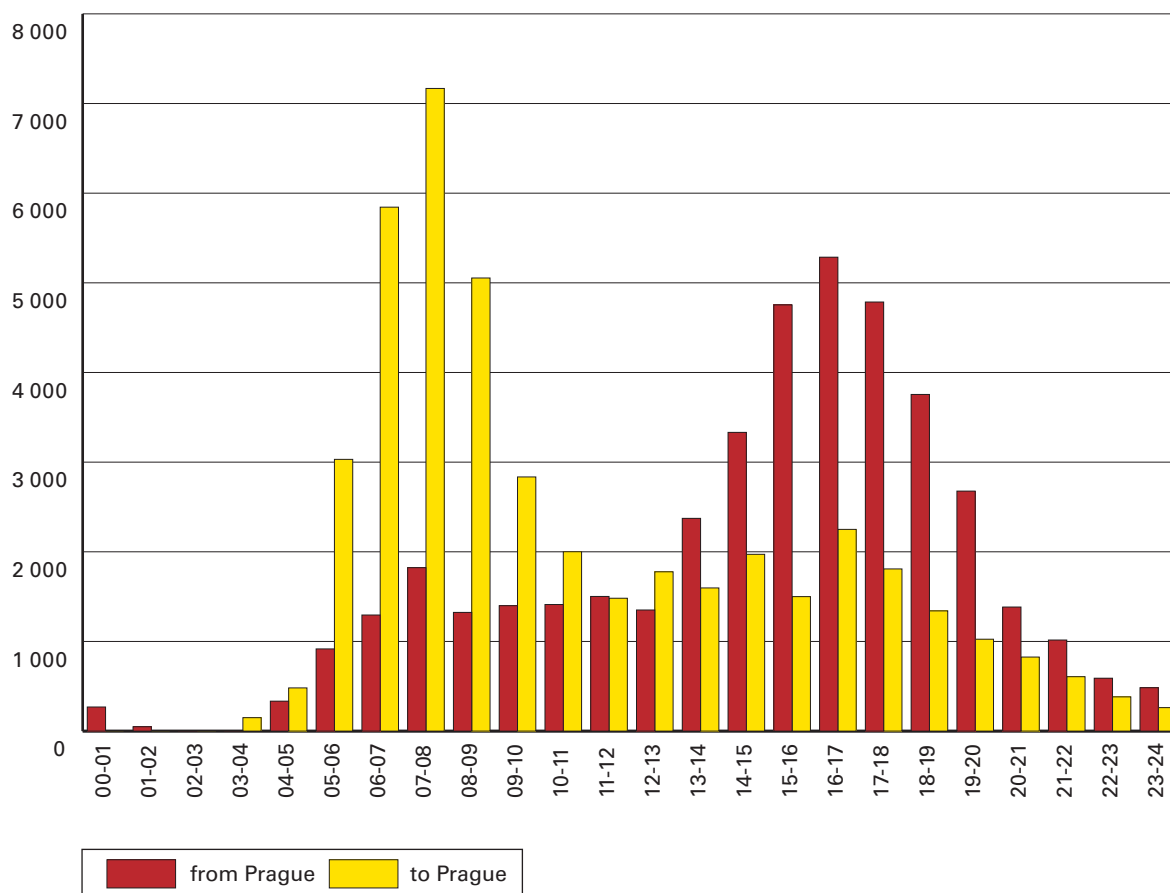


The Hlavní nádraží platform III and IV redevelopment

Performances of Prague key railway stations in 2007

	persons getting on (000s/year)	persons getting off (000s/year)	Total (000s/year)	trains at railway station
Praha-Hlavní nádraží	9 366	8 071	17 437	85 410
Praha-Masarykovo nádraží	4 683	3 299	7 982	43 800
Praha-Smíchov	1 780	1 714	3 495	47 085
Praha-Vršovice	498	575	1 073	52 925
Praha-Libeň	634	926	1 561	84 680
Praha-Vysočany	593	738	1 332	43 800
Praha-Holešovice	1 427	1 655	3 082	31 390

Daily variation in trains on Prague borders in 2007
number of persons, workday 0–24 hrs

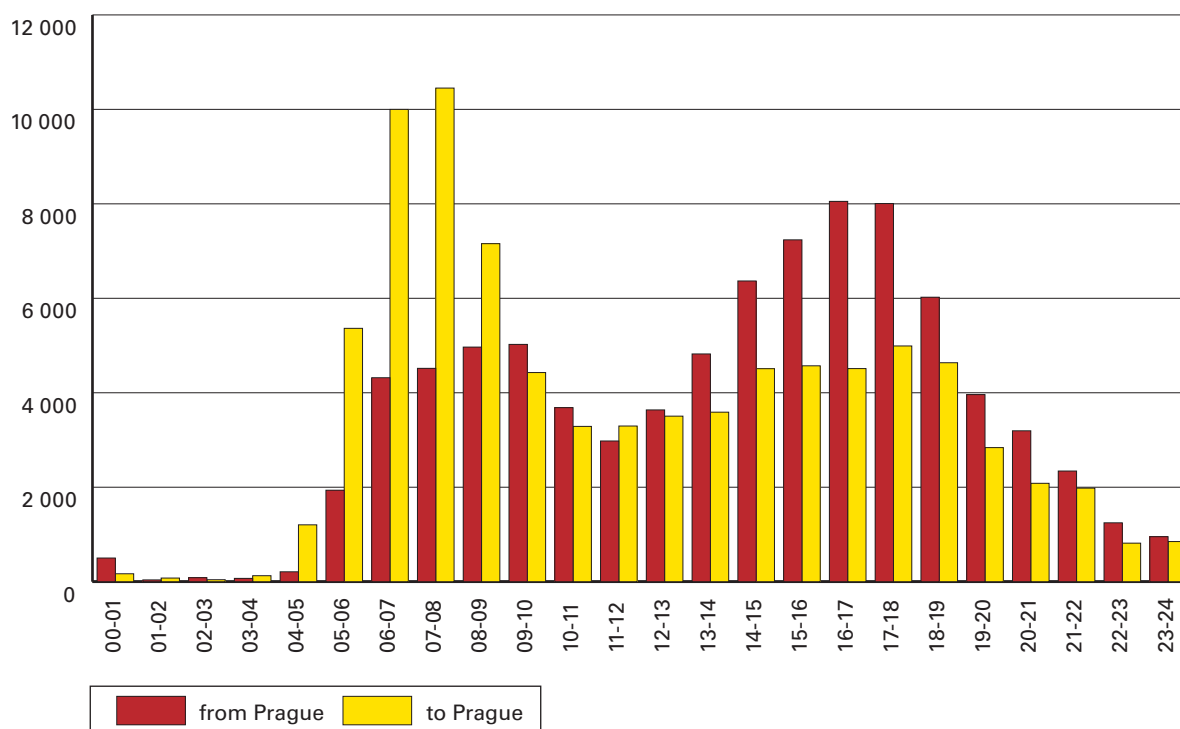


3.3.2 Coach services

Public coach services connecting Prague with other territories (except *PID*) and the rest of the nation are offered by many operators from all over the Czech Republic, some international lines are also offered by foreign operators. The border of Prague is crossed both ways by almost 2 700 coaches in 24 hours of an average workday, including almost 1 450 regional connections (except *PID*), over 1 000 long-distance connections and almost 250 international coach connections. 18.5 % of the total number of connections uses the most exposed profile, the *D1* motorway.

Almost 57 000 passengers crossed a Prague boundary either way in a connection of a regular long-distance or regional coach transport (except *PID* connections) on a workday in 2007. The most heavily loaded profile on the city border is the *D1* motorway section counting almost 10 000 persons in either direction daily in almost 500 connections of regular coach transportation (except *PID* and tour operations).

Daily variation in regular coach transport (except *PID*) on Prague borders in 2007
number of persons, workday 0–24 hrs



The *Florenc* terminal coach station for regular outbound coach transportation (*ÚAN Florenc*) is long time the most heavily utilized terminal.

Development of selected characteristics of the *Florenc* coach terminal, 2003 – 2007

	2003	2004	2005	2006	2007
Annual number of connections	230 000	220 000	220 000	210 000	200 000
Connections per an average workday – total	700	660	670	650	620
International connections per an average workday	110	150	140	140	140
Number of operators	100	95	90	90	90

More connections are dispatched and terminated at coach terminals *Černý Most*, *Dejvická*, *Hradčanská*, *Nádraží Holešovice*, *Smíchovské nádraží*, *Na Knížecí*, *Roztyly* and *Zličín*.



A public coach at the Na Knížecí coach terminal



A public line coach on the Ke Štvanici street

4.1 Telematics in traffic

The recent period of approximately 15 years saw an outstanding growth in volumes of car traffic, and simultaneously a substantial development in technologies that are able to help control the traffic better, collect various data on it, plan its future evolution as well as provide quality information to the traffic participants concerning live condition over the road network. Telematics in traffic integrates information and telecommunication technologies with transportation engineering in a manner to optimise performance, enhance the traffic safety and improve the quality of transport for the current infrastructure, often already filled to capacity. Additionally to road traffic, the transportation telematics gets increasingly utilized in information and monitoring systems of public transportation.

“Principles for the development of telematics in traffic for the Capital of Prague”, approved in 2002, define 11 areas to gradually develop telematics in Prague:

- Area 1: Road traffic control
- Area 2: Information for traffic and travel
- Area 3: Parking systems
- Area 4: Public transport
- Area 5: Systems of supervision and warning
- Area 6: Safety and rescue systems
- Area 7: Electronic payments
- Area 8: Vehicle systems
- Area 9: Haulage
- Area 10: Data collection and management
- Area 11: Traffic infrastructure administration

Concerning 2007, key activities were focused on areas 1, 2, 3 and 10.

4.2 Construction and renovation of traffic signals

In 2007, work went on to maintain, renew and develop the system of traffic signal devices (TSD), based on the conditions set in the tender in 2006. The winner company, *Eltodo DS, s. r. o.* with its subcontractors *SBH, s. r. o.* and *AŽD Praha, s. r. o.*, are to make sure the number of TSDs in the city grows from about 500 to 700 before 2015. The contractor will also complete the system of local traffic control centres (*ODŘÚ*) and coordination cables on the territory of the Capital of Prague in the following years, complying with the new concept of division of traffic areas approved in 2007.

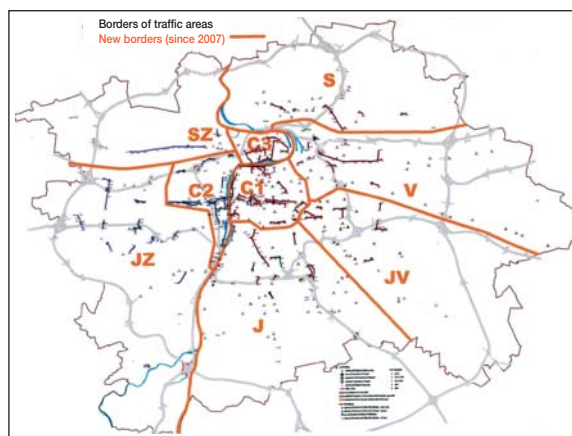
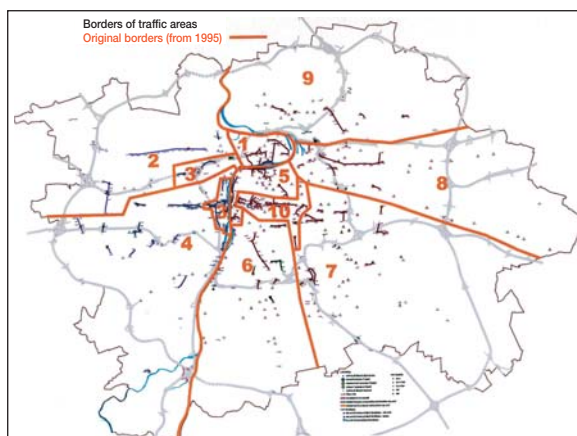
Following twelve years of development of the traffic control system in Prague, the division of the city has been optimised into new traffic control areas in line with new technologies implemented in junctions (controllers), areas (traffic control centres) and communication networking. Currently, Prague is partitioned in nine traffic areas (formerly ten) with partially re-divided borders and re-labelled with cardinal points. The inner city having the largest number of TSDs has been split up in three areas.



TSD 0.615 Přátelství – New square



TSD 8.673 Sokolovská – Za Invalidovnou



Original (from 1995) and redivided borders of traffic areas (since 2007) in the Capital of Prague

The so far intended ODŘÚ local control centres from where junctions are to be connected to the principal traffic control centre (HĐŘÚ – Hlavní dopravní řídící ústředna) are planned by the new concept inside or close to the Metro stations. In that manner, the cable links of TSDs and control centres will be able to utilize the Metro tunnels.

The total of 504 TSDs were in service in the territory of the Capital of Prague in the end of 2007. 13 TSDs were installed, of which the most important three TSDs are on the extended section of the Rohanské embankment, the crossroads of Bělohorská and Patočkova as well as on the New square at Uhřetěves. The most important renovation of TSDs were made on both ends of the Štefánikův bridge rebuilt last year and at the Palackého square where a large redevelopment of the whole crossroads took place. A simple replacement of controllers was done with 23 TSDs.

The total of 78 signalled autonomous pedestrian crosswalks were in the Capital in the end of 2007. Autonomous crosswalks were implemented at the Palackého náměstí tram stop and the crossing over the Korunní street close to the school at the Sázavská street. Acoustic signal devices for the blind are implemented at 362 crossroads.

The tramway network is equipped with 208 TSDs. Tram priority operates on 109 TSDs (52.4 %) including the 50 TSDs (24 %) with an absolute priority. As many as 53 TSDs are also available for PT buses to get priority. The number of 218 TSDs were connected to the HĐŘÚ principal control via single ODŘÚ local controls in the end of 2007.



TSD 2.048 Korunní – Sázavská

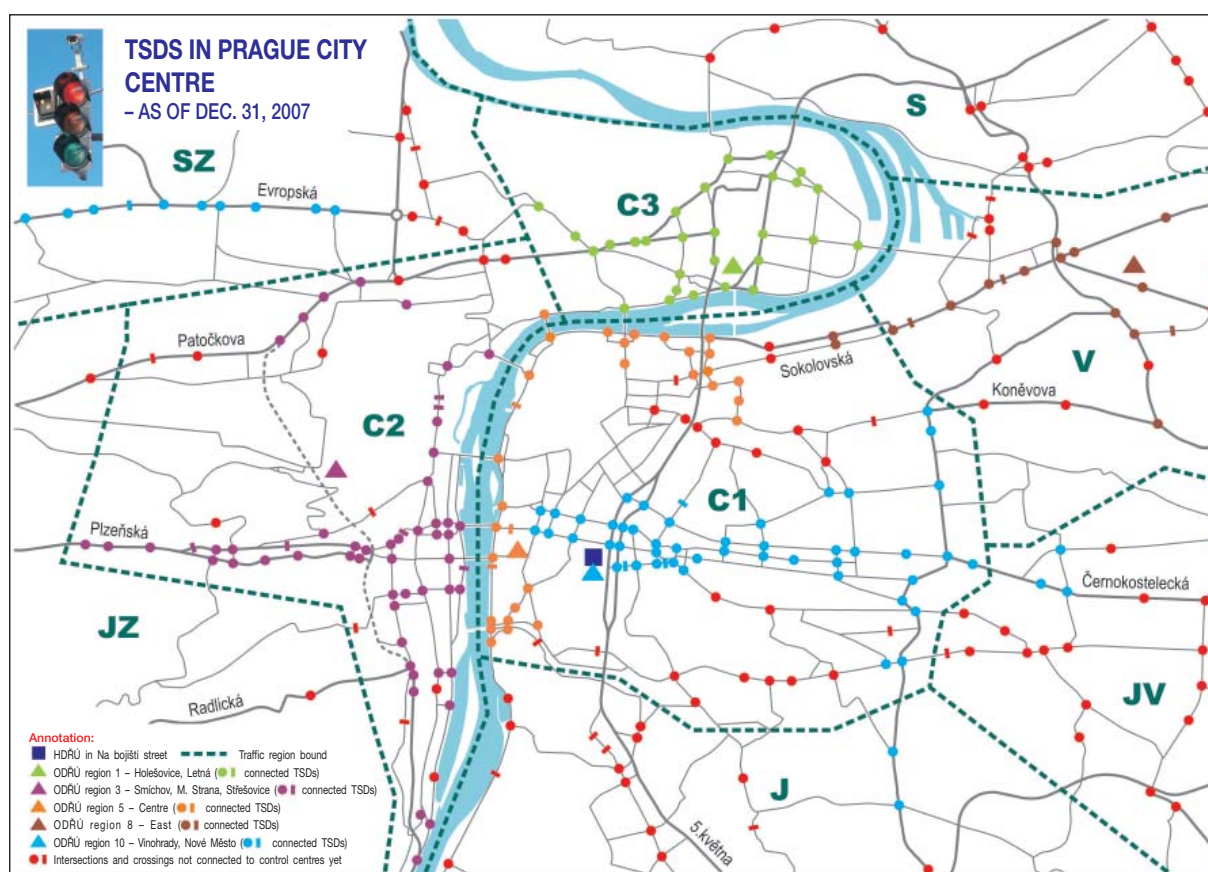
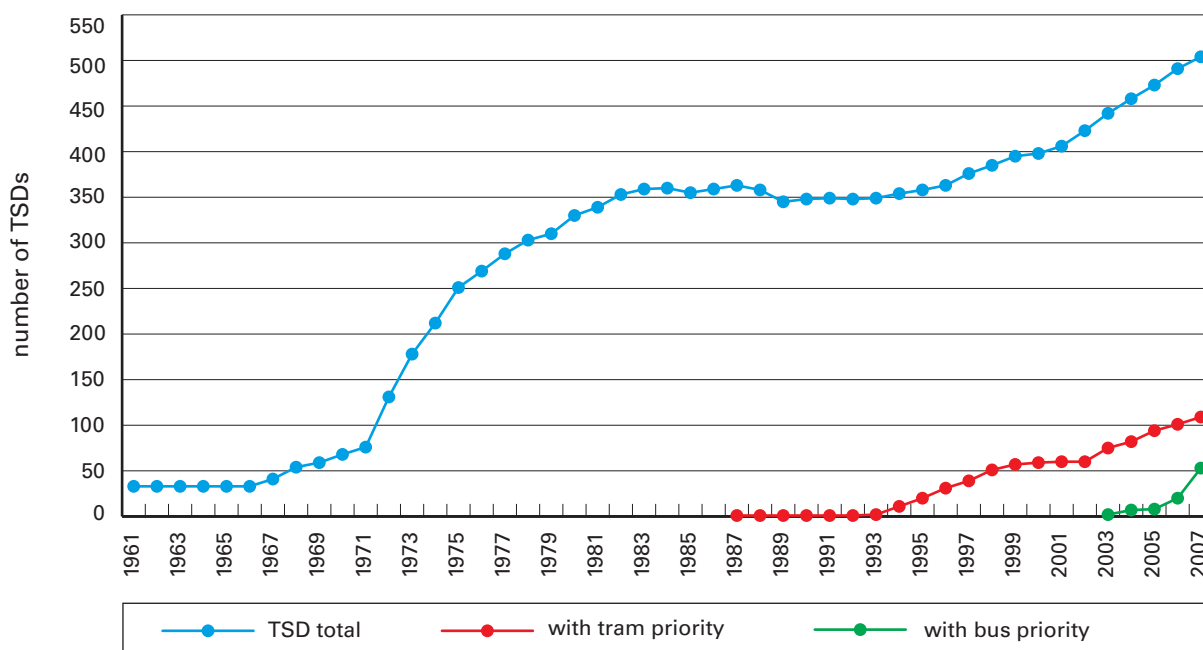


