

**GENERAL NATIONAL REPORT:**  
**2019 MOTORWAY DEVELOPMENT IN SERBIA**

**1. Total length of Serbian motorway and expressway network**

The length of the tolled motorways network managed and maintained by PE Roads of Serbia remained the same when you compared with 2017. New sections did not opened in 2018.

- motorways and expressways
- tolled motorways and expressways: **645,00 km**

**Openings in 2019**

The opening of the following sections of tolled motorways is foreseen in 2019:

Motorway	Section	Length km
<b>Corridor X, E 75</b>	<b>Grabovnica-Levosaje</b>	<b>74,0</b>
<b>Corridor X, E 80</b>	<b>Niš-Dimitrovgrad(Bulgarian border)</b>	<b>86,9</b>
<b>Corridor XI, E 763</b>	<b>Surčin-Obrenovac</b>	<b>17,6</b>
<b>Total</b>		<b>178,5</b>

**Investments in motorways**

Year	2018		2019	
	mil CSD	mil EUR	mil CSD	mil EUR
Investments in construction of new motorways	2.864,90	23.54	3.783.90	31,85
Investments in routine maintenance of existing motorways ***	21.895,20	179,91	15.831.50	133,26
<b>Total</b>	<b>24.760,10</b>	<b>203.45</b>	<b>19.615,40</b>	<b>165.11</b>

\*\*\*Investments in routine maintenance are for all state roads I and II category.  
 Exchange rate 1 EUR = 121,7CSD/ 2018; Exchange rate 1 EUR = 118,8 CSD/ 2019;

## *Financing*

<b>Year</b>	<b>2018</b>	<b>2019</b>
National Budget	28%	19%
Loans ( IFI )	15%	26 %
Own income (toll collection and other fees)	57 %	55 %
<b>Total</b>	<b>100 %</b>	<b>100%</b>

### *Traffic on Serbian motorway network*

According to the data published by Statistical Office of the Republic of Serbia estimated **increased** of GDP 2018/2017 in Serbia is **4,4%**.

Inflation rate in 2018 was (taking December 2018/ December 2017 price index) 2 %.

**Traffic growth on motorway network in 2018/2017: 8,37 % (taking into account the total volume of traffic on all tolled motorways in Serbia).**

### *Tolling system and tolling technologies used*

On next sections: Belgrade – Niš, Belgrade – Šid and Belgrade - Subotica, are installed so-called „closed “toll system and on section Niš – Leskovac, Ljig – Preljina, Levosojе – Preševo, and Suva Reka - Gradinje, is „open “toll system.

To save space and money many lanes are mixed with manual and electronic toll.

### **ETC Pay Toll system features**

- Cutting edge technology
- Interoperability with neighbouring countries (Montenegro and Federation of Bosnia and Herzegovina) as well as with other countries
- High reliability
- Easy to maintenance
- State-of-the-art technology
- Excellent working environment

## **ETC Pay Toll system – Technology**

- ETC system was implemented in accordance with EU CEN 278/2004 and carrier frequency of 5.8 MHz
- Based on DSRC (Dedicated Short Range Communications) technology
- Implemented for pre-paid, post-paid and exempted users
- Each user of the ETC system has an on-board unit (OBU) attached to the windscreen of the vehicle
- Payment without stopping for all vehicle categories
- The speed of passing vehicles is limited to 50 km / h for safety reasons

## ***Toll Rates***

Now In Serbia there are only four toll classes, as follows:

Toll classes:

### 1a. Class

- a. Motor vehicles with the characteristics of motorcycle, motor tricycle and quad

### 1. Class

- a. Motor vehicles with two axles and height equal to or lower than 1.3 m, measured at the first axle
- b. Vans with two axles and total height equal to or lower than 1.9 m, with maximum allowed weight up to 3,500 kg

### 2. Class

- a. Motor vehicles with two axles and height equal to or lower than 1.3 m measured at the first axle, with trailers
- b. Vans with two axles and total height equal to or lower than 1.9 m, with maximum allowed weight up to 3,500 kg with trailers
- c. Vans with two axles and total height over 1.9 m, with maximum allowed weight up to 3,500 kg

### 3. Class

- a. Motor vehicles with two or three axles, with height over 1.3 m, measured at the first axle, with maximum allowed weight over 3,500 kg
- b. Vans with two axles and total height equal to or over 1.9 m, with maximum allowed weight up to 3,500 kg with trailers

### 4. Class

Motor vehicles with four or more axles (also counting the trailers' axles), with height over 1.3 m, measured at the first axle, with maximum allowed weight over 3,500 kg

## ***Revenues***

The gross toll income in 2018 was 23.553,37 million CSD or 199, 14 million EUR, taking the exchange rate **1 EUR = 118, 2752 CSD.**

The toll revenue approx. increased 13, 95% in the year 2018 (calculated in national currency).