TSD 7.002 Kapitána Jaroše embakment – Štefánikův bridge

Basic data on TSDs, 1961 – 2007

Year	1961	1971	1981	1990	1995	2000	2005	2006	2007
TSD total (controllers counted from 2005)	33	76	339	348	358	398	473	491	504
including pedestrian crosswalks	-	9	37	45	46	57	72	76	78
with tramway priority	-	-	-	1	20	59	94	101	109
with bus priority	-	-	-	-	-	-	8	20	53

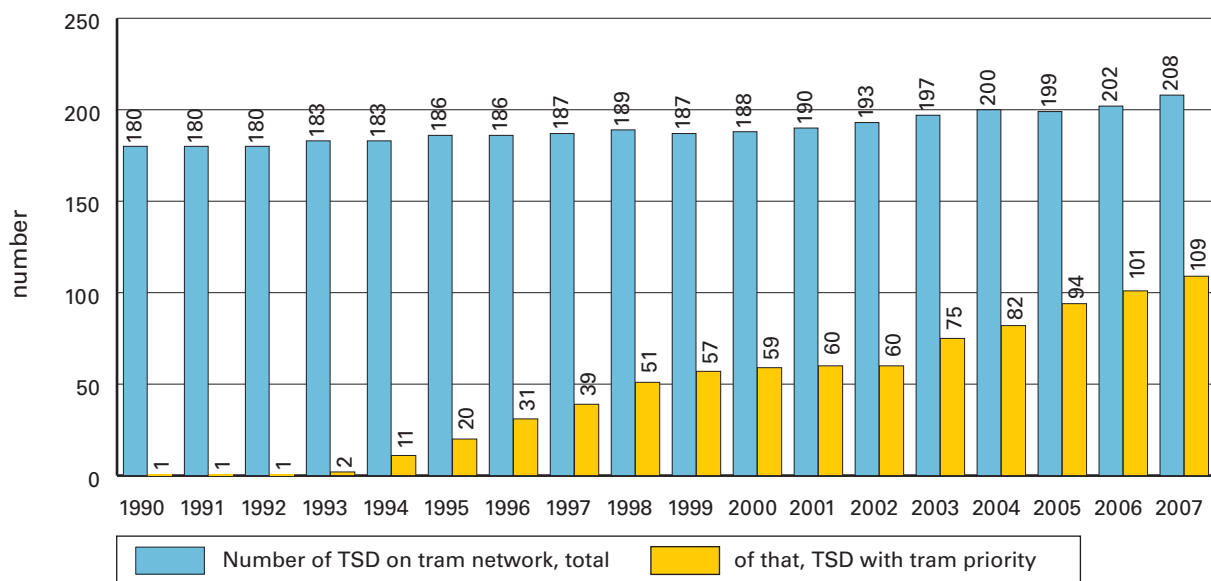
TSDs in the Capital of Prague, 1961 – 2007



4.3 TSD priority for public transport vehicles

New and renovated TSDs are equipped with devices that offer both dynamic control on demand from vehicles and pedestrians as well as priority for the public transport vehicles (PT). PT vehicles then may take preference and have the Go signal prolonged in real time in keeping with their requirements at the moment so as to go through the TSD-controlled crossroads with minimum or no delays.

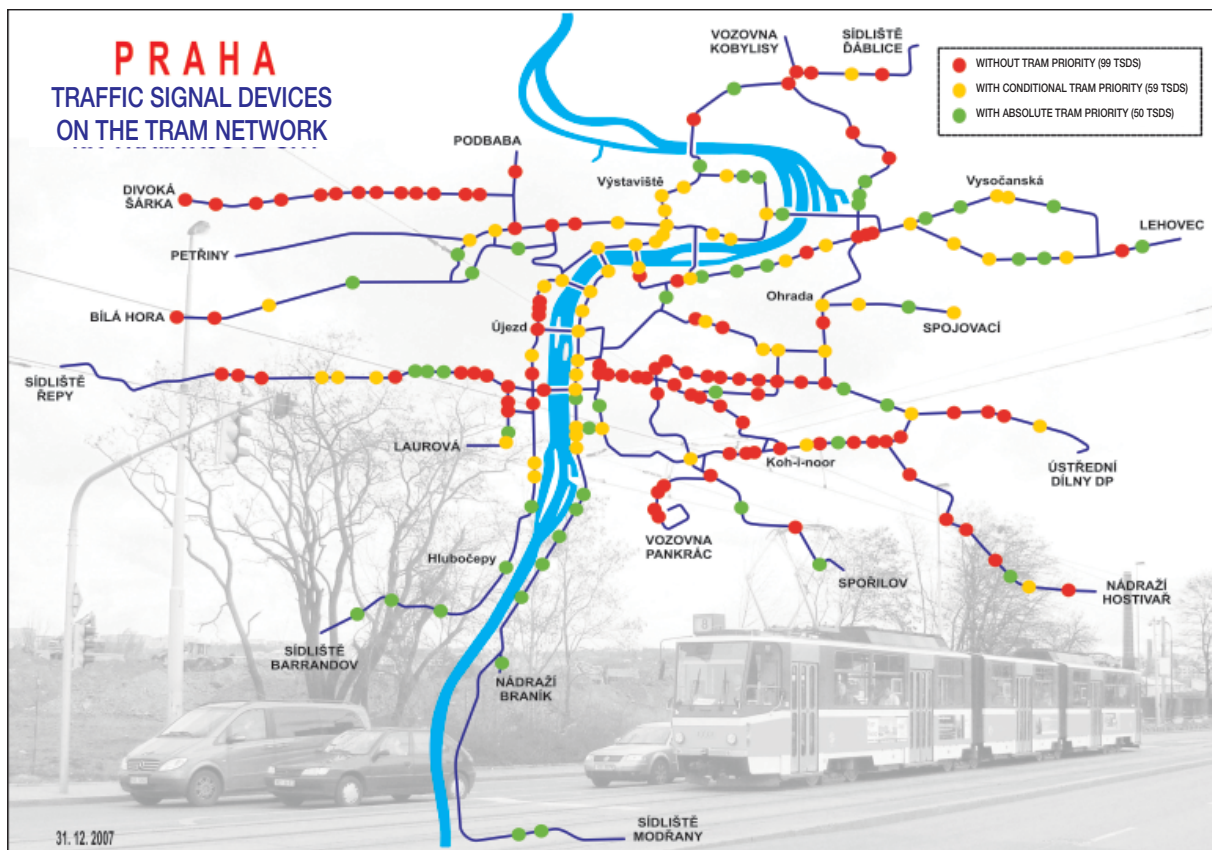
Traffic signal devices (TSD) on the tramway network, 1990 – 2007



The number of TSDs with **tram priority** grew by additional 7 locations during 2007. The eighth crossroads that entered statistics is the 2.021b Výtoň crossroads (*Rašínovo embankment – Vnislavova*) which so far has been listed together with the 2.021a Výtoň crossroads (*Rašínovo embankment – Svobodova*).

5 new TSDs appeared on the tramway network with simultaneously introduced priority (an absolute priority in four TSDs). Priority for trams started to apply also on two older crossroads (0.391 Švehlova – Pražská and 1.003 Revoluční – Řásnovka).

The tramway network was controlled with 208 TSDs including 50 (i.e. 24 %) with an absolute priority and 59 TSDs with conditional priority in the end of 2007.





TSD 6.144 Bělohorská – Patočkova with tram presignalling



TSD 7.135 Bubenské embankment – Argentinská

A test run of **bus priority** was launched on the first two crossroads as early as during 2003 under the Trendsetter project participated by the Capital of Prague. Adjustments were made to enable bus priority on the TSDs close to recently opened Metro C line segment toward *Kobylisy* and *Ládví* in 2004. The number of TSDs with bus priority grew by twelve more in 2006, especially close to the *Vysočanská* street related to the construction of another segment of the Metro C line and 27 more TSDs were added with an active detection for bus priority in 2007. The total of TSDs with an active detection of buses was 46, with a passive detection was 7 TSDs as of 31. 12. 2007.

The bus priority active detection system operates on radio communication of the vehicle with the TSD controller. An infra-transmitter placed at an adequate offset from the stop line is used to spot vehicles approaching the crossroads. A device inside the vehicle makes also possible to link the system with the current timetable of the line in order to enable the controller to award priority at the crossroads first to the connections that need it the most due to a delay. If a discrepancy from the timetable is found out, the controller receives back an appropriate requirement for priority which is categorised in three degrees from low to high.



PT buses at the TSD 8.242 Střelnická – Klapkova



Line 177 at the TSD 0.391 Švehlova – Pražská

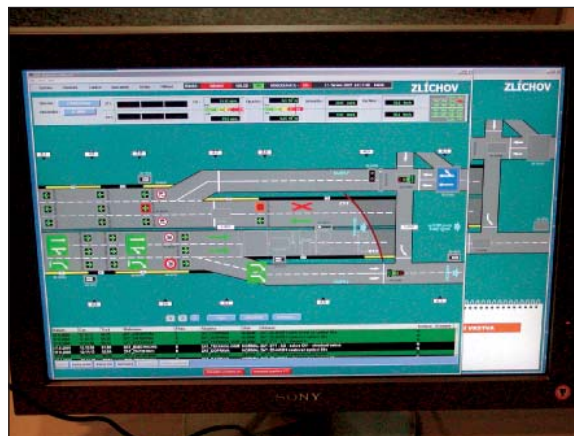
4.4 Control centres

The expanding and updating of the “System of control and regulation of the urban road traffic” in keeping with the approved principles continued, in 2007, primarily with the afore mentioned conceptual re-adjustment of traffic areal partitioning in the Capital of Prague. Additionally, a tender was held for a contractor to upgrade the Principal traffic control centre Prague (*Hlavní dopravní řídící ústředna – HDŘÚ Praha*) based at the *Na bojišti* street. Work started in order to provide a connection in future between this centre and the centre of the Road and Motorway Directorate (*Ředitelství silnic a dálnic*) where information is to be collected concerning traffic on the gradually built outer Prague Ring Road (*Pražský okruh*).

It is The Technical Administration of Roads of the City of Prague (*Technická správa komunikací hl. m. Prahy*) that is responsible for maintaining the central traffic control system in the Capital. The *HDŘÚ* control centre is installed at the Public Transport Central Control (*Centrální dispečink MHD*) building at the *Na bojišti* street, Praha 2. It is operated by the Police of the Czech Republic, specifically the Prague Constabulary (*Správa hl. m. Prahy*). Under the traffic control system, the site was connected to 218 TSDs via five local controls (*ODŘÚ*) as of 31. 12. 2007. The controllers were linked to the *VRS 2100*, *MIGRA* and *ADT* systems in individual areas.



The HDŘÚ Praha control room at the Na bojišti street



The tunnel Zlíchov as represented on the display at HDŘÚ Praha

The re-adjustment in the Prague traffic areas of real-time TSD connection to control sites will manifest only in future years. For that reason individual crossroads are linked to *ODŘÚ* controls belonging to the former 10 traffic areas. In the north, the *VRS 2100* system connects three areas. Area 1 – *Letná, Holešovice* (re-labelled as C3) operates 27 TSDs currently linked to the *HDŘÚ* control, other 30 TSDs are linked to the Area 5 – Right Bank (re-labelled C1) control and the Area 8 – *Vysočany* (re-labelled V) control operates 28 TSDs.

The *MIGRA* system controls the Area 3 – *Smíchov, Malá Strana, Střešovice* (re-labelled C2) having connected 61 TSDs. Basic features of the system are analogous to the *VRS 2100* system apart from the *MIGRA* extension, the *MOTION* system which exercises control on adaptive principles. The system reads data from detectors and computes optimum parameters for cycle lengths, green light offset on next junctions and the green light values. It makes no selection then, it tries and optimises the control by means of parameter change.

The *ADT* system control computer managed 53 TSDs in Area 10 – *Vinohrady, Vršovice, Nové Město* (re-labelled C1) in the end of 2007. The system also processes 19 more TSDs on the *Evropská* street (re-labelled SZ). The *ADT* system is the oldest one in Prague for traffic control, it was in service as early as 1980s.

4.5 TV monitoring systems (TVD)

Three TV monitoring system were in operation in the Capital of Prague in the end of 2007. The Prague Road Maintenance (*TSK hl. m. Prahy*) operates a *TVD* system supervising chiefly traffic. The **TVD-TSK system** centre is found at the Principal traffic control at the *Na bojišti* street, the main users being the *HDŘÚ* operators. The *HDŘÚ Praha* worksite can manipulate with the cameras (turn, zoom) as needed to supervise traffic.

All the cameras of the *TVD* system of *TSK hl. m. Prahy* are also available to the Mobility Information Centre (*Dopravní informační centrum – DIC Praha*) operators that currently use the cameras to monitor mainly the degrees of traffic load on approximately 90 sections of Prague road network. Additionally, the dispatchers of the Public Transit HQ (*GŘ DP*) can passively use the *TSK* cameras as they are the supreme supervising body over the public transport traffic.

The *TVD TSK hl. m. Prahy* system had 225 cameras in the end of 2007, far most of them being rotary cameras. Almost half of the number are installed in Prague road tunnels. More *TSK* cameras are distributed rather unequally across the city territory, mostly having been implemented simultaneously with the construction or redevelopment of roads or TSD facilities.



The TVD system panel at HDŘÚ Praha



A TVD camera at the Rumunská – Legerova crossroads

Another TV system in the city is the **Public Transit (DP hl. m. Prahy) system** that totals approximately 600 cameras, especially inside the Metro facilities and vestibules. These cameras cannot be used, apart from exceptions, to monitor the traffic on roads.

The two previous TV supervision options are supplemented in Prague with the **Security TV system (Bezpečnostní kamerový systém – BKS)** with its approximately 400 cameras monitoring mostly the security in the city. These cameras, rotary in 99 %, work in high definition so as to be able to help in personal identification.

In spite of all these systems being developed independently, there is already a base that integrates them in a single system termed the **Municipal Camera System (Městský kamerový systém – MKS)**. All the BKS system cameras were integrated in it as well as additional 64 cameras of the TSK hl. m. Prahy system and 64 cameras of the DP Praha, a. s., system in 2007. The MKS project, jointly funded by EU in the framework of the SPD 2 project, aims primarily at increasing safety, enhancing smooth traffic flow, decrease negative environmental impacts by the road traffic as well as the possibility to improve co-ordination among components of the Integrated Rescue System.

4.6 Variable information signs (VIS)

There are 22 variable information signs (VIS) on the roads of the city which inform drivers in three-line texts of key current changes in traffic in the neighbourhood (congestions, degrees of traffic, accidents, limited traffic in tunnels etc.).



VIS on the Patočkova street (to the centre)



VIS on the Karmelitská street considered for dismantling

In a tender being prepared to upgrade VISes and provide additional ones, 4 VISes are considered for cancellation, 18 VISes for upgrade and 43 more VISes to be newly implemented. The aim in view is to have 136 VISes on the city territory and additional 31 VISes outside on the roads that affect the traffic in the city according to the “Distribution of VISes on the territory of the Capital of Prague: a study”.

4.7 Speed measurement and traffic light violation recording

Section speed measurement of vehicles by means of video cameras in the Unicom Velocity system was implemented as an effort to enhance traffic safety on the City Ring Road in recent years, first in the section *Zlíchov – Radlická* (*Dobříšská* street), in the *Mrázovka* tunnel and in the *Strahovský* tunnel (always in both directions).

The device consists of a pair of portals with cameras that take one picture of a vehicle entering and another when leaving the section. The average speed is calculated from distance covered, time data and the registration ID of the vehicle.

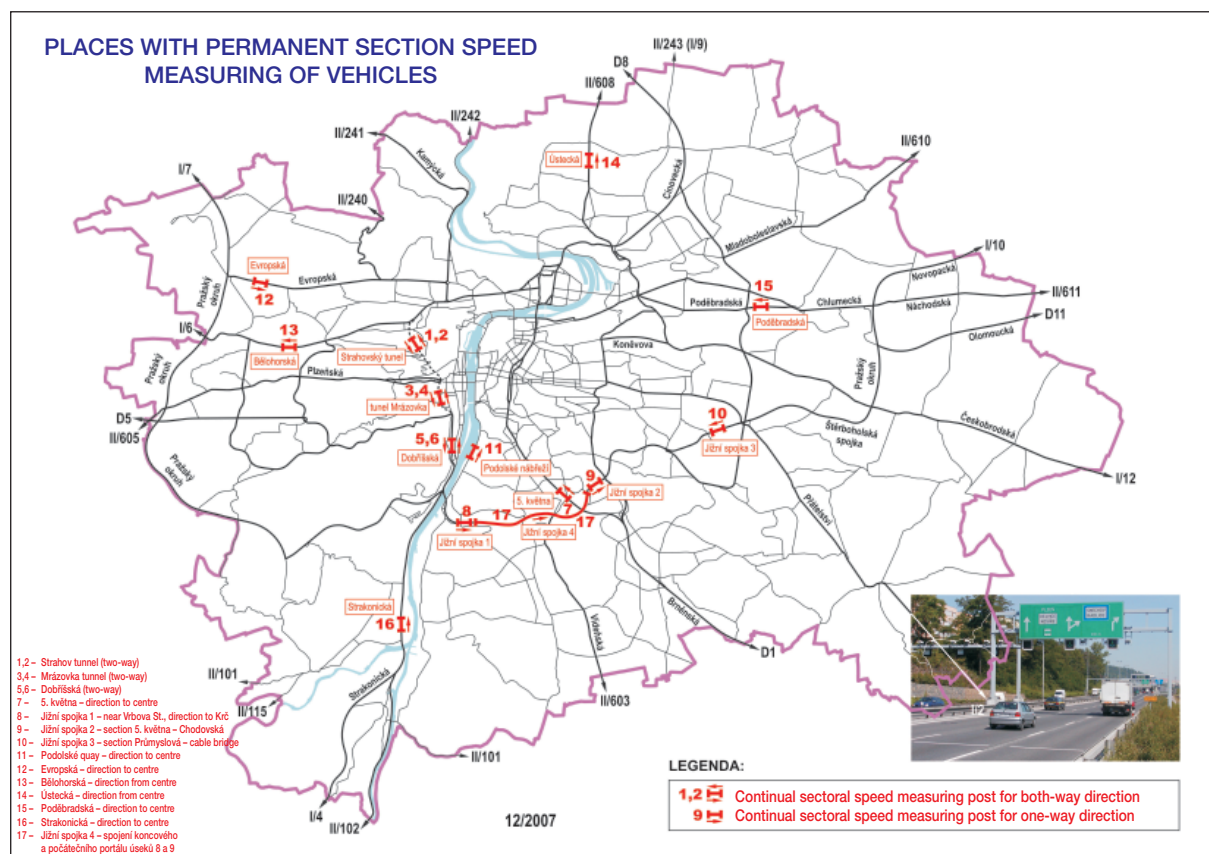


Section speed measurement on the Bělohorská street (from the centre)



Section speed measurement cameras on the City Ring Road

As the section speed measurement was positively evaluated, the Municipality of Prague provided for it to be expanded. Currently then, speeding drivers are monitored in this manner on 17 sections in Prague.



PRAHA

NETWORK OF TRUNK ROADS AND METRO (UNDERGROUND)

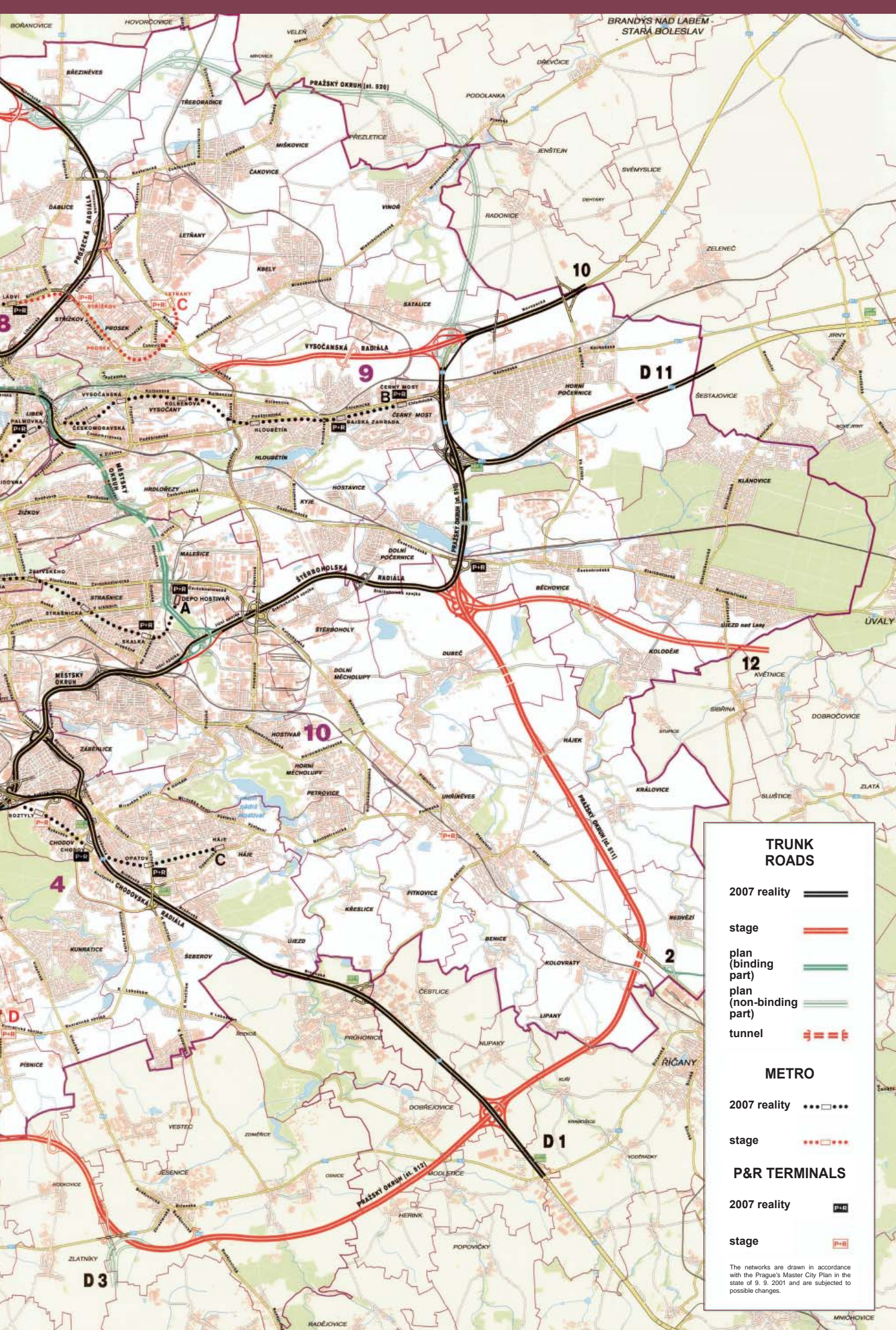


Technická správa komunikací hlavního města Prahy
Úsek dopravního inženýrství
Řásoňkova 8, 110 15 Praha 1
www.tskpraha.cz

PRAHA - orientační plán města. Vydala a zpracovala Kartografie Praha, a. s. v. roce 2004 jako účelový náklad pro Ústav dopravního inženýrství hlavního města Prahy. © Topografický podnik Kartografie Praha, a. s. (6/2004) © Odborný obsah TSK-ÚDI Praha. Jakákoliv mechanická, fotografická či elektronická reprodukce mapy nebo její části je povolena jen se souhlasem Kartografie Praha, a. s. a TSK-ÚDI.

1 : 90 000

0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 km



TRUNK ROADS

- 2007 reality
- stage
- plan (binding part)
- plan (non-binding part)
- tunnel

METRO

- 2007 reality
- stage

P&R TERMINALS

- 2007 reality
- stage

The networks are drawn in accordance with the Prague's Master City Plan in the state of 9. 9. 2001 and are subjected to possible changes.

Measured data from all the sections are displayed on the web pages www.praha-mesto.cz/doprava from as early as February, 2007, for anybody to find the number of violations and also a schematic drawing of the section including the cameras placement, shots taken out of the scene of the measurement and a simple map of the locality around.

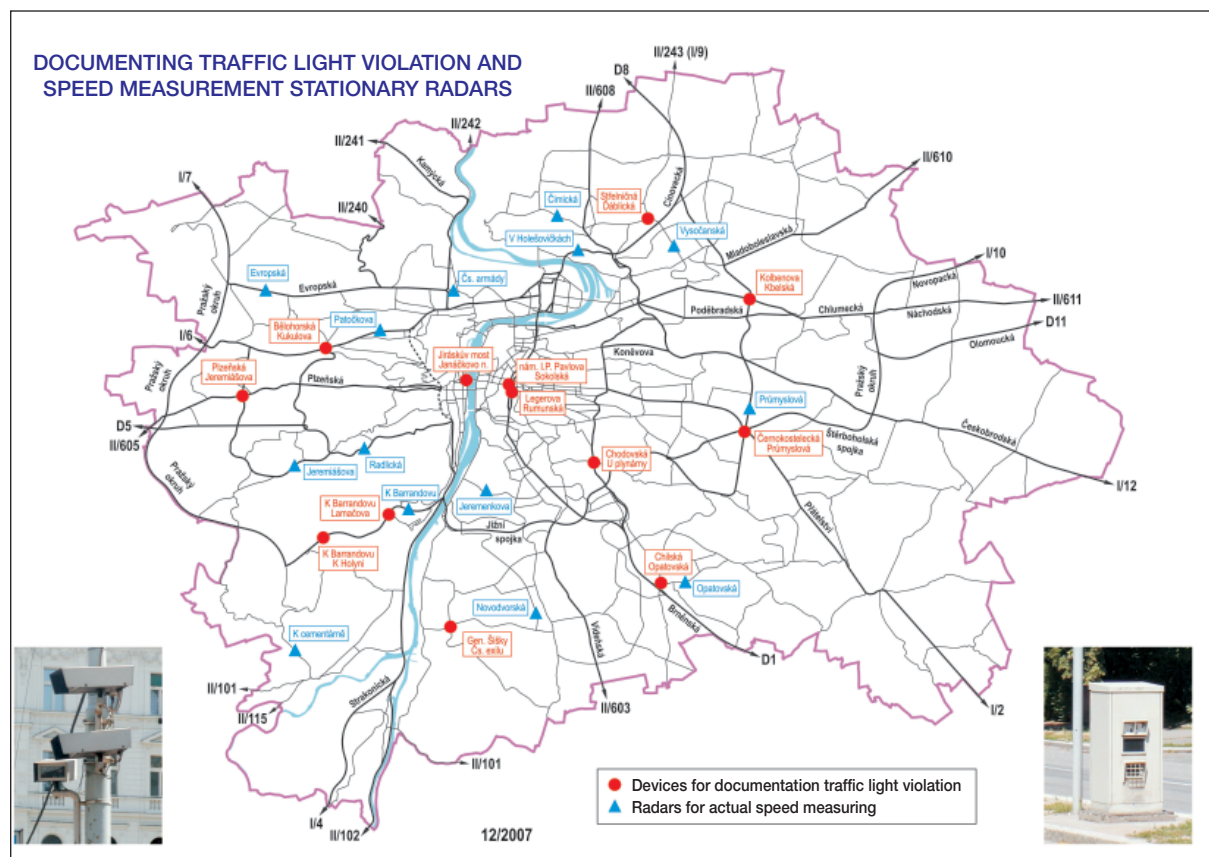
Providing drivers with this kind of information is very important since a general awareness of the system helps significantly trim the count of violations.

Other 14 devices for **permanent measuring of current travelling speed** of vehicles are distributed throughout the Prague road network.

Devices for **traffic light violation monitoring and recording** are distributed throughout the territory of the Capital on 13 crossroads as a transgression recording application.



Traffic lights violation monitoring at TSD 0.612a Černokostelecká – Průmyslová and at TSD 5.018 Jiráskův bridge – Janáčkovo embankment



4.8 Mobility Information Centre (DIC) Prague

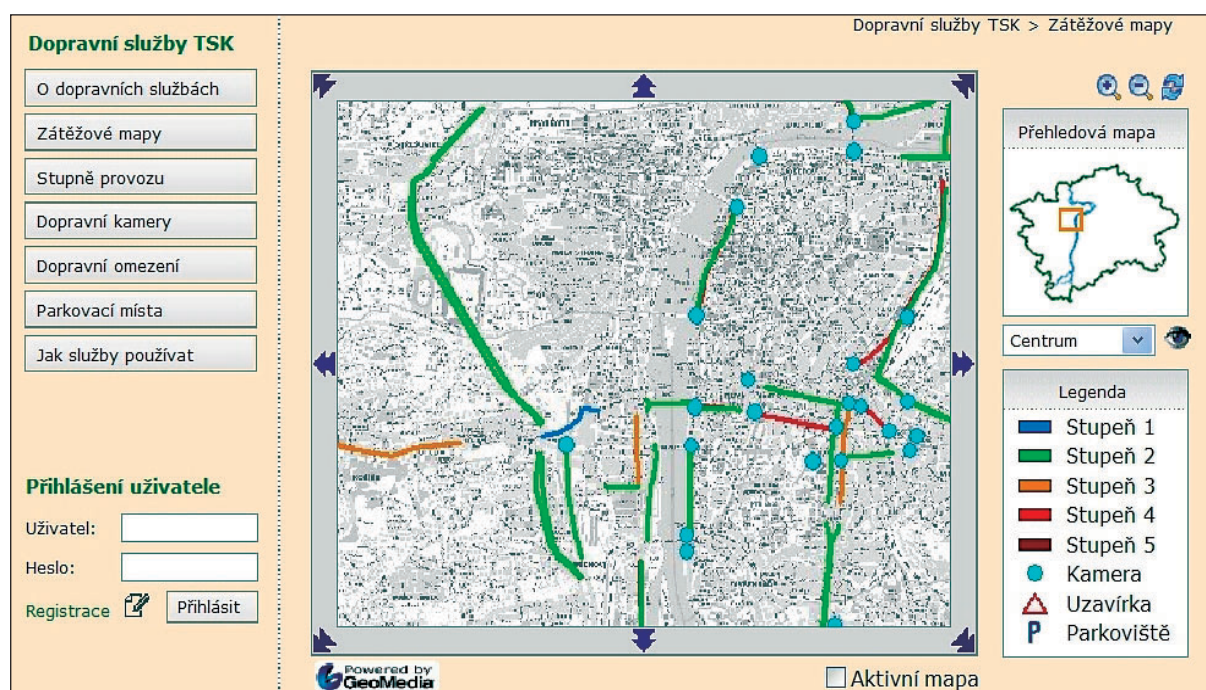
Mobility Information Centre (DIC) Prague housed inside the CD building in Prague at the *Na bojišti* street has been in operation (initially pilot run) since 1. 7. 2005. The *DIC Praha*, after its positive evaluation of the pilot run, has been in permanent operation since the beginning of 2006.

The Mobility Information Centre currently offers information services in monitoring and classifying traffic load, providing information on planned long-term closures in the road network and supplying outputs from municipal information databases to web pages, distributing them via SMS messages and WAP. The RDS-TMC (Radio Data System – Traffic Message Channel) system is the fourth service for the drivers by the *DIC Praha*. It is capable of displaying current traffic information in the navigation maps in vehicles and adjust the guidance accordingly. The message format is fully standardised in line with the ALERT C international standards (the broadcast is provided jointly with the Czech Radio 1, Radio Journal).

The *DIC Praha* offers current traffic information via WEB, WEB for PDA, WAP, SMS and MMS services. They are traffic density load maps, tables showing traffic in degrees, shots of selected traffic TV cameras, information on traffic restrictions (closures) as well as on vacant and reserved places in P+R parking yards.

The information is available at the www.doprava-praha.cz pages as well as at the www.tskpraha.cz site. Some of the data are also available to third parties due to contractual obligations of the administrator of the facility, The Technical Administration of Roads of the City of Prague (*TSK hl. m. Prahy*).

A great asset for expanding the possible data entry into the *DIC Praha* systems should be the system of anonymous monitoring of the traffic by means of mobile phones (CFCD). The technology was studied and examined in 2006. The system was evaluated as useful, especially for its potential application in the Travel time systems (monitoring duration of trips). In 2007, Prague saw a pilot run of the project of the system covering the space between the South Connection (*Jižní spojka*), the *5. května* street, the *Sokolská*, *Legerova* and *Průmyslová* streets. Its primary output was an on-line speed map of the monitored area which later is to make possible to establish current travel times at any given moment. The results of the pilot project will decide on further employment of the system.



A map showing current traffic in degrees at the www.doprava-praha.cz site (courtesy of DIC Praha)

NEW TRAFFIC ARRANGEMENTS

5

A rise in VKT and growing volumes of car traffic demand optimum use of the available traffic infrastructure. One of the tools is introducing efficient arrangements in transportation aiming at increasing safety and smooth traffic flow as well as, in line with local conditions, regulating traffic, solving parking problems and providing better conditions for PT, pedestrians and bikers.

The most important efforts in Prague city centre in 2007 were traffic adjustments around the *Republiky* square following the completion the *Palladium* commercial centre as well as new traffic arrangements around the *Strossmayerovo* square where a pedestrian precinct was set up and built. Minor arrangements were made at some service roads with calm traffic in the centre (e.g. the residential area marked out at the *Jalovcová* street).

A traffic arrangement change was also implemented in a greater Prague centre related to the completion of another stage of the *Rohanské* embankment construction as well as a renovation of the *Štefánikův* bridge. Traffic arrangements were also adjusted following the completion of the redevelopment of the *Libušská* street (restriction for vehicles over 3.5 t apart from resident traffic for businesses at the *Meteorologická* and *Libušská* streets).

Temporary modifications of traffic arrangements due to construction and redevelopments of traffic infrastructure in the Capital were still going on during 2007. Traffic restriction in front of the north entry to the *Strahovský* tunnel while building the *Malovanka* split-level junction as well as a large construction on the City Ring Road at the space of the projected *Špejchar* split-level junction substantially affected the smoothness of traffic along the roads at the whole of the north-west urban sector.

The “New Link” construction with its follow-up redevelopment of the *Hlavní nádraží* railway station demanded for the traffic restrictions at the *Bulhar* neighbourhood to continue. Local traffic restrictions inside the *Praha 9* were brought about by the *Vysočany* radial road construction and its connection to the *Kbelská* street.

More traffic arrangements substantially affecting the condition of traffic on roads of the Capital could be listed, e.g. the complete closure of the *Karlická* street, traffic regime adjustments on the *Vysočanská* and *Střelničná* streets related to the Metro C line construction, measures due to the *Svobodova – Na slupi* crossroads redevelopment as well as the *Palackého* and *Karlovo* squares, the operation on alternative halves of the *Chlumecká* street while building an underpass at the *Černý Most* neighbourhood and a shuttle traffic control at the *Komořanská* street due to the A 2 trunk sewage conduit.



Traffic restrictions while redeveloping the Na slupi street and the Palackého square

6.1 Traffic accidents

As many as 33 484 accidents (3 % less than in 2006) happened in Prague in 2007, 33 victims died (41 % less) and 2 275 victims were injured (5 % less). Pedestrians were involved in 656 accidents (1 % more) with 17 fatalities (32 % less) and 613 injured (3 % less). Pedestrians themselves were culpable in 311 accidents (5 % less) with 13 fatalities (8 % more) and 272 injured (9 % less). The dominant share in accidents was with the drivers (32 584 out of 33 484 accidents, i.e. 97 %).

The main causes of the drivers' accidents were reckless driving and failure to give way. The number of accidents with culprits intoxicated was 724 (30 % more).

The number of accidents due to speeding dropped from 85 in 2006 to 54 in 2007, i.e. by 36 %. The speeding accidents, however, make only very small share of the total accidents in Prague – mere 0.2 %.

Accidents, impact on health and main causes

Year	2005	2006	2007	diff. 07/06 (%)
Accidents	33 349	34 689	33 484	- 3
Fatal injuries	61	56	33	- 41
Serious injuries	393	357	352	- 1
Slight injuries	2 603	2047	1923	- 5
Accidents with injuries	2 506	2022	1943	- 4
Accidents without injuries	30 843	33 667	31 541	- 3
Driver culpable due to	32 494	33 759	32 584	- 3
speeding	140	85	54	- 36
overtaking	263	253	186	- 26
failure to give way	9 658	10 034	9819	- 2
reckless driving	19 329	20 961	20 677	- 1
Caused by road defects	81	167	115	- 31
Caused by pedestrians	352	328	311	- 5

General trend in 2007 accidents: a slight drop in the accident count comparing to the previous year, a significant drop in death casualty count, a mild drop in both serious and slight injury count.

Consideration of the long-term trends in traffic accidents leads to the conclusion that the 1960s to 1980s enjoyed a long-lasting, relatively favourable tendency in accident rate since the accident count kept in proportion to the VKT development and grew slower than the VKT parameter.

The overall trend in the development turned unfavourable in 1990s when accidents started to increase more than the VKT, making also the accident risk rate grow as expressed in the relative accident rate (accidents per one million VKT travelled).

Since 2001, the number of reported accidents has been going down in spite of ever growing volumes of car traffic, making the relative accident rate go down along with it (by 35 % in 2007 comparing to 2000).

The decrease in registered traffic accidents since 2001 was also affected by the regulation of the Road Traffic Act No. 361/2000 Coll. that reduces the obligation to report to the police, since January, 2001, only the accidents with either injuries or the obvious material damage in excess of CZK 20 000, while up to the end of 2000, obligatory was to report to the police the accidents with injuries or the obvious material damage over CZK 1 000. The Road Traffic Act No. 361/2000 Coll. amendment, in effect since July, 2006, has further limited the obligation to report to the police the accidents with injuries or the obvious material damage over CZK 50 000.

The all-Prague average was 4.8 reported accidents in 1 million of vehicle-kilometres covered in 2007.

A favourable trend in traffic safety is an ongoing significant decrease in fatal, severe as well as slight injuries in accidents in the last 7 years in spite of the urban car traffic continually growing.

The total number of injuries in accidents decreased to 2 308 injuries in 2007 from the earlier 3 861 injuries in 2000, i.e. by 40 %, while the car traffic grew by 26 % in the same period in Prague. The number of accident injuries in Prague in 2007 was the lowest one in the last 15 years.



A car accident on the Rašínovo embankment

Even more favourably compares the long-term development in injury count to the car traffic intensities. Comparing to 1990, the urban car traffic has increased almost three times (by 187 %) in the last 17 years, while the injury count in traffic accidents has decreased by 29 % (from 3 269 injuries in 1990 to 2 308 injuries in 2007), covering all types of injuries – fatal, serious and slight ones.