## ***Safety***

### **Main indicators:**

According to statistical data published by Statistical Office of the Republic of Serbia in 2018 and the report published by Ministry of Internal Affairs in 2019 the following total of accidents on **motorway roads** in Serbia was:

Indicate the following main *ratios*:

	<b>Definition and method of calculation</b>	<b>Variation in % in 2017/2018</b>
<b>Personal injury rate</b>	2017 – 96,1 % total number of injury 2018 – 96,2 % total number of injury	8,6 %
<b>Fatal accident rate</b>	2017 – 2,2 % total of accident number 2018 – 2,0 % total of accident number	- 10 %
<b>Rate of dead</b>	2017 – 3,9 % total number of dead 2018 – 3,8 % total number of dead	- 2 %

Year	Total number of accidents	Number of accidents with a fatality	No. of personal injury accidents	Number of dead	Total no. of injured
2017.	1846	40	546	50	1219
2018.	1846	36	593	49	1228

***On-going projects:***

- **Construction of Belgrade by-pass, Bridge over Sava river / in progress**
- **Construction of Belgrade by-pass Sector 4: Construction of the “Petlovo Brdo” Interchanges / in progress**
- **Finalization of the motorway E 75, section Grabovnica – Levosoje**
- **Finalization of the motorway E 80, section Nis – Dimitrovgrad**
- **Highway E 763, Corridor 11 Belgrade – South Adriatic, connection between Serbia and Montenegro / in progress**
- **Highway, E 763 Beograd – Požega / in progress**

***Long-term forecast and tendencies:***

- **Construction of the motorway E 70 Belgrade – Pančevo – Vršac**
- **Construction of Belgrade by-pass, Section C Bujanj Potok – Pančevo**
- **E 763 Požega – Boljare**
- **E 761 Pojate – Preljina**
- **E 761 Požega – Užice – BIH**
- **E 761 Bulgarian border – Zaječar – Paraćin**
- **I B 21 Novi Sad – Ruma – Šabac – Loznica**
- **M-24 Hungarian border – Kikinda – Pančevo – Kovin**
- **Niš – Merdare, Route no. 7 (SEETO), preliminary design**
- **Morava Corridor, the road from Pojate to Preljina – exceptional significance, connects the central parts of the Republic of Serbia with the two most important routes on Corridors X and XI.**
- **exspressway Ruma - Novi Sad - this route will connect Vojvodina and Western Serbia and the Corridors X and XI with the Corridor Vc, direction Budapest – Osijek – Sarajevo – Mostar – Ploče.**

***Significant actions already started and foreseen for 2019***

## **Modernization of toll collection system in Serbia**

**Through the Sector for Toll Collection, the PE Roads of Serbia charges the road users on the following motorway sections:**

- Belgrade-Niš, I A Category state road No. 1(E-75)
- Belgrade-Šid, (border with Croatia), I A Category state road No. 3(E-70)
- Belgrade-Subotica, (border with Hungary), I A Category state road No. 1(E-75) (opening sections Sirig-Subotica, 2017-12-05),
- Niš-Preševo, (border with Macedonia) I A Category state road No. 1(E-75) (opening new stations Preševo 2016-12-12),
- Ljig-Preljina, I A Category state road No. 2 (E-763) (opening two new stations Takovo and Preljina, 2017-01-01)
- Niš-Dimitrovgrad, (border with Bulgaria) I A Category state road No. 4 (E-80) (opening new stations Dimitrovgrad 2018-01-01)

On sections of motorways Belgrade-Niš, Belgrade-Šid and Belgrade-Subotica the toll is being collected within closed toll collection system, while on the sections, Niš-Preševo, Ljig-Preljina and Niš -Dimitrovgrad the toll is being collected within open toll collection system.

The toll is being collected on motorways in the length of 645 km by automated toll collection system. System covers 47 toll stations.