Traffic accidents, injuries and relative accident rate, 1961 – 2007

Year	Total accidents		Fatal injuries		Severe injuries		Slight injuries		Relative accident rate	% VKT
	count	%	count	%	count	%	count	%		
1961	5 495	30	63	69	580	157	2 361	84	7,3	31
1971	8 496	47	123	135	567	154	4 046	144	5,1	69
1981	13 064	72	81	89	401	109	2 572	92	7,1	76
1990	18 024	100	94	100	369	100	2 806	100	7,5	100
1995	33 898	188	123	131	679	184	4 044	144	7,9	178
2000	40 560	225	80	85	521	141	3 260	116	7,4	228
2005	33 349	185	61	65	393	107	2 603	93	5,1	273
2006	34 689	192	56	60	357	97	2 047	73	5,2	278
2007	33 484	186	33	35	352	95	1 923	69	4,8	287

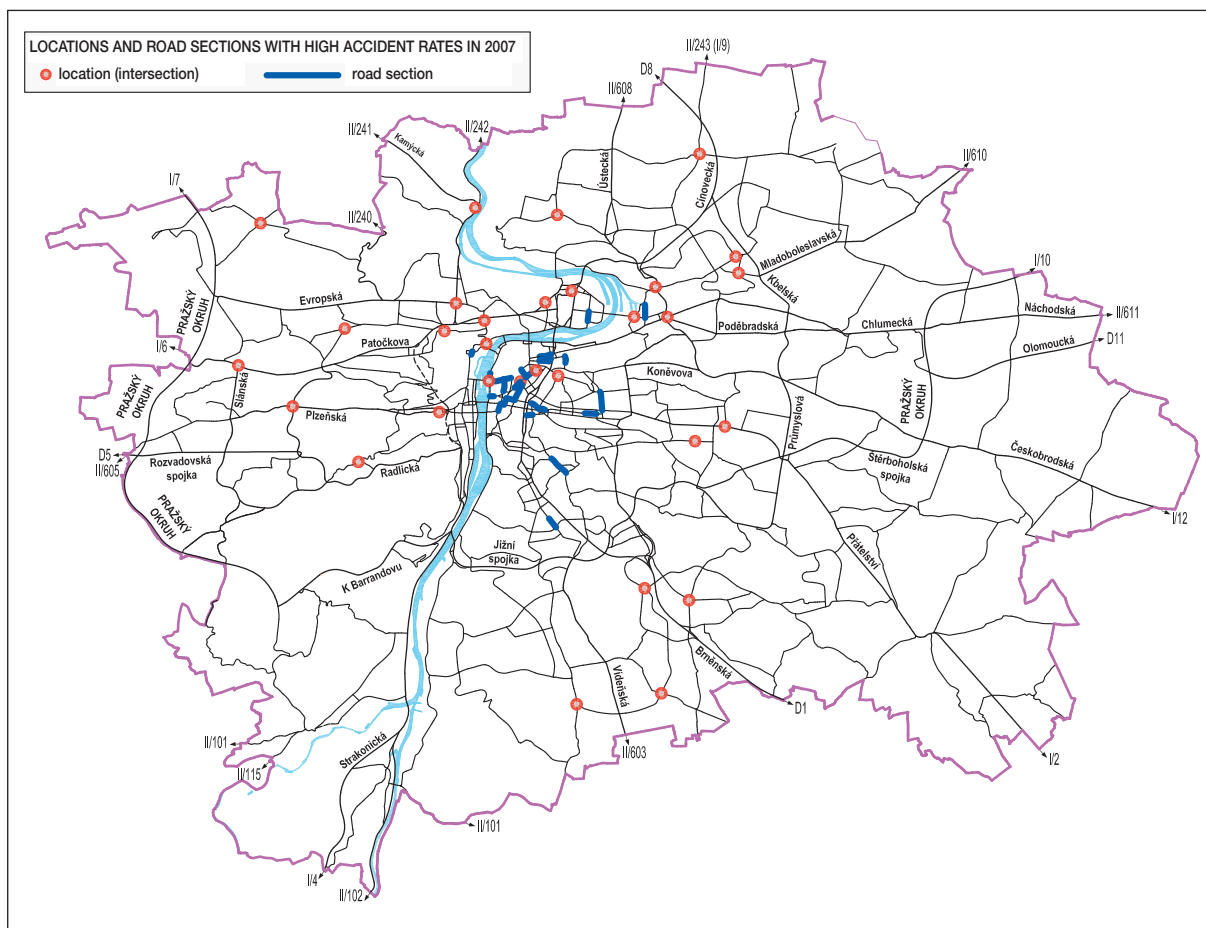
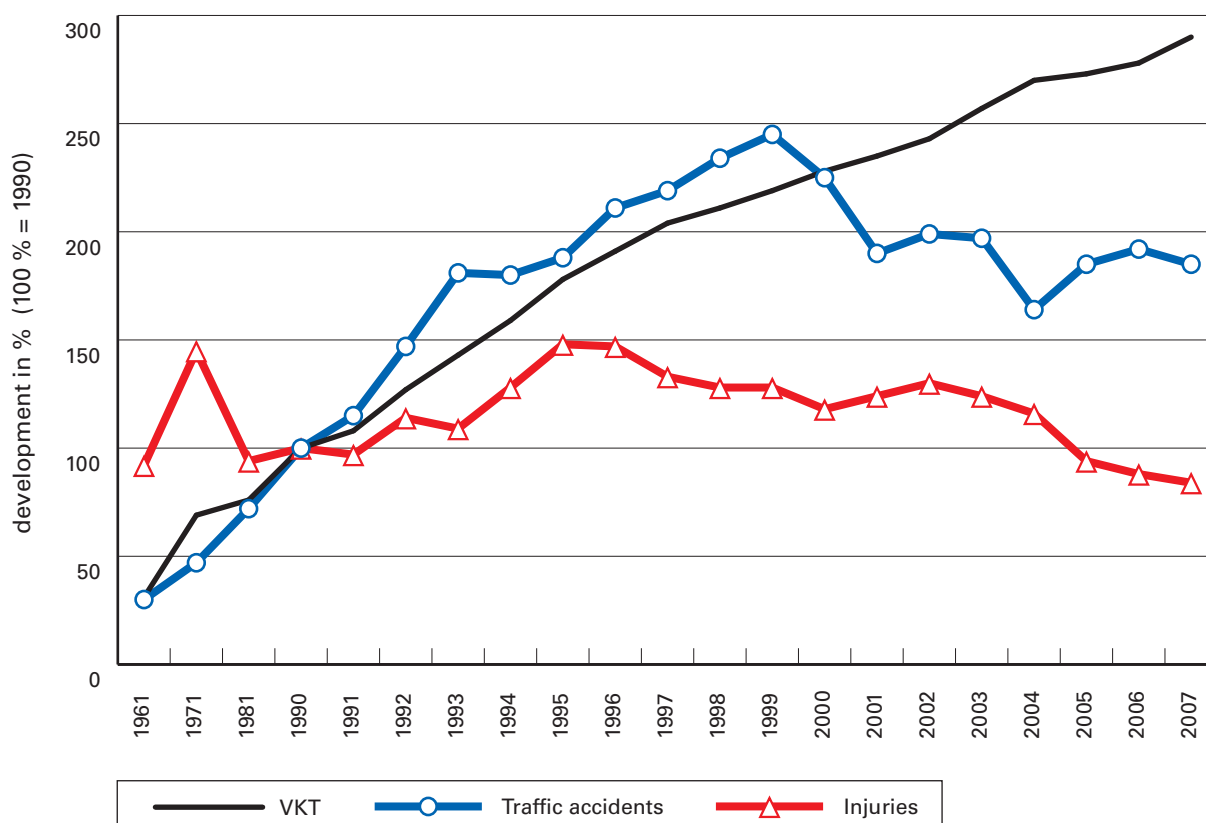
100 % = 1990

Relative accident rate = accident count per one million VKT (averages, all roads)

VKT = vehicle kilometres travelled, all roads

All roads, annual summaries

All roads, annual summaries



6.2 Traffic education

Many programmes were offered in traffic education of children in 2007, e.g. the systematic training on children's playgrounds programme ("DDH"), the starting biker programme (Youth Biker Traffic Contest), traffic-educational broadcasts for children and youth, interactive children's theatrical performances on traffic-educational topics and other events.

There were 9 permanent children's traffic playgrounds in service in the Capital of Prague in 2007. Training went on there in line with the thematic plan of traffic education focused primarily on 4th graders of the elementary school as they start biking in this age. Pupils of other grades of elementary schools or children from kindergartens may also take part at the *DDH* training provided there are vacancies. As many as 23 160 elementary school pupils took an organised training at Prague traffic playgrounds in 2007. Approximately 13 500 children took part in afternoon programmes.



Children on a traffic playground at the Karlov neighbourhood

The starting biker programme – Youth Biker Traffic Contest is announced by the Ministry of Transportation of the Czech Republic jointly with the Ministry of Education, Youth and Sports. It consists of four contests: Vehicles Regulation tests, driving practice through the city keeping the Regulations (traffic playgrounds are used for the contest in Prague), driving skills (driving among various obstacles) and First Aid knowledge. Basic rounds of the contest were participated by 4 420 pupils from 51 schools in 2007.



Tests on road traffic rules



Health studies

Another form of traffic accident prevention is a series of traffic-educational performances intended for children from kindergartens, elementary and secondary schools. 32 performances were given jointly with the International Student Theatre Europe and 20 interactive children's theatrical performances "A Fairytale Semaphore" and "Aunt Berta's Bike" was performed on the premises of the Police Museum.

A number of traffic safety efforts was held also for the grown-up road traffic participants in 2007 (spring and autumn driving skills contests, handicapped and hearing-impaired motorists' efforts, lectures and promotions at the AUTOPRAHA 2007 exhibition).

6.3 Measures to enhance road safety

The total of CZK 23.3 mil. was invested to implement Prague road safety-enhancing measures from the *BESIP* budget in 2007. The funds were primarily intended for traffic measures supporting enhanced protection and safety of pedestrians in road traffic.

Wide built-in speed humps for the total cost of CZK 3.2 mil. and assembled, added speed humps were installed in 52 locations for the cost of CZK 1.6 mil. in 2007.

Redevelopments of the *Hviezdoslavova – Michnova* and *Novodvorská – Chýnovská* junctions on a small roundabouts required construction costs of CZK 2.6 mil.

Installations of safety fences and railings were made as demanded by individual municipal quarters at 70 locations. Road mirrors were set up at 25 locations. Surface chipping was made at 10 locations with total costs reaching CZK 1.7 mil.

A “user-friendly” speed measuring device was put in the *Žernosecká* street in order to support respecting and keeping the speed limit in 2007.



A “user-friendly” speed measuring at the Ankarská street



In-pavement crosswalk lights at the Vozovna Střešovice PT stops

An important feature in enhancing pedestrian safety at crosswalks are added lights, installed at 26 locations with the cost of CZK 6.2 mil.

Other traffic safety measures at 80 locations (e.g. pedestrian crosswalk adjustments) required approx. CZK 11 mil. including CZK 7 mil. earmarked for traffic safety measures inside the *Praha 6* city district. There the road surfaces were dressed with the *Rocbinda* system, railings installed, crosswalks adjusted etc. at 7 crossroads.

Some tramway platforms were improved so as to enhance PT passenger safety. The platforms were widened, equipped with shelters, protection railings and adjustments for the needs of mobility and/or orientation challenged individuals.



Adjusted and widened tramway stops Říčanova and Sídlíště Červený Vrch

TRAFFIC AT A STANDSTILL

7

7.1 The inner city

The inner city consists especially of the Prague Conservation Area (PCA), covering the whole of *Praha 1* city district, a large portion of *Praha 2*, and minor portions of *Praha 4*, *5*, *6* and *7*. The PCA covers 8.7 km² which is 1.7 % of the total urban ground.

The PCA utilization is varied and attractive. Apart from approximately 50 000 residents, over 200 000 job opportunities concentrates there and the PCA's great cultural and historical potential attracts large numbers of occasional visitors inside its territory.

Roughly the following numbers of parking and lay-by places were available for zones of paid parking vehicles of residents and motorised visitors of PCA in the end of 2007:

- on the streets 16 150 places
- inside yards 2 850 places
- public car parks 3 700 places
- total 22 700 places

The following table lists the car parks available to the public and their capacities inside or at the border of PCA.

City district	Public car park name and address	Places
<i>Praha 1</i>	Palladium (<i>nám. Republiky</i>)	900
	Rudolfinum [Parking Centre] (<i>nám. J. Palacha</i>)	450
	InterContinental (<i>nám. Curieových 43/5</i>)	200
	The Kotva dept. store (entry <i>Králodvorská st.</i>)	300
	Renaissance (<i>V celnici 7</i>)	90
	Millenium Plaza (<i>V celnici 10</i>)	480
	Wilsonova (<i>Hlavní nádraží</i>)	310
	Opletalova (<i>Opletalova 9</i>)	90
	Slovan (<i>Wilsonova 327/77</i>)	520
	Národní divadlo theatre (<i>Ostrovní 1</i>)	210
<i>Praha 2</i>	Václavské garáže (<i>Václavská 18</i>)	150
<i>Praha 4</i>	Congress Centre (<i>5. května 65/1640</i>)	1 090 + 5 BUS
	Corinthia Towers (<i>Kongresová 1</i>)	150 + 5 BUS
<i>Praha 5</i>	Obchodní centrum (<i>Kartouzská st.</i>)	2 000
	Anděl City (entry <i>Radlická & Stroupežnického sts.</i>)	550
	Zlatý Anděl (<i>Bozděchova st.</i>)	500
<i>Praha 8</i>	Hilton (<i>Pobřežní 1</i>)	300
Total		8 290 + 10 BUS

The capacities do not include the zones of paid parking places in private car parks. The total places in car parks unavailable to the general public is not known. A mild increase in private zones of paid parking places in the inner city can be presumed due to the changes in utilization of many facilities accompanied with creating new parking places inside such premises in the inner city.

Zones of paid parking (ZPP)

Legal basis for establishing and operating zones of paid parking

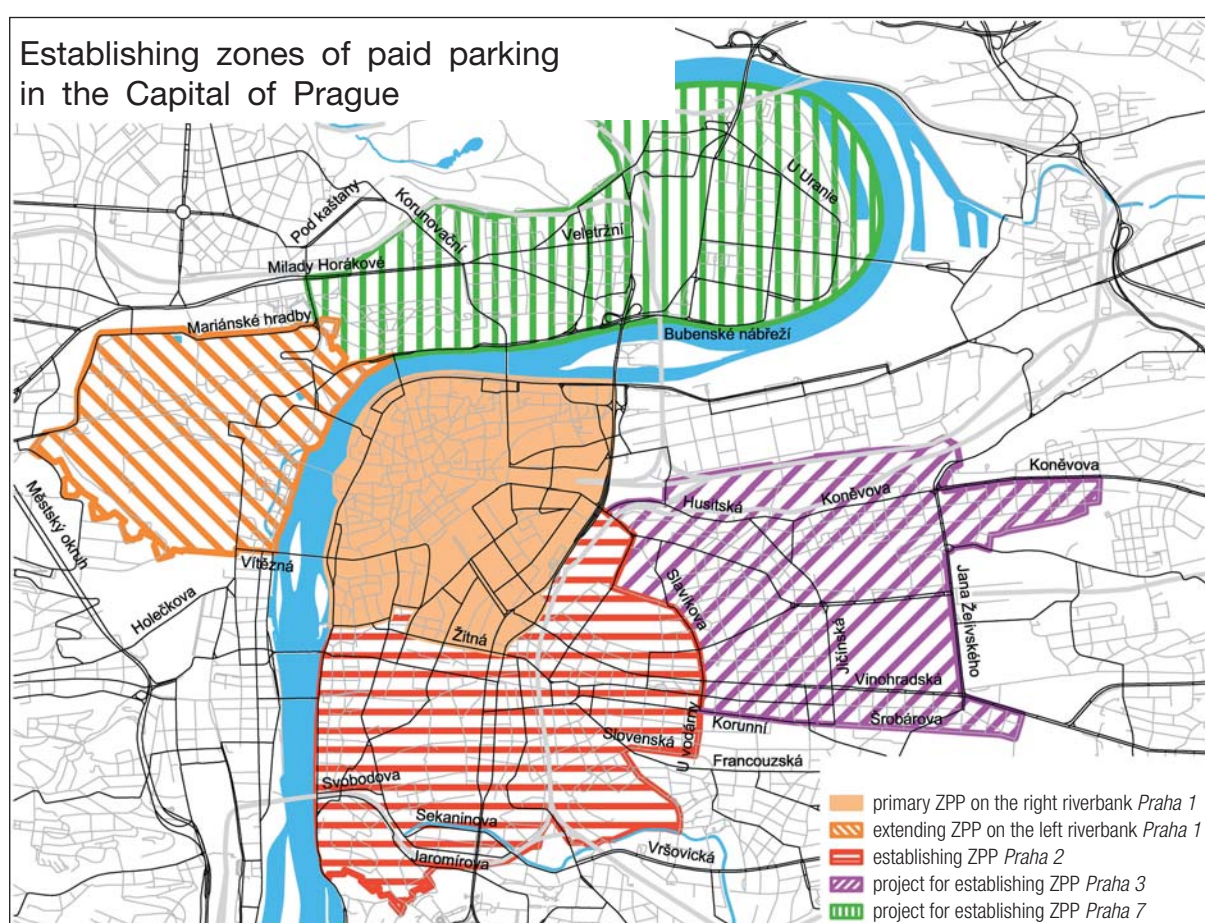
Zones of paid parking (ZPP) on local roads are established according to § 23 of the Surface Road Act No. 13/1997 Coll. in later regulations, stipulating that the municipality may delimit, in a generally binding municipal regulation, the areas inside the municipality where local roads or their specified sections can be used for a price agreed in keeping with pricing regulations

- for a road motor vehicle to stand inside the municipality for a limited period of time with maximum of 24 hours;
- for parking of a road motor vehicle of a legal or physical entity pursuing business in keeping with a special legal regulation with domicile or establishment inside the delimited municipal area, or for parking of a road motor vehicle of a physical person with a permanent residence or owning a real estate inside the delimited municipal area.

Establishing zones of paid parking in the Capital of Prague is determined by a “Directive of the Capital of Prague”. The ZPP promoter is the Capital of Prague that delegates the implementation and operation of the ZPP to an administrator selected in a public tender. The administrator operates the ZPP on behalf of the promoter.

In 2007, the *Praha 1* zone of paid parking was extended by a left riverbank portion of the city district. The ZPP was also established on the whole area of the *Praha 2* city district.

The reason of establishing more ZPPs in a greater inner city is the need to regulate the ever growing demand for parking places in a condition of a permanent shortage of parking places on local roads and spaces available to the general public.



Operating ZPP

Basic user groups for parking in ZPP on the territory delimited by the Capital of Prague are –

- residents (physical persons that have permanent residence inside the delimited municipal territory),
- proprietors (legal or physical entities pursuing business in keeping with the Business Act that have domicile or establishment inside the delimited municipal area, or persons owing a real estate inside the delimited municipal area),
- visitors, other users.

Parking cards are issued for residents' and proprietors' vehicles. The cards award a right to stand a road motor vehicle in a “blue zone” of the delimited ZPP. The cards are issued to eligible

persons for a fixed price for a maximum of 1 year. The resident parking cards are self-adhesive and non-transferable, issued for a registration mark (RM) or state registration number (SRN) of a road motor vehicle.

Proprietor parking cards are either self-adhesive non-transferable, issued for a vehicle's RM/SRN of the eligible legal or physical entity, or transferable, issued for the name of the legal entity.

The parking cards must be placed in a visible space behind the windscreen of the vehicle (passenger car) when parking inside the ZPP.

Visitors' vehicles may park in the delimited "orange" or "green" zones. Orange and green zones are equipped with parking machines. When the zone is in service, the parking there is paid and time-limited. During the orange or green zone service, users subscribe the parking time at the parking machine that issues a parking ticket to them. The ticket proves the parking fee was paid. For that reason, it should be placed in a visible space behind the windscreen of the vehicle.

The orange parking zone when in service is restricted to the maximum of 2 hours (short-time parking), in a green zone to the maximum of 6 hours (medium time parking). The minimum selectable time unit in the orange zone parking machines is 15 minutes, in the green zone machines 30 minutes.

When the orange/green zone is out of service, the parking places on these local road sections are freely available to all the visitors at no charge.

Apart from that, visitors in the delimited areas of the city where ZPP have been established can park on supervised paid parking yards and paid public garages.



Revoluční st. – entry to/from the new public subterranean garage Palladium



A detail of the garage entry at the Palladium commercial centre

Launching more ZPP in the inner city prompted also short-time resident "blue zone" parking for vehicles of those who are not eligible to purchase resident/proprietor parking card for the zone by means of flat-rate two hour parking card for CZK 120 which is valid across all the residential zones and can be used anytime. It is a scratch card to be activated by scratching the time stamp (year, month, day, hour and minute of the vehicle arrival). Especially the conditions for delivery of goods and services inside ZPP have been improved this way.

The ZPP service time has been adjusted following the launch of additional ZPP.

- The **blue zone** has its time of service for residents' and proprietors' vehicle parking reassigned as follows: daily from 08:00 to 24:00 and from 00:00 to 06:00, meaning that the blue zone is out of service between 06:00 to 08:00 when it can be used by vehicles with no parking card. During the day, vehicles with no parking card may be parking inside the blue zone for maximum 3 minutes.
- The **orange and green zones** have their times of service for visitors' vehicles assigned depending on the attractiveness of a particular location related to the utilization of the facilities around as well as to the demand for short-time / medium time parking. Times for service for a particular locality are set through a supplementary table. It is most often set for workdays only from 08:00 to 18:00 while from 18:00 to 08:00 and on weekends and holidays

Price ranges for parking cards

Mapový podklad Kartografie Praha a.s.

3 price ranges for parking cards were introduced related to establishing additional ZPPs:

An orange zone price for short-time parking under 2 hours: rate I. 10 CZK/h or 0.40 EUR/h;
 rate II. 20 CZK/h or 0.70 EUR/h;
 rate III. 40 CZK/h or 1.50 EUR/h.

A green zone price for medium time parking under 6 hours: rate I. 15 CZK/h or 0.50 EUR/h;
 rate II. 30 CZK/h or 1.00 EUR/h.

Applying a particular rate depends on the approved project for the zone. Mopeds, motorcycles, motor three-wheelers and motorbikes are free of charge.

ZPP inside the *Praha 1* district

An approximately 3 km² of ZPP is in service on the right riverbank part of the *Praha 1* city district (*Josefov*, *Staré Město* and a portion of *Nové Město*) from as early as April, 1996. The ZPP was extended to cover the left riverbank part of the *Praha 1* district from 15. 10. 2007. Since that time, the surface roads except the private parking places and supervised facilities inside the left riverbank *Praha 1* (*Hradčany* and *Malá Strana*) of the approximate area 2.4 km² have welcomed only vehicles of residents (physical persons permanently residing there), distinguished by a permit of the *Praha 1* government, a "D" card.

Following the ZPP extension to cover the whole of the *Praha 1* territory, approximately 1 500 places on its left riverbank were added to the former number of roughly 8 400 places in the right riverbank *Praha 1* district, rising their total number to the approximate 9 900 places.

ZPP inside the *Praha 2* district

The ZPP covering the whole area of the *Praha 2* district was put to service on 1 November, 2007. It administers approximately 13 600 places. Roughly 12 % of them are reserved for visitors as short-time places and about 5 % are medium time, the rest is blue zone.

An increased attention is paid to provision of deliveries of goods and services in locations with deep deficit of parking places. Several dozens of delivery spots were set apart in such localities, making possible to stop and carry out the delivery for a set time of maximum 15 minutes from 08:00 to 18:00. At other times, these delivery spots are freely available to all users.

7.2 The rest of the city territory

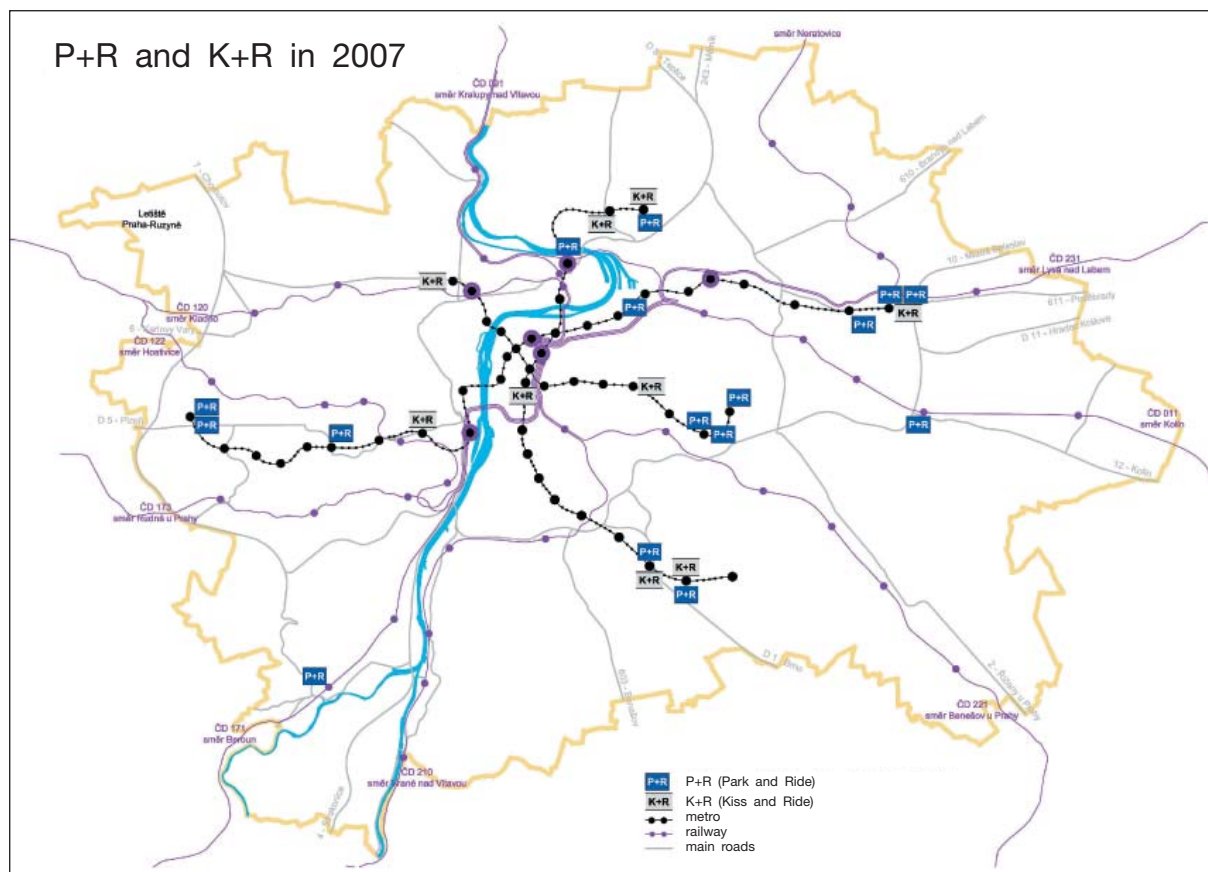
City residents and visitors may use multilevel public, serial and individual garages to lay their cars by. Neither their exact number nor the number of places in the garages totalled over the city territory is known. The overall capacity in garages is estimated close to 170 000 places. Nevertheless, the number of garages grows annually as new administrative, commercial and residential facilities are being constructed. Most of the city residents park and lay their cars by on local roads which lack, however, sufficient capacity for parking, notably inside housing estates.

Additionally, near 365 locations of extra-road parking yards are registered on the city territory providing a rough capacity of 39 700 places for vehicle parking, including near 43 % supervised places.

7.3 Park and Ride (P+R)

The number of parking places for P+R users totalled 2 344 places + 102 handicapped places in 16 parking yards as of 31. 12. 2007.

P+R and K+R in 2007



The P+R development, 1997 – 2007

Site	Parking places*										
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Zličín 1	103	103	94	94	94	94	88	85	85	85	85
Nové Butovice	75	75	60	60	60	60	60	57	57	57	57
Radlická	40	40	40	37	37	37	37	35	-	-	-
Skalka 1	157	157	175	114	114	114	11	107	107	107	107
Opatov	150	150	212	186	186	186	186	182	182	182	182
Zličín 2	-	-	70	70	70	70	70	64	64	64	64
Rajská zahrada	-	-	80	80	80	80	80	87	87	87	87
Černý Most 1	-	-	300	300	300	300	300	294	294	294	294
Holešovice	-	-	77	77	77	77	77	74	74	74	74
Palmovka	-	-	-	122	122	122	122	119	119	171	171
Radotín	-	-	-	62	62	62	21	21	21	21	21
Běchovice	-	-	-	-	-	100	100	94	94	94	94
Modřany	-	-	-	-	-	53	53	51	-	-	-
Černý Most 2	-	-	-	-	-	-	138	131	131	131	131
Ládví	-	-	-	-	-	-	-	81	81	81	81
Chodov	-	-	-	-	-	-	-	-	-	658	658
Skalka 2	-	-	-	-	-	-	-	-	-	71	71
Hostivař depot	-	-	-	-	-	-	-	-	-	167	167
Total	525	525	1 108	1 202	1 202	1 355	1 446	1 482	1 396	2 344	2 344

* place count excludes reserved places for the handicapped and residents

For tariffs, the P+Rs are included in the Prague integrated transport system (PID) by means of subscriber PID tickets and preferential daily PT tickets. The 2007 fares linked to P+R parking were CZK 10 for parking, CZK 40 for a transfer return ticket or CZK 80 for a one-day rover ticket.

Vehicles parking at P+R in Octobers 2001 – 2007

Site	Parked vehicles						
	10/2001	10/2002	10/2003	10/2004	10/2005	10/2006	10/2007**
<i>Běchovice</i>	-	1 498	180	140	597	307	173
<i>Černý Most 1</i>	10 716	3 481	9 818	9 714	9 226	10 610	11 727
<i>Černý Most 2</i>	-	-	2 042	2 934	2 555	3 631	3 281
<i>Hostivař depot</i>	-	-	-	-	-	2 439	4 519
<i>Holešovice</i>	3 226	1 453	3 299	2 759	2 765	3 318	2 890
<i>Chodov</i>	-	-	-	-	-	9 856	12 857
<i>Ládví</i>	-	-	-	2 184	2 117	2 612	2 748
<i>Modřany</i>	-	213	310	0*	192	-	-
<i>Nové Butovice</i>	2 572	1 689	2 136	1 988	1 866	2 165	2 264
<i>Opatov</i>	5 073	5 389	5 732	5 890	5 168	5 771	6 180
<i>Palmovka</i>	4 446	3 779	4 183	3 521	3 874	1 966	1 417
<i>Radlická</i>	1 272	948	1 169	1 003	-	-	-
<i>Radotín</i>	463	878	918	768	805	890	296
<i>Rajská Zahrada</i>	2 837	409	2 697	2 626	2 701	2 919	2 595
<i>Skalka 1</i>	2 762	2 461	3 408	3 336	3 223	3 052	2 029
<i>Skalka 2</i>	-	-	-	-	-	332	318
<i>Zličín 1</i>	3 508	3 622	3 510	3 618	3 111	3 548	3 109
<i>Zličín 2</i>	2 111	3 432	2 505	2 609	2 240	2 508	2 735
Total	38 986	29 252	41 907	43 090	40 440	55 195	59 138

* The P+R site *Modřany* not available due to a feeder road renovation

** data from manual count by the P+R security (all other data are from automated count)

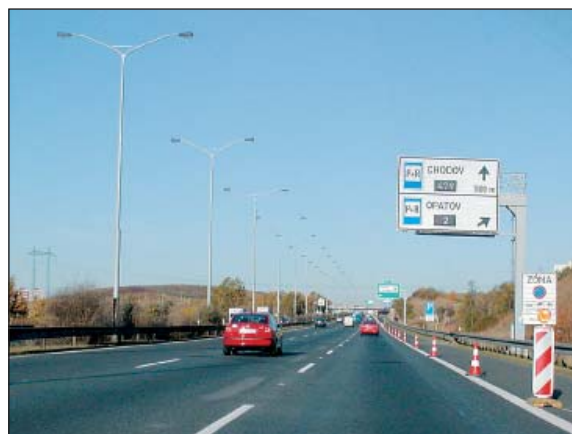
Supplementary services at the P+R sites

Free bike storage (Bike & Ride)

The service has been provided, since 2002, at all the P+R sites in operation. Bikers are offered, for returnable deposit, to store their bikes at a stand inside the supervised area of the P+R site. Bikers, however, are not entitled to a preferential fare and if they leave their bikes at the P+R site overnight when the site is out of operation they are bound to pay a fine of CZK 100.- per night for trespassing the site's service regulations.



Stands for bicycles inside P+R Rajská zahrada



Occupancy information for Chodov and Opatov P+R car parks when arriving in Prague along the D1 motorway

Long-term vehicle parking

The offer to lease a place for parking at a P+R continuously is provided, as of 31. 12. 2007, at sites with low utilisation, the *Běchovice* P+R and the *Radotín* P+R, and is still being offered at the *Opatov* P+R where it reduces the facility's capacity. The service is provided for a fee preferring physical persons with a nearby residence.

Night and weekend parking

The service has been provided, since 2005, at the *Rajská zahrada* P+R where, for a monthly fee, has been offered to lay a car by from 17:30 to 7:30 of a workday and, on weekends, for a whole day. The users of the service have kept close to number 10 vehicle owners even in 2007.

7.4 K+R stopping places

The K+R (Kiss and Ride) sites enable drivers to stop at the Metro stations for their occupants to get out in order to continue their trip by other means of PT. Selected stopping spots can also be used for a short-time parking when waiting for PT passengers to give them a lift. The short-term parking is limited to 5 minutes.



The K+R sites are marked out with vertical traffic signs complemented with a “K+R” letters on the carriageway.



The K+R localities can be seen graphically at the beginning of the 7.3 section. A traffic survey was made at the new K+R *Dejvická* whose results are displayed in the following table.

Usage of a new K+R site *Dejvická*, (city bound)

year	interval (hours)	persons		car affiliation			vehicles per times of stopping (minutes)						total vehicles
		in	out	Prague	close	other	< 0,5	0,5 < 1	1 < 5	5 < 10	10<20	longer	
2007	6 – 10	21	133	81	29	23	115	5	9	2	2	0	133
	10 – 14	9	38	33	12	15	44	8	0	4	4	0	60
	14 – 18	20	132	89	23	18	109	8	4	2	6	1	130
	total	50	303	203	64	56	268	21	13	8	12	1	323



K+R Radlická



K+R Dejvická

The following key cycle tracks were put in service in 2007:

A new segment of the cycle track *Modřany – Zbraslav*. The track is led from the *U soutoku* street toward the *Závodu míru* bridge and goes along the right bank of the *Vltava* river between the river and a railway line. The total length of the track is 2 039 metres, including 461 m on a calmed carriageway with 4 m wide lay-bys, which makes possible to service adjacent lands and gardens. Next 1 578 m is a 3 m wide pathway for pedestrians and bikers. The surface is bitumen. This new segment of the cycle track continues another track made earlier on the right bank of the *Vltava* from the inner city via *Podolí*, *Braník*, *Modřany* and is included in the A2 biker route.



The Modřany – Zbraslav biker track traffic

The cycle track *Staroměstské náměstí – Pohořelec* (the segment *Brusnice – Pohořelec*). The segment between *Brusnice* and *Pohořelec* on the cycle track *Staroměstské náměstí – Pohořelec* was completed in September. Its portion is 180 metre long bidirectional cycle stripe for bikers, 2.5 m wide, along the tramline bed in the *Jelení* street and also a 530 m long common pathway for pedestrians and bikers through the orchard on the former artillery cemetery. A one-directional stripe for bikers in the oncoming lane was marked out in the *Morstadtova* street and adjusted for the construction to be 1.5 m wide. The same street upstream marks the track out, together with pedestrian traffic, along the existing, rebuilt pavement. The construction offers a safer biking to cyclists without having to go through the *Keplerova* street.



Biker stripe at the Parlářova street



Biker pass over the Hládkov street

A cycle track across *Přední Kopanina*, *Suchbát* cycle tracks and demarcation of the *Kbelský* round makes more efforts implemented in 2007 in order to improve cycle traffic. Additionally, river grades in the A2 cycle route were re-paved, providing better conditions for cycling on the grades, and cycle stripes were marked out in the *Chotkova* street, the *Pobřežní* street and on the *Štefánikův* bridge.

The last segment of the cycle track on the *Rohanský* island was made passable in the framework of completing the flood-control measures in the *Karlín* neighbourhood and surfaces were repaired at the north end of the *A2* cycle route from *Podhoří* to as far as the Capital.

Bicycle transport by the Metro

An offer to transport bicycles by the Metro underground was permanently extended following the positive evaluation of the pilot run from 1 April, 2007. Bikes may be transported in any car of the train on every last deck in direction of the route – but only two bicycles maximum. There are no time limits on the transport; it is limited, however, during high demand periods.

Bicycle transport by special buses and trains

April saw the launch of already the fifth season of service of the *PID* cyclobus line from *Dobřichovice* railway station where it takes up the trains on the railway line *Praha – Beroun* via *Černolice*, *Řitka*, *Mníšek pod Brdy* to *Kytín*. The line operated on weekends and holidays to as late as 7 October. The cyclobus line was serviced with a bus adjusted to transport 25 bicycles. The *PID* tariff is valid on the line; one bike transport costs czk 20. (Provided the passenger arrives by train to *Dobřichovice* and can provide a valid Czech Railways (*ČD*) ticket for a bike transportation, the bike is transported by the cyclobus for czk 10.)

Czech Railways, Co. Inc., jointly with the Prague government launched operation of a cycle train on the line *Praha-Masarykovo nádraží – Slaný* in the end of March, 2007. The train pulled up at all the stops that have tourist sights nearby within walking or biking distance. The cycle train was in service on weekends and holidays up to 28 October, 2007. Both railway (*ČD*) and public transport (*PID*) tariffs were good for ticket on the train. Passengers were expected to see to the loading and discharge of their bikes. The second car of every train was preferred for the transport of the bikers as it provided special spaces to transport bikes and with less sitting places. To transport a bike, a ticket must be purchased for the bike as an accompanied baggage. The price was czk 26.



Bike transport on a cycle train on the line Praha-Masarykovo nádraží – Slaný

A Prague bicycle traffic survey

Another survey of volumes in bicycle traffic was held in April, May and June, 2007. The count took place at 70 posts on workdays (Monday to Thursday) from 7 a.m. to 8 p.m., always for both directions (any days on the *Podolské* embankment profile).

Posts selected were on cycle tracks, roads feeding the larger inner city and all the bridges over the *Vltava*. The biker count results were noted down in hours and driving directions. The survey was extended for additional non-motor mobility categories (walkers and skaters) at the posts on cycle tracks. This was a follow-up survey to the biker count survey in 2005. A comparison of the 2005 and 2007 results on 65 comparable profiles showed the biking volumes increased; by under 50 % on 21 profiles, by over 50 % on 24 profiles, less bikers were counted on 20 profiles (probably due to an unfavourable weather during the 2007 count in over half of the cases).