Toll amount is calculated based on distance covered and vehicle class. Vehicles are classified according to their characteristics (i.e. number of axes, height of vehicle at first axis, total height and permissible maximum weight).

Modernization of toll collection system has been successfully implemented, so that out of overall 250 traffic lanes with toll collection and card distribution, 200 (80,0%) of lanes is provided with the system for electronic toll collection.

The system is fully harmonized with the EU recommendations and standards for interoperability of electronic toll collection, thus allowing interconnection with huge part of electronic toll collection system installed in other European countries.

During 2019, it is planned to introduce closed toll system on the following motorway sections: Niš – border with the Republic of North Macedonia, Niš - border with the Republic of Bulgaria and Obrenovac - Preljina, as follows:

### **1. On the motorway section Niš – Dimitrovgrad**

On the **east branch of Corridor X**, IA motorway No. 4 (**E-80**), from the toll station Niš to Bulgarian border, it is planned to construct and put into function toll collection systems on 6 new lateral toll stations: “Niš sever”, “Niš istok”, “Malča”, “Bela Palanka”, “Pirov zapad” and “Pirov istok” which will, together with the frontal toll station “Dimitrovgrad”, establish the eastern branch of the closed toll collection system. Tolloed motorway length will increase to 105.63 kilometres from the present 51.5 km.

### **2. On the motorway section Niš - Preševo**

On the **south branch of Corridor X**, IA motorway No. 1 (**E-75**), from the toll station Niš to toll station Preševo, it is planned to construct and put into function toll collection systems on 12 lateral toll stations: “Prokuplje”, “Niš jug”, “Doljevac”, “Brestovac”, “Leskovac centar”, “Leskovac jug”, “Grdelica”, “Predejane”, “Vladičin Han”, “Vranje”, “Bujanovac 1” and “Bujanovac 2”, which will, together with the frontal toll station “Preševo”, establish the southern branch of the closed toll collection system. Tolloed motorway length will increase to 151.75 kilometres from the present 79.0 km.

### **3. On the motorway section Obrenovac-Preljina**

Construction of the temporary frontal toll station Obrenovac and lateral toll stations Ub, Lajkovac and Ljig on IA motorway No. 2 (**E-763**) and integration into the closed toll collection system with TS Takovo and TS Preljina. Total tollod motorway section is increased to 103.45 kilometres from the previous 39.3 km. Closed toll collection system is planned to start operating in May 2019.

In **2019**, total length of the tollod motorways will increase from 645 km to **836 km** and the number of toll stations will rise from 47 to **69**.

## SUMMARY

### MAIN ASECAP KEY FIGURES

Country: <b>REPUBLIC OF SERBIA</b>	Indicate below how you calculate each figure provided in the "2018" column	2018 Figure
<b>Network length (Km).....</b> <b>2 x 2 lanes (Km).....</b> 2 x 3 lanes (Km)..... 2 x 4 lanes (Km).....		645,0km 645,0km
Number of km in construction		
Forecasts of opening motorways section		
Annual toll revenues* (in millions of Euros)	199,14 M EUR =165,95 + 33,19 VAT	199,14 M EUR
VAT % (Indicate the VAT % percentage to the toll revenues)		20%
Permanent staff		1244
Average daily traffic (light vehicles)		12.661
Average daily traffic (heavy vehicles)		2.588
Average daily traffic (total = light + heavy vehicles)		15.249
Total number of accidents		1.846
Number of personal injury accidents		593
Number of dead		49
Fatality rate		- 2 %
Kilometres travelled (10 <sup>6</sup> x km)		/



	Indicate below how you calculate each figure provided in the "2018" column	2018
Number of toll transactions (Total) Number of toll transactions (light vehicles): Number of toll transactions (heavy vehicles):		53.723.465 45.104.054 8.619.411
Number of toll stations		47
Number of toll lanes		250
Number of ETC lanes		200
Number of ETC subscribers (Total): Number of ETC subscribers (light vehicles): Number of ETC subscribers (heavy vehicles):		291.864 219.494 72.370
Number of service areas (equipped with petrol stations)		109
Number of rest areas		177
Number of restaurants		20
Number of hotels		60

\*please provide the figure VAT and other taxes excluded.

**Total traffic flow volume in 2018**

Light vehicle (I and II class): 45.104.054 number of vehicles in 2018

Heavy vehicle (III and IV class): 8.619.411 number of vehicles in 2018