The available results show the most frequent profiles: the *Vltavanů* street at *Modřany* neighbourhood (1 243 cyclists per day), the *Podolské* embankment (1 121 cyclists per day) and the *Trojská* footbridge (1 070 cyclists per day). On the other hand, the least bikers were found on roads with

a heavy car traffic. An inference can be made that it is leisure type of biking that is still prevalent in Prague, which is supported by the most frequent peak hours being in the afternoons and evenings. This also proves the need to create safe conditions for bikers and their traffic, which in most cases can be achieved only by means of separating their mobility from the car traffic.

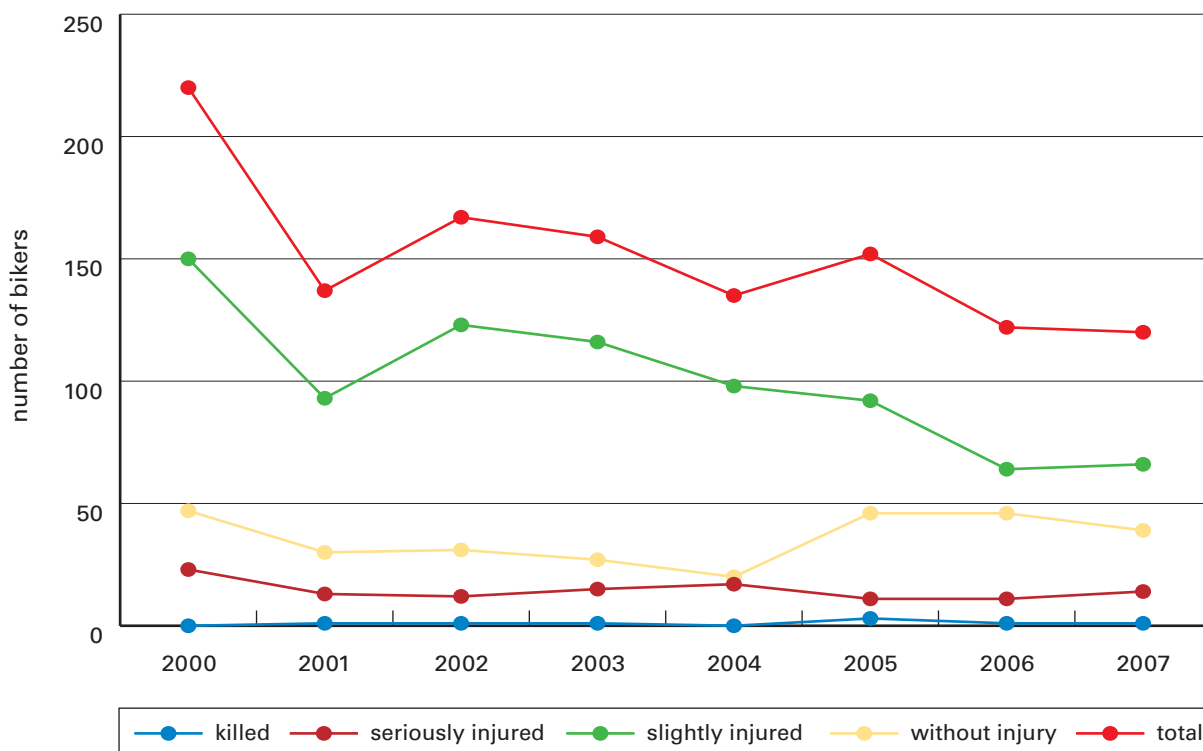
Bicycle accident rate in Prague

The numbers of bicycle accidents and of accidents with bicycle injuries and casualties have decreased in recent years in Prague, which is shown on the graph and the table attached. This beneficial fact can be attributed to improving cycle infrastructure, growing skills of bikers to move in urban traffic, improving road courtesy of other traffic participants and also the spreading use of protective devices (helmets, reflective materials, lighting).

Bicycle injuries in Prague, 2000 – 2007

	2000	2001	2002	2003	2004	2005	2006	2007
Bikers killed	0	1	1	1	0	3	1	1
seriously injured	23	13	12	15	17	11	11	14
slightly injured	150	93	123	116	98	92	64	66
without injury	47	30	31	27	20	46	46	39
total	220	137	167	159	135	152	122	120

Bicycle injuries in Prague, 2000 – 2007



Walking which starts and ends any trip, even by whatever carrier, is an important part of human life. In spite of increasing motorisation and ever growing utilisation of passenger cars, approximately a quarter of all the intra-urban trips are made in Prague on foot only (with no use of any traffic means) even at the present time. This fact has been supported from survey results of the behaviour of the population permanently living in the territory of the Capital, which was made by the Institute of Transportation Engineering of the City of Prague in 2005. The permanent Prague residents perform about 24 % of all their trips on foot.

The total number of almost 800 000 walking trips made by permanent Prague residents on an average workday includes 40 % of them related to dwelling. Another 22 % walking trips made by Praguers relate to business – commuting, errands etc. The third largest group (17 % of all walking) are shopping and catering trips. The remaining 21 % walking is made for various other reasons – schools, administration, culture etc.

The greatest walkers are pupils, students and apprentices who walk 30 % of their trips. They use mainly public transportation (62 % of trips) for other journeys while cars are left almost unused by them (solely 8 % of trips). On the other hand, employers and the self-employed walk only 14 % of their trips. To make the rest of 86 % trips, they use especially passenger cars (60 %), in lesser extent (26 %) a public transport.

The greatest number, approximately a third, of intra-urban walking trips is made inside the *Praha 1* city district. The population permanently residing in the territories of the *Praha 1* and 2 districts make as many as 42 to 43 % of trips just on foot. On the other hand, in the outskirts (e.g. in *Praha 13*) the share of walking trips goes down under 15 %. Of all the intra-urban pedestrian trips that use no other means of transport, 23 % of trips have its origin or destination in *Praha 1*, while other 9 % of walking trips is made solely on this territory, i.e. they do not cross the border of this city district.



Pedestrians in Karlova street



Pedestrians on Staré zámecké schody

Surveys to check pedestrian traffic in the Wenceslas Square, around the *Můstek* pedestrian precinct, on the *Smetanovo* embankment and on the Charles Bridge were made by means of a four-hour afternoon probe on a workday in 2007. The results of the survey show the following:

Peak volumes of pedestrian traffic along the whole length of the Wenceslas Square move in crosscut figures ranging from 6 780 pedestrians per hour in the upper portion between the *Ve Smečkách* and *Krakovská* streets to 7 620 pedestrians per hour at *Můstek*. It represents a mild increase (by about 3 %) over 2000 – 2001.

Peak volumes in the *Na Můstku* and *Na Příkopě* streets were found 5 380 and 5 110 passengers per hour respectively, which roughly corresponds to values found in 2000 – 2001.

The peak volume got on the Charles Bridge was 3 690 passengers per hour (by 7 % more over 2000 – 2001).

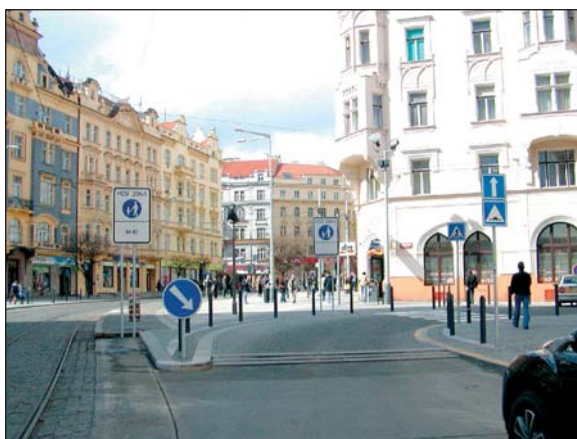
The peak walking volume on the *Smetanovo* embankment was determined as 810 pedestrians per hour (by 31 % less than the last count in 1999).



Republiky square, a pedestrian precinct with tramway traffic after completion

Apart from the “Golden Cross” (*Václavské náměstí, Na můstku, 28. října, Na příkopě*), the most busy walking routes include the link between tourist hot sights, the Prague Castle and the Old Town Square. Walking volumes here are by as many as 15–20 % higher on weekends (especially Saturdays) and holidays rather than workdays. The reason seems to be a growing preference of Prague by domestic and international tourists. Walking streams are also frequent in routes going through parks and sylvan parks in Prague on weekends whose purpose is temporary relaxation.

The construction of a pedestrian precinct with tramway traffic on the *Republiky* square in *Praha 1* was completed and a new pedestrian precinct with tramway traffic was built on the *Strossmayerovo* square in *Praha 7* in 2007.



New pedestrian precinct on Strossmayerovo square viewed from Antonínská street and the St. Antonín church

Airline passenger and freight transport is conducted in the Capital chiefly at the Prague Airport, situated at the north-western outskirts of the city. The other three airports in Prague serve mostly other, special purposes. The Prague Airport offers three take-off and landing runways, one of which is in a long-term shutdown. The total annual runway capacity exceeds 200 000 aircraft movements per year. Maximum hourly capacity in 2007 was 42 aircraft movements (take-offs and landings) per hour. The terminals North 1 and North 2 provide the joint capacity of 8 100 passengers cleared in one hour, specifically 3 900 for take-off and 4 200 after landing. Two terminals are available to clear cargo, 100 000 t/yr each.

Regular lines were operated by 56 carriers on the Prague Airport in 2007, offering over 120 destinations. The largest volumes of passengers were processed for London destinations (967 000) followed by (in decreasing order) Paris, Frankfurt a/M., Amsterdam and Moscow (339 000). Most of the flights (90 %) were for Europe, an increase over 2006 was, however, observed in flights to Africa, North America and the Far East.

The position of the Prague Airport in international comparison is seen from the following table.

Passenger volumes processed at selected airports (mil. passengers / year)

Airport	1995	2000	2006	06/95 (%)
Chicago O'Hare	67.3	72.1	77.0	114.4
London Heathrow	54.1	64.3	67.5	124.8
Paris Ch. de Gaulle	28.0	47.8	56.8	202.9
Frankfurt Rhein-Main	37.4	49.0	52.8	141.2
Amsterdam Schiphol	24.9	39.3	46.1	185.1
Madrid Barajas	19.6	32.6	45.5	232.1
Roma Fiumicino	20.7	25.9	30.2	145.9
Kopenhagen Kastrup	12.7	18.2	20.9	164.6
Stockholm Arlanda	14.3	18.3	17.5	122.4
Vienna Schwechat	8.4	11.8	16.8	200.0
Bruxelles National	12.5	21.5	16.7	133.6
Praha Ruzyně	3.2	5.8	11.6	362.5
Budapešť Ferihegy	2.9	4.7	8.3	286.0
Warsawa Okęcie	2.7	4.3	8.1	300.0
Bratislava M. R. Štefánika	0.2	0.3	1.9	950.0

Data: Yearbook of transportation MDS ČR (ICAO), The Chicago Department of Aviation, ACI

The total volume of passengers cleared in 2007 at the four main Czech airports that are international (*Praha, Brno, Ostrava, Karlovy Vary*) was 13.2 mil. passengers, i.e. by 7.6 % more over 2006. The volume of transported cargo (goods and mail) increased, however, only by 1 % to 60 700 t over 2006.



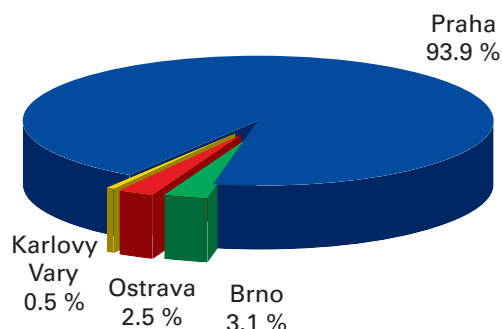
Full view of Terminal North 1



Terminal North 2 – a car ramp to first floor

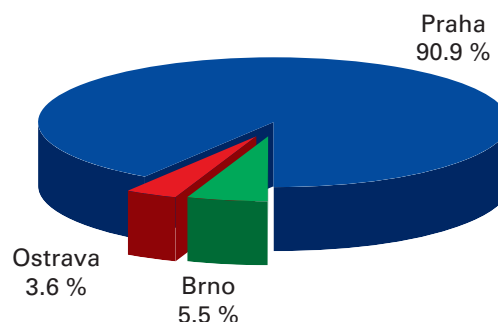
Share of airports in passenger transport performance

% from the overall volume
of cleared passengers



Share of airports in cargo transport performance

% from the overall volume
of cleared cargo and mail



The total of 12 436 300 passengers were cleared through the Prague Airport in 2007 which represents an annual increase by almost 0.9 mil. passengers (7.4 %) over 2006. Most passengers were cleared at the Terminals 1 and 2 North while as few as 1 % of passengers were processed through the Terminal 3 South. The 85.2 % of passengers were transported by regular lines, the remaining 14.8 % by special lines out of the total volume 12.4 mil. The share of low-cost carriers has increased, having reached the value of 22.4 % in 2007. The most passengers were cleared in August (1 338 400 persons), the least of them in January (710 000 persons). Compared to 2006, the monthly high was by 3.8 % up over 2007.



China Airlines cargo aircraft at the Prague Airport

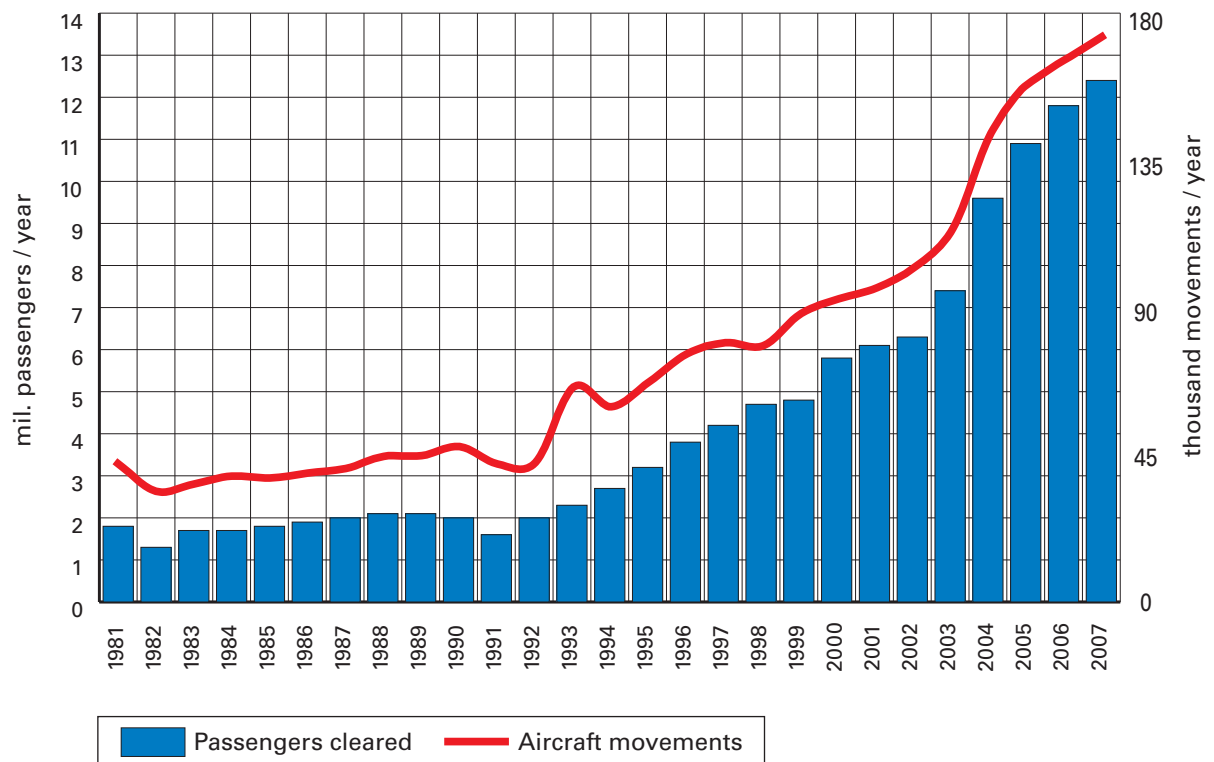


An Italian aircraft is landing at the Prague Airport

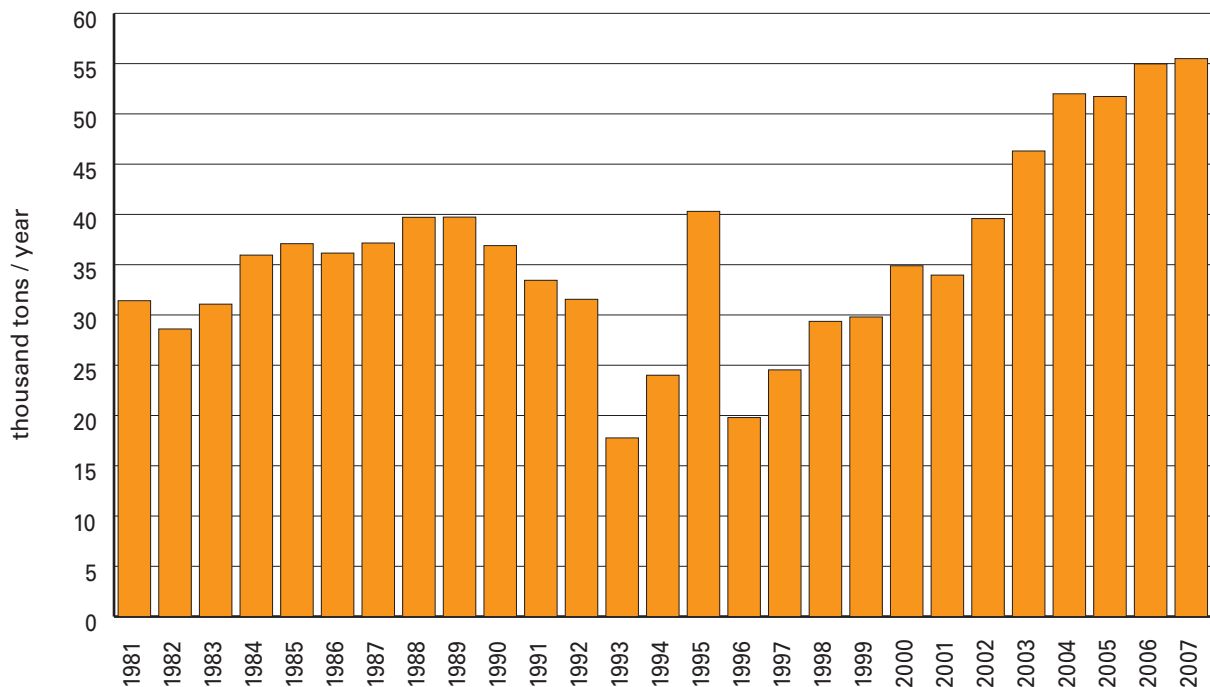
The cargo air transport cleared 48 867.8 t goods and 6 311.8 t mail in 2007. The total cleared air cargo volume thus reached the value of 55 179.6 t and exceeded 2006 by only 0.4 %. The most cargo was handled in November (5 333.8 t), the least in January (3 922.4 t). The monthly high was by 0.4 % lower in 2007 than in 2006.

The number of aircraft movements in 2007 was 174 662 moves/year which is by 8 316 moves more than in 2006 (a rise by 5 %). The most movements (16 184) was recorded in July, the lowest (11 753) in January. The monthly maximum movements in 2007 were by 2.7 % higher over 2006.

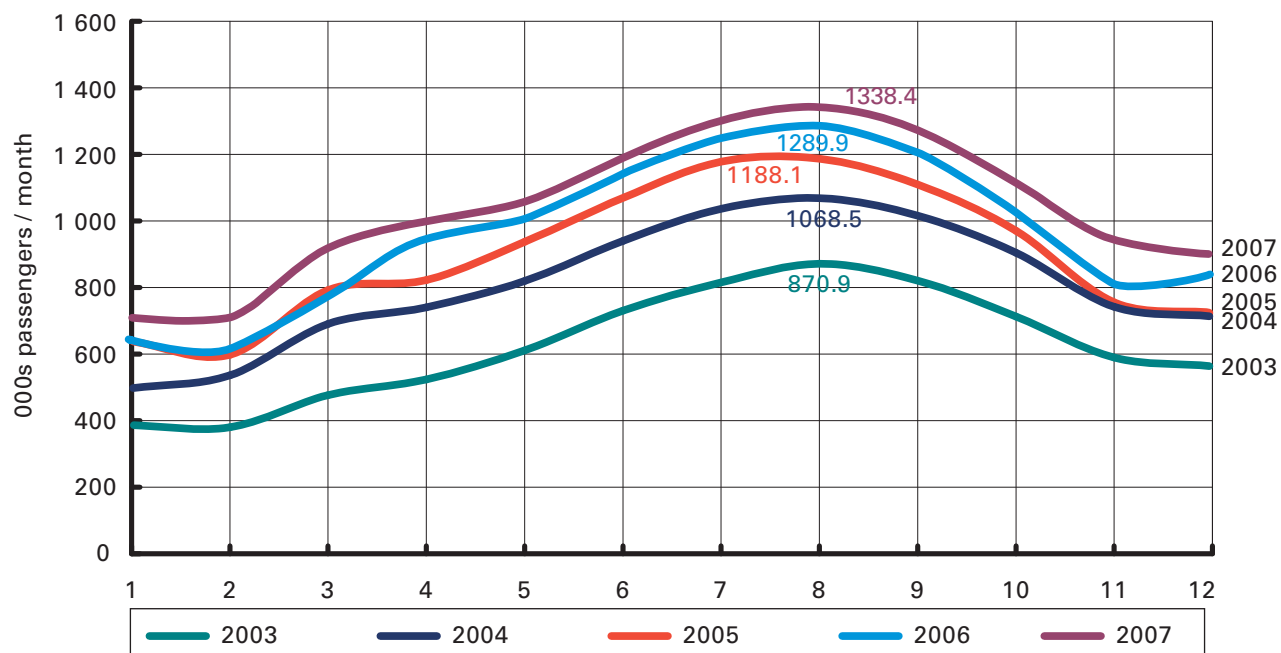
Development of the *Praha – Ruzyně* airport volumes
passengers cleared and aircraft movements



Development of the *Praha – Ruzyně* airport volumes
cargo handled (goods and mail)

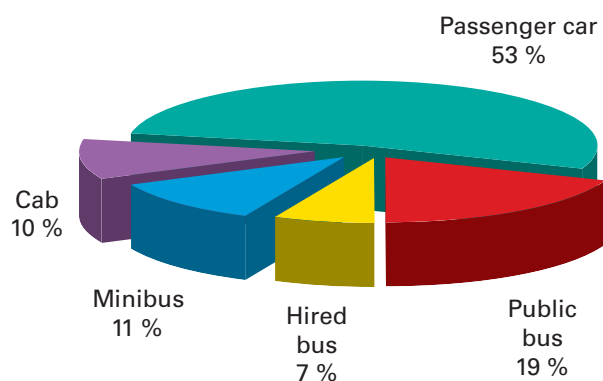


Passengers cleared at the *Praha – Ruzyně* airport, monthly, 2003 – 2007



The Prague Airport is situated about 11 km from the inner city where a downtown airline terminal is located. A connection for airline passengers is provided by means of a special coach service as well as an Airport Express line terminated at the *Praha-Holešovice* railway station, taking up the *Pendolino* train passengers on the line *Praha – Ostrava*. Additionally, the airport is serviced with two fast lines of municipal bus transport terminated at the Metro A and B line terminals at the Dejvice (A) and Zličín (B) respectively, with other *PID* bus lines as well as many national and regional coach lines. Also available is cab transport offering both passenger cars and minibuses. Additionally, multiple car rental companies operate there. The majority share of airport-to-city passenger transport is covered with individual cars.

Airport-to-city modal split
September 2007, workday, 6-22 h



PT bus stop at Terminal North 1

The total capacity of lay-bys and parking places run by the Prague Airport administration available to general public and employees at the airport's northern side reached almost 5 300 places in 2007. Apart from these, additional parking yards are reserved for the companies that operate at the airport. The largest capacity (over 4 600) for general public and employees is offered inside parking facilities A, C and D.

Most of the places are medium and long-term, 213 short-time lay-bys is available for service operations and over 100 places are set apart for persons with reduced mobility. 121 parking places are available to the public at the southern end of the airport including 13 places for persons with reduced mobility or orientation.

WATER TRANSPORT

11

Prague water transport provides passenger and cargo transportation on the *Vltava* river. The waterway capacity is determined by the capacity of the sluices – *Podbaba* 5.2 mil. t./year and *Smíchov* 2.8 mil. t./year.

The *Vltava* river passenger transport is mostly of leisure type. It is carried out by several companies all year round. These specialize in different types of Prague sight cruises with additional services (catering and entertainment).

Among passenger river transport operators, the largest are the Prague Steamship Company (*Pražská paroplavební společnost, a. s. – PPS*), European Water Transport (*Evropská vodní doprava, s. r. o. – EVD*), *AQUAVIVA Praha, s. r. o.*, and the First General Boating Company (*První všeobecná člunovací společnost, s. r. o.*).

The first water transport operator on the *Vltava* river in Prague was the Prague Steamship Company, established in 1865. It currently operates 5 ships landing at the *Rašínovo* embankment between the *Palackého* and *Jiráskův* bridges. The company offers several regular lines: *Praha – Mělník* (2 times a year), *Praha – Slapy* (Saturdays, Sundays and holidays from 1. 5. to 14. 9.), *Praha – Troja* (3 times a day from 1. 5. to 14. 9., April and October only on Saturdays, Sundays and holidays). Regular cruises are the Great Tour through Prague, lasting 90 minutes, and the Small Tour through Prague, lasting 55 minutes. The company holds lunches, dinners and discos aboard. They transported 109 191 passengers in regular lines, 36 768 passengers in cruises and 82 546 passengers in charter cruises, in all 228 505 passengers in 2007.



Leisure ships at a landing place Na Františku between the Čechův and Štefánikův bridges

Another passenger river transportation company is the European Water Transport. The company operates 8 modern ships landing at the *Čechův* bridge. They operate all year round, either at regular intervals, or as ordered by clients. Regular cruises include one or two-hour guided trips, two-hour cruises with lunch and music as well as regular night cruises through Prague with dinner and music. They also offer conferences, weddings, corporate parties and other social events. The company transported 230 000 passengers in 2007.

The *AQUAVIVA Praha* company offers turnkey social and corporate events including catering and entertainment on three ships. The company provides one-hour, two-hour or customer-tailored cruises. The landing place is at *Na Františku*.

Channel sightseeing cruises on the *Vltava* entitled Venetian Prague is offered by the First General Boating Company. The cruises are run all year round from 10:30 to 18:00 (6. p.m.), in summer up to 23:00 (11 p.m.). The line provides 4 wharfs.



The Vyšehrad steamship



A ship under the Štefánikův bridge

Apart from these large companies, there are many smaller companies offering cruises and social events on individual orders. Wharfs of these companies are found along the two *Vltava* banks in the inner city, e.g. *Na Františku*, at *Kampa* and at the *Dvořákovo* embankment. The companies take orders for Prague cruises as well as for trips to *Slapy*, *Nelahozeves*, *Poděbrady*, *Mělník* and *Dresden*, Germany.

Veteran ships are also offered: OLD TIME BOATS for 6-10 persons, motor boats (TAXI BOATS) for 2-3 persons and many restaurant and sightseeing ships.

Passenger water transport is also made available by three **ferries across the Vltava** where a *PID* tariff applies and bicycles are transported free of charge. The wharfs are run by the First General Boating Company.

The *P1* ferry *Sedlec* provides connection of *Sedlec* with *Zámky* at the northern outskirts of Prague which is an attractive location for trips through the *Vltava* valley and even for commuting. A surface public transport connection from the *Bohnice* neighbourhood to *Suchdol* via *Holešovice* lasts about 60 minutes while the ferry can cut the time half and using a bike can make the trip from *Bohnice* to *Suchdol* last even under 20 minutes. The ferry operates the whole week until 20:00 (8 p.m.), on workdays from 5:25, on Saturdays, Sundays and holidays from 6:45. It transported 71 550 passengers in 2007.

The *P2* ferry *Lysolaje* connects the banks of the *Vltava* between the opening of the *Šárecké* valley and *Podhoří*. The connection is attractive especially as it links portions of *Praha 6* with *Troja* for free-time trips and commuting. The ferry operates the whole week until 20:00, on workdays from 5:40, on Saturdays, Sundays and holidays from 6:50. It transported 106 600 passengers in 2007.



The P3 ferry Lihovar – Veslařský island



Bikers using the P3 ferry on the Veslařský island

The *P3* ferry *Lihovar – Veslařský island* is a freshly launched ferry with seasonal operation (from 17. 7. 2007 to 28. 10. 2007). The ferry is attractive as it links the left bank (the *Lihovar* stop) with important right bank holiday locations (swimming baths *Podolí* and *Žluté lázně*). The

ferry operates the whole week until 22:05, on workdays from 6:00, on Saturdays, Sundays and holidays from 7:00. It has transported 53 000 passengers for four months in service.

Various national and foreign carriers operate also **cargo shipping** on the *Vltava* river. One of the largest carriers is European Water Transport that provides domestic and international shipping of mass substrates, heavy pieces, containers, liquids etc. Its fleet includes 38 vessels and 1 tanker. The company also owns floating facilities – construction platforms for various purposes.

The volume of the cargo shipping and numbers of ships flown in 1997 – 2007 is indicated in the following tables.

Volumes of freight flown through sluices in Prague in 1997 – 2007 (tons of freight / year)

Year	Sluices				
	<i>Modřany</i>	<i>Smíchov</i>	<i>Mánes</i>	<i>Štvanice</i>	<i>Podbaba</i>
1997	20 6921	234 537	2 363	232 442	379 606
1998	13 6407	196 487	1 320	191 624	403 840
1999	97 325	190 323	10	186 153	356 008
2000	108 168	197 740	238	201 712	370 037
2001	109 282	175 941	360	176 936	374 692
2002	71 136	126 206	7 251	117 296	214 173
2003	63 158	77 398	6 523	83 289	241 000
2004	86 254	130 404	4 018	126 295	293 027
2005	56 759	59 378	690	106 749	302 726
2006	12 482	33 109	545	54 743	236 344
2007	18 344	32 037	35	38 280	393 159

Ships flown through sluices in Prague in 1997 – 2007

Year	Sluices				
	<i>Modřany</i>	<i>Smíchov</i>	<i>Mánes</i>	<i>Štvanice</i>	<i>Podbaba</i>
1997	2 164	18 581	1 273	3 529	2 237
1998	1 863	17 844	3 103	5 091	1 562
1999	1 897	20 305	3 919	4 794	1 649
2000	1 898	21 716	3 747	5 775	1 897
2001	1 852	22 291	3 434	5 732	1 851
2002	1 307	17 729	2 604	3 603	1 203
2003	1 785	21 617	2 878	4 118	1 415
2004	2 413	23 967	2 998	5 330	1 690
2005	2 530	24 576	2 329	7 740	1 799
2006	2 265	24 247	2 285	6 492	1 736
2007	2 633	26 879	2 571	7 209	2 735

Four harbours are found on the territory of the city – *Radotín*, *Smíchov*, *Holešovice* and *Libeň*. They serve to reload various freight. The operator is Czech Harbours Company (*České přístavy a. s.*). Harbour users are carrier, warehousing, reloading and producing companies and entities.

Substrate volumes in Prague harbours in 2004 – 2007 (total substrates transported in tons / year)

Year	Harbours			
	<i>Praha Radotín</i>	<i>Praha Smíchov</i>	<i>Praha Holešovice</i>	<i>Praha Libeň</i>
2004	58 961	19 642	31 311	14 236
2005	36 408	11 396	99 308	2 934
2006	13 932	559	114 462	-
2007	20 597	9 986	182 974	-

TRANSPORTATION STRUCTURES

12

The year 2007 was notable for completion of key stages in some transport constructions (the *Rohanské* embankment, the *Jinočany* link), significant redevelopment efforts (the *Štefánikův* bridge, the *Palackého náměstí* crossroads) and continuation of projects with completions planned for future years (e.g. the C line of Metro extension to *Letňany*, the “New Link” railway, the South section of the Prague Ring Road).

An important construction that helped calm down the car traffic in the *Sokolovská* street and, simultaneously, made possible the future service of new developing terrains along the *Vltava* river, was the extension of *Rohanské nábreží* embankment in *Praha 8*. The construction labelled as *Pobřežní III* – stage 1 completed in 2007, extended *Rohanské embankment* from the *Šaldova* street to the *Za Invalidovnou* street. The stage 2 of the construction is to reach as far as the *Vocetářova* street close to the *Libeňský* bridge. The construction is later to be taken up with the *Pobřežní IV* project in order to extend the new road as far as *Balabenka*.

The continuation of *Rohanské embankment* offers two lanes in both directions, a biker lane and a new sidewalk, 3 m wide, separated from the carriageway with a green verge and trees. It has barrier-free crosswalks and two linked traffic lights. Simultaneously, new utility mains were built in, new public lighting and more park arrangements. The total costs for the construction, included in the SPD 2 programme, reached CZK 244 700 000.



The portion of the extended Rohanské embankment put in service in 2007 and its follow-up portion under construction

Other important constructions put in service in 2007 include the first section of the “*Jinočany* link” that makes a new backbone avenue of a future residential area South-west City II (City West) and, at the present stage of construction, it links the Prague Ring Road with the *K Třebonicům* street. The four-lane dual carriageway road is 1 250 m long and has a sidewalk along its north edge with a new cycle track 800 m long. Rain collectors and subterranean cable ducts for utilities were constructed with it. The total costs of the “*Jinočany* link” portion of the construction were CZK 770 000 000.



Portion of “Jinočany link” put in service in 2007



Bridge over the railway at Praha-Kolovraty

The car traffic has also been served with a new one-span deck bridge over a railway at *Praha-Kolovraty* since 2007. The construction work were co-ordinated with the construction of the IVth railway corridor on the line *Praha – Říčany – Benešov u Prahy*.

The IVth railway corridor, in turn, was worked on close to the borders of the Capital. The *Říčany* railway station with adjacent track sections underwent refurbishment and, as early as in the end of 2007, the renovated continuous section between the *Praha-Hostivař* and *Strančice* stations was already in service. Additionally, follow-up investments and ground shaping were completed around the *Praha-Uhřetěves* station. First, it was a new underpass under the railway which replaced original level crossings in the *Františka Diviše* and *K dálnici* streets. The *Ke Kříži* street under the railway now links the New square at *Uhřetěves* with *Pitkovice* and heads for the *D1* motorway at the *Průhonice* exit. A new parking yard, an illuminated crosswalk and a park arrangement were created around the underpass.



New underpass under the railway at Uhřetěves with a new illuminated crosswalk and a park arrangement

In sequence to the start of operation of the split-level junction *Malá Chuchle* on the *Strakonická* street in 2005, the *Mezichuchelská* street was put in service linking this split-level junction with the *Dostihová* street in 2007, this way connecting the *Malá* and *Velká Chuchle* neighbourhoods. It is a dual carriageway leading along the *Praha-Smíchov – Praha-Radotín* railway. An interface junction was set up close to the *Starolázeňská* street in order to make possible a future connecting of a new overpass above the railway with a continuation of the *Starochuchelská* street.

Gradual redevelopment of several Prague bridges was launched with a general renovation of the *Štefánikův* bridge in 2007. The renovation was necessary due to the bad condition of the bridge, brought about, i.a., by the 2002 flood. All the equipment of the bridge was taken away (balustrade, public lighting stands, tramway rails, traction) as well as carriageway and pavement layers down to the base deck. A new, strengthening deck was cemented on the base deck to increase the bearing capacity of the whole construction.



The renovated Štefánikův bridge



Construction on the City Ring Road at Troja

Maintenance and grouting were made on damaged portions of the structure and in piers. Simultaneously, all the utilities were relaid. The whole soffit of the bridge and its staircases were repaired, the carriageway, TSDs and sidewalks of the *Řásnovka – Revoluční* crossroads were

renovated. The original paving of the bridge was replaced with bitumen surface and cycle tracks were marked out on the carriageway both ways. The Prague Public Transit, Co. Inc., renovated the tramway tracks and adjacent track crossings at the *Letenský* tunnel. The total cost of the repair reached czk 380 million.

Constructing more traffic infrastructure in Prague continued during 2007. Concreting of City Ring Road tunnels started in the *Troja* neighbourhood. Construction of a *Malovanka* split-level junction continued in front of the north portal of the *Strahovský* tunnel and large construction work on the City Ring Road was initiated at the space of the split-level *Špejchar* junction.

Apart from the City Ring Road construction in the section of *Malovanka – Pelc Tyrolka*, the construction of the southern portion of the Prague Ring Road was carried out on the territory of the Capital and the *Středočeský kraj* heartland. The work on the sites 514 *Slivenec – Lahovice* and 513 *Lahovice – Vestec – Jesenice* including the bridge across the *Vltava* was in full swing. A three-lane tunnel was cut through at the site 514 in December, 2007. A follow-up construction 512 *Jesenice – D1* is expected in 2008.

The most important construction in the municipal public transportation network is the extension of the C line of the Metro in the section *Ládví – Letňany* to open in spring 2008. Completion work concentrated especially on finishing the grade, lining and facing of the stations and providing technologies.



An open ditch for Metro at the Liberecká bus stop



The Strážkov Metro station building

Additionally, large-scale refurbishments of the tramway network were carried out in summer 2007. The most important of them was redevelopment of the tramway crossing at the *Palackého* square and adjacent tramway track sections in the streets *Na Moráni*, *Lidická* and on the *Palackého* bridge. A new tramway superstructure and enlargement of the rail centre-to-centre spacing in the *Na Moráni* street made possible, following the redevelopment, to run the bus line No. 176 between the *Karlovo* and *Palackého* squares together with trams, which significantly helped speed it up in the direction to *Strahov*.



Repair starts on the Palackého square crossroads and superstructure panels are replaced on the tramway line in the Lidická street

Two horizontal curves (the *Jiráskovo* square – the *Palackého* bridge, and the *Jiráskovo* square – the *Na Moráni* street) were added on the track crossing *Palackého* square, which significantly improves the options to detour trams in closures and emergencies in the inner city. In relation to it, a TSD was renovated and a new signalled pedestrian crosswalk was added on the extended structure of the tram stop on the *Rašínovo* embankment.

More major refurbishments were performed on the tramway network in 2007. Repairs were done on the track in the *Korunní* street between *Flora* and the *Vinohradská* water house, track crossing on the *Karlovo* square and the tramline at *Nusle* between *Albertov* and the *Otakarova* street. Some tram stops were given structural enlargements and arrangements more comfortable for passengers. The *Moráň* stop was widened and the stops *Sídlíště Červený Vrch* and *Říčanova* at *Praha 6* were redeveloped. Also the *Albertov* stops were expanded, one of them was rebuilt in a “Viennese type” stop.



The Palackého nám tram stop and the related TSD



The widened Moráň tram stop

Two pedestrian precincts with tramway traffic were also completed in 2007. One of them got its finished look jointly with the Palladium commercial centre start-up on the *Republiky* square, the other has made life significantly easier for pedestrians on the *Strossmayerovo* square. The Charles Bridge refurbishment was started with no interrupt to pedestrian traffic.

The work on extending the tramway line between the *Laurová* stop and the Metro station *Radlická* also began in 2007. The fundamental ground work and anti-noise barriers were on at the future tramway line along the *Radlická* street.



The “New Link” construction in the area of Krejčárek



The “New Link” construction towards the Hlavní nádraží station

The construction of the “New Link”, the key portion of the Prague railway junction redevelopment, was carried out on with intensive effort around the *Husitská* street. Most of the assembly of the bridges were complete both in the section *Praha–Hlavní nádraží – Vítkov*, and on the other side of the new tunnels close to *Krejčárek* in 2007. Also the railway gridiron renovation at the *Praha–Masarykovo nádraží* station was made in relation to the “New Link” project in 2007. Then the repair of the railway yard and platforms, starting with platforms III and IV, complemented the ongoing redevelopment of the terminal at the *Hlavní nádraží* main station in the end of 2007.

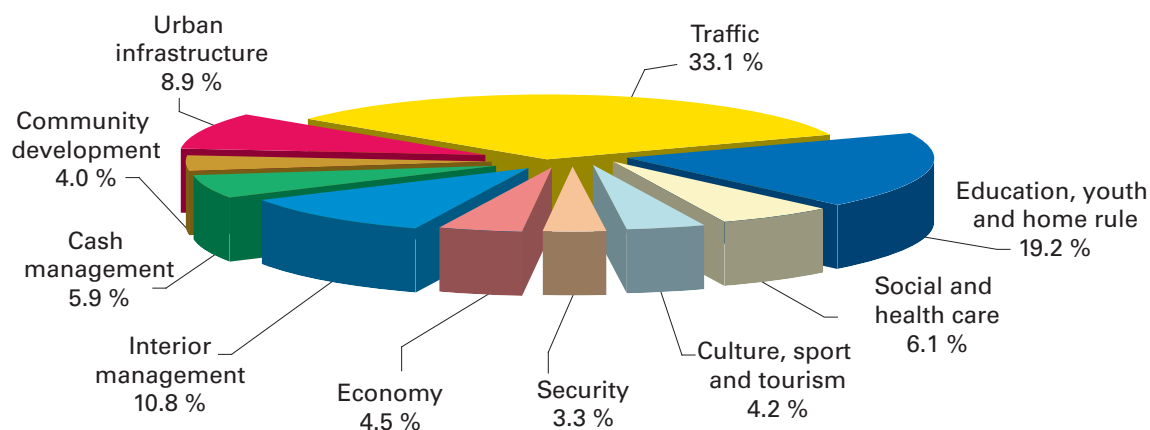
FUNDING THE OPERATION AND DEVELOPMENT OF THE URBAN MOBILITY

The urban mobility operation and construction were funded from the Prague's municipal budget in 2007. The budget was contributed from the state budget and resources of the Prague Public Transit, Co. Inc. (*Dopravní podnik hl. m. Prahy, a. s.*) and other municipal bodies. Earnings from obligations, subsidies from the EU funds and EIB loans are also used for funding.

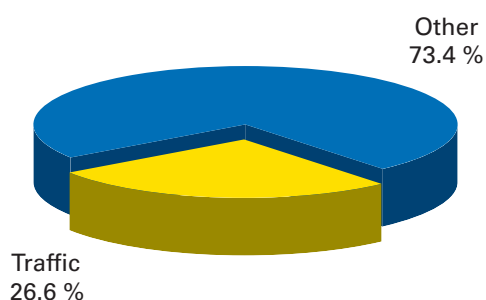
The Prague's municipal budget, adjusted as of 30. 06. 2007, reached czk 61.5 bn. in expenditures, including czk 20.3 bn. (33 %) expenditures in the chapter 03 Transportation which was the most substantial chapter of the municipal budget's expenditures in 2007 again. The operational expenditures of the Capital were transportation in 27 %, the capital expenditures were investments to traffic in 45 %.

Breakdown of expenditures in municipal budget in 2007
(adjusted as of 30. 6. 2007)

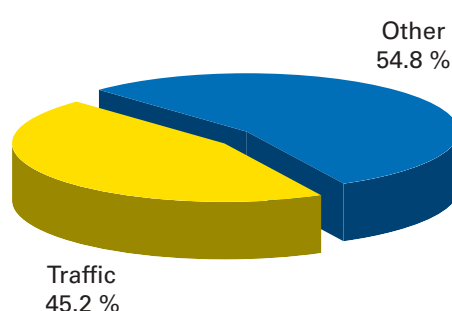
Total expenditures



Share of traffic in operational expenditures



Share of traffic in capital expenditures



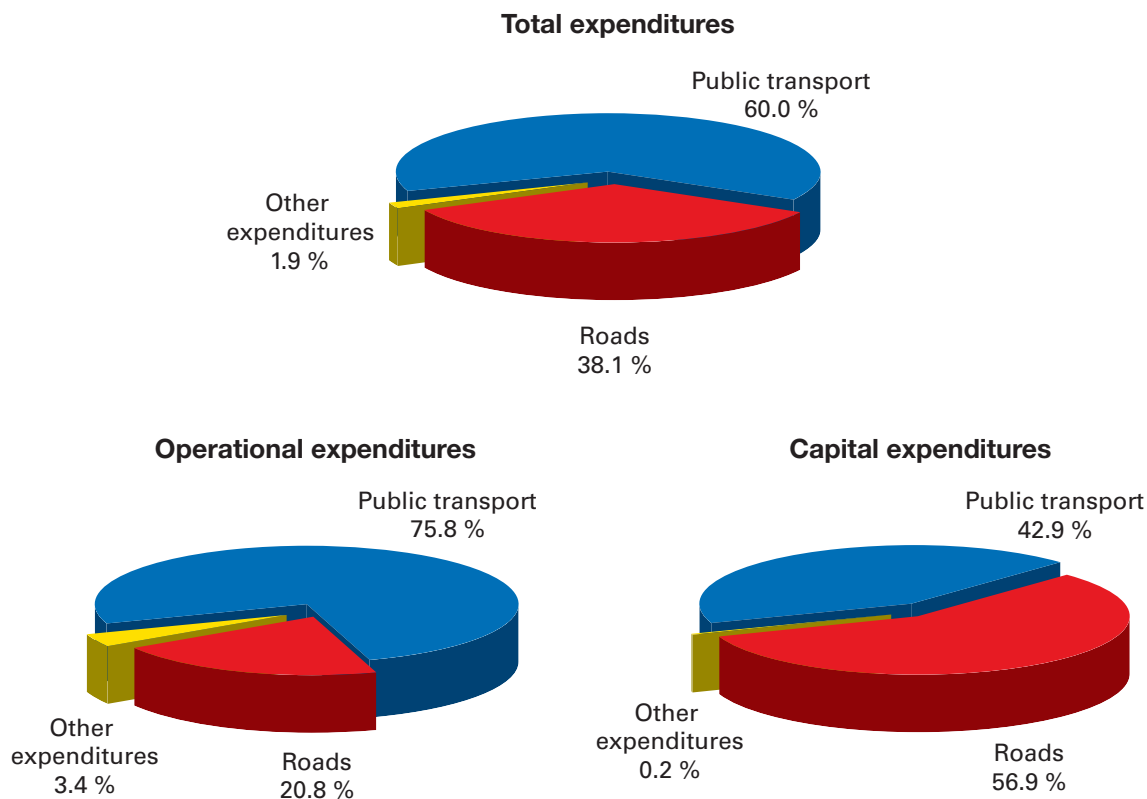
The foregoing amount of czk 20.3 bn. was czk 10.6 bn. earmarked to cover operational expenditures and czk 9.7 bn. for capital expenditures.

The **operational expenditures** in transportation cover every year predominantly subsidies for public passenger transport in and around the city. The amount of czk 8 bn. was allotted in the adjusted budget for this purpose while over czk 2 bn. went to repairs, maintenance and operation of the roads.

The **capital expenditures** covered mostly investments in development i.e. construction of new roads, Metro lines and other transportation facilities (60 %) as well as larger repairs and redevelopment of traffic routes as well as equipping and renewing engineering devices (36 %). The amount of czk 4.2 bn. out of the total czk 9.7 bn. were earmarked for public transport renovation and development, czk 5.5 bn. for investments in the road network.

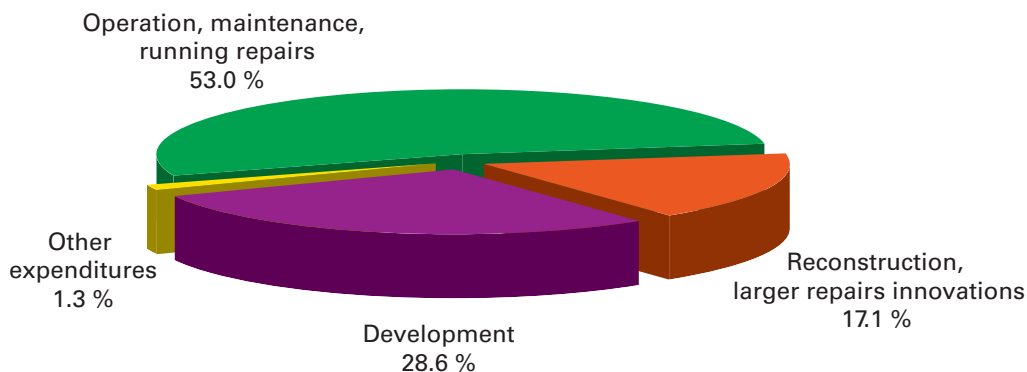
Expenditures for providing operation, renovation and development of public transport prevailed in the 2007 budget. Their share in the total expenditures intended for transportation was 60 %.

Structure of transportation expenditures in the 2007 municipal budget (adjusted as of 30. 6. 2007)

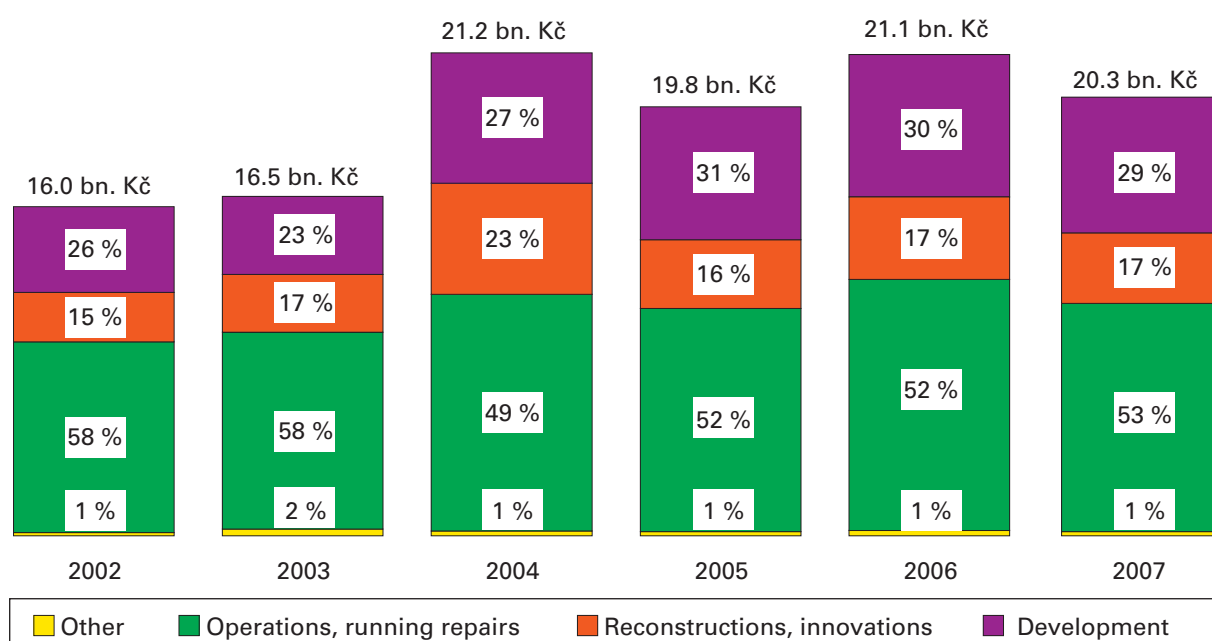


An analysis of the items listed in the breakdown of expenditures made in more detail shows that almost czk 11 bn. was aimed to secure operation, regular repairs and maintenance of the urban transport system, czk 3.5 bn. to provide for larger repairs, redevelopment and renewal of engineering equipment and almost czk 6 bn. was earmarked for investments in development.

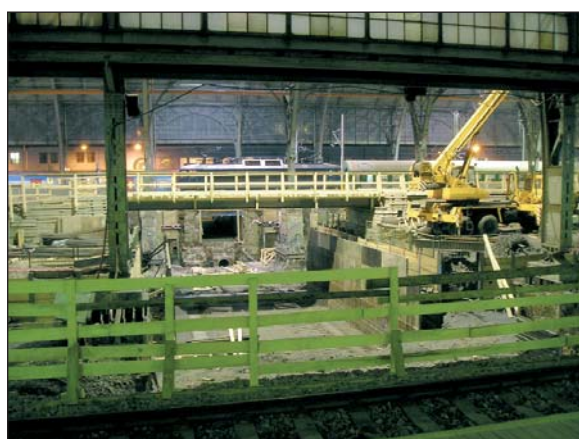
Total transportation expenditures breakdown in the 2007 budget (adjusted as of 30. 6. 2007)



Transportation expenditures breakdown development in Prague's municipal budgets



Targeted contributions concerning public transportation from the national budget were provided to the Capital of Prague for construction of the Metro, maintenance of its system of protection and for purchase of new tram cars (czk 390 million), the budget of the National Fund for Traffic Infrastructure provided the city with czk 1.32 bn. for maintenance, repair and construction of roads for 2007. The Government also participates in the construction of the Prague Ring Road encircling Prague, for the financing of which the Government had already assumed and guaranteed full responsibility. Prague Ring Road constructions drawn the total of czk 2.760 bn. from the investment funds in 2007, including czk 958 mil. from an EIB loan and czk 417 mil. from the Cohesion Fund.



New pedestrian underpasses constructed and platforms III a IV reconstructed at the Hlavní nádraží Main Station

Railway junction Prague constructions (New Link, the *Hlavní nádraží* Main Station redevelopment, the IVth Corridor) were also paid from the government funds.

The Prague Public Transit Co. Inc. have also contributed to meet investment costs for the urban mobility system from their own resources (czk 2.1 bn.), using them i.a. to cover 37 % of the costs expended in 2007 to renew the PT fleet.

Funding of suburban transport was shared by communities around Prague whose population are users of the *PID* integrated transport. Providing a basic transportation service in the suburbs was contributed to also by the Government in the budget of the Municipality of Prague and of surrounding communities.

“Control and regulation system of urban road traffic in Prague”, a Transport Operational Programme project

The Technical Administration of Roads of the City of Prague participated in the preparatory and programming processes of the



OPD



Transport Operational Programme during 2006 and 2007. Jointly with the transportation and EU funds departments of the Prague Municipality and in co-ordination with City Development Authority Prague, a division of the Prague Municipality, a spin-off of an independent priority effort No. 5 was achieved for the City of Prague entitled “Modernisation and development of the Prague Metro and control systems of Prague road traffic”.

The ensuing allocated funds for this priority effort (after increasing a compensatory allocation of the European Regional Development Fund) makes the total of EUR 330 million. The amount will be drawn by two entities, The Technical Administration of Roads of the City of Prague and Prague Public Transit. Prague Road Maintenance is expected to cover the initial two year drawing from the allocation and Prague Public Transit will take up its drawing later with the project of the Metro A line extension.

The specific project to draw from the allocation on behalf of Prague Road Maintenance was entitled “Control and regulation system of urban road traffic in Prague” with the total budget of CZK 1.3 bn., subsidised in 85 % (approx. CZK 1 bn.) from the Transport Operational Programme.

Classes of drawing funds by The Technical Administration of Roads of the City of Prague and the extent of features procured were defined as follows:

- | | |
|---|--|
| Class 1 – Principal traffic control centre Prague | Class 6 – Entry control to Southern Connection – Ramp metering |
| Class 2 – Control with traffic signal devices | Class 7 – Line control on the City Ring Road and radial roads |
| Class 3 – Control and monitoring traffic in tunnels | Class 8 – Prague Road Maintenance radio network function enhancement |
| Class 4 – Supply of traffic information | Class 9 – Optical network |
| Class 5 – Collection of traffic information | Class 10 – Meteorological sensors |

Connect, a regional EU project

The Capital of Prague also participated, as a telematic effort, on a regional project CONNECT in 2007. It focuses on “Infomobility” services. The programme includes necessary studies and pilot projects to introduce systems for high quality information on traffic condition and information for passengers.



Some of the study-type activities are in 50 % jointly covered from the project’s resources (primarily exploratory and testing projects in launching and running Mobility Information Centre *DIC Praha*).

The third and last stage of the project was in progress at the close of 2007. This stage co-financed efforts related to the pilot introduction of the technology of anonymous monitoring of the traffic by means of mobile phones (CFCD).

Traffic Modelling, an SPD 2 project

The Traffic Modelling Project was made by the Institute of Transportation Engineering of the City of Prague (*ÚDI Praha*). Following the merger of the Institute with The Technical Administration of Roads of the City of Prague (*TSK hl. m. Prahy*) as of 1. 1. 2008, the project’s output continues to be utilised by this entity. The Traffic Modelling project is included in a Single Programming Document for Objective 2 (SPD 2) for the Prague cohesion region. The task is subsumed in Priority 1 – Revitalisation and development of the city



PROJEKT JPD 2

Dopravní modelování



Tento projekt je spolufinancován
Evropskou unií (Evropský fond
pro regionální rozvoj ERDF),
hl. m. Prahou a Českou republikou

environment, and in Measure 1.1 Transport systems supporting the transformation of the city environment.

The main purpose of the Traffic Modelling SPD 2 project was improving an efficient specialised tool which makes possible in mobility modelling to test variant methods for optimisation and regulation of urban mobility.

The project, worked out from April, 2005, till February, 2007, focused at traffic conditions currently met on selected Prague crossroads. Particular conditions on the crossroads are determined by their various characteristics and parameters including: its traffic control (no control, traffic signal devices), its structural design (intersecting, circular, number and proportions of incoming roads), traffic load in respective directions, lines of public (esp. tramway) transport, pedestrian and biker volumes etc. These characteristics and parameters make multiple combinations which were described in the model in such a way so as to provide outputs as close as possible to the real traffic. A modelling tool was created under the project which considers those parameters affecting traffic on particular crossroads. The tool is now used for testing selected objectives, transportation measures and plans for urban mobility development in line with the principles for transportation policy of the Municipality of Prague.

The project was co-funded by the EU (European Regional Development Fund – ERDF), the Municipality of Prague and the national Government. For more information concerning SPD 2, please turn to www.strukturalni-fondy.cz/jpd2 and to the website of the SPD 2 co-ordination authority, Ministry for regional development – www.mmr.cz. The project is currently found in the stage called “sustainability of the project” which monitors retention and utilisation of the project's benefits.



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– Department of Transportation Engineering

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