



ANALYSIS OF THE GROWTH OF EXISTING TRANSIT ROUTES IN THE REPUBLIC OF UZBEKISTAN AND THE DUPLICATION OF HIGHWAYS IN TRANSIT ROUTES

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Annotation. This article analyzes the transit roads intended for international drivers in the Republic of Uzbekistan and the stages of its development, the distances of the transit roads, and the volume of cargo transportation.

Introduction. There is a good reason to call automobile transport the transport of the 20th century. It was created at the beginning of our century and now the car has become an integral part of our life. The length of the roads is increasing, 24 mln. km. reached About half of it belongs to five countries - USA, India, Russia, Japan and China. Automobiliation has reached an all-time high in the United States. Here, on average, there are 600 cars per thousand people. In many countries of Western Europe, this indicator is somewhat higher: 300-400 and even more [1-2].

Globalization is significantly increasing global cargo flows, where large shipments must be handled through gateway ports. Often, the focus of expanding port capacity to handle future cargo flows is to improve terminal efficiency, but investment in critical port infrastructure is just as crucial [3]. Blockages at ports can be avoided only if fast and trouble-free transportation of goods to the hinterland is guaranteed. Fast and trouble-free delivery of goods is carried out in these vehicles with all the conveniences of car transport [4].

Taking into account that the bulk of cargo transportation in the countries of Central Asia is delivered by road transport, the territory of the Republic of Uzbekistan is a convenient transit country [5]. At the same time, it is necessary to ensure all security for vehicles transiting through the territory of the Republic.

Material and methods. The number of routes intended for the transit of foreign motor carriers through the territory of the Republic of Uzbekistan is set at 44 by the decision of the Cabinet of Ministers No. 323 of December 9, 2011 [6].

With the increase in the volume of road transport, the Cabinet of Ministers in order to create additional favorable conditions for the transit movement of foreign motor carriers across the territory of the Republic of Uzbekistan, to increase the transport and transit potential of the republic, and to ensure the uninterrupted transportation of export-import goods by road transport By the decision No. 492 dated June 30, 2018, the number of these routes was set at 99 [7].

International by cars through the territory of the Republic of Uzbekistan transit routes for transportation

Table 1

s/n	Name	Length	The name of the highways in the route
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		km	
1	Route 1	268	A-381-A380-4P156-4P156g
2	Route 2	680	A-381-A380-M37
3	Route 3	1028	A381-A380-M39-4P23
4	Route 4	1035	A381-A380-M39-M39a
5	Route 5	1192	A381-A380-M39-M39a-M41
6	Route 6	1112	A381-A380-M37-M37a-M39-A373-4P20
7	Route 7	1330	A381-A380-M37-M37a-M39-A373-4P20-A376-4P44b-A373b-A373
8	Route 8	1096	A381-A380-M37-M37a-M39-A373-M34-M39-4P186
9	Route 9	424	A381-A380
10	Route 10	480	4P156g-4P156- IY15km-A380-M37
11	Route 11	828	4P156g-4P156-IY15km-A380-M39-4P23n
12	Route 12	835	4P156g-4P156-IY15km-A380-M39-M39a
13	Route 13	992	4P156g-4P156-IY15km-A380-M39-M39a-M41
14	Route 14	912	4P156g-4P156-IY15km-A380-M39-M39a-M41
15	Route 15	1130	4P156g-4P156-IY15km-A380-M37-M37a-M39-A373-4P20-A376-4P44b-A373b-A373
16	Route 16	896	4P156g-4P156-IY15km-A380-M37-M37a-M39-A373-M34-M39-4P186
17	Route 17	668	4P156g-4P156-IY15km-A380
18	Route 18	550	M37-A380-M39-4P23n
19	Route 19	557	M37-A380-M39-M39a
20	Route 20	714	M37-A380-M39-M39a-M41
21	Route 21	634	M37-M37a-M39-A373-4P20
22	Route 22	852	M37-M37a-M39-A373-4P20-A376-4P44b-A373b-A373
23	Route 23	618	M37-M37a-M39-A373-M34-M39-4P186
24	Route 24	1080	M37-A380
25	Route 25	184	4P23n-M41
26	Route 26	652	4P23n-M39-A378-M37a-M39-A373-4P20
27	Route 27	870	4P23n-M39-A378-M37a-M39-A373-4P20-A376-4P44b-A373b-A373
28	Route 28	636	4P23n-M39-M378-M37a-M39-A373-M34-M39-4P186
29	Route 29	1428	4P23n-M39-A380
30	Route 30	173	M39a-M41
31	Route 31	659	M39a-M39-A378-M37a-M39-A373-4P20
32	Route 32	877	M39a-M39-A378-M37a-M39-A373-4P20-A376-4P44b-A373b-A373
33	Route 33	643	M39a-M39-A378-M37a-M39-A373-M34-M39-4P186
34	Route 34	1435	M39a-M39-A380
35	Route 35	816	M41-M39a-M39-A378-M37a-M39-A373-4P20
36	Route 36	1034	M41-M39a-M39-A378-M37a-M39-A373-4P20-A376-4P44b-A373b-A373



37	Route 37	800	M41-M39a-M39-A378-M37a-M39-A373-M34-M39-4P186
38	Route 38	1592	M41-M39a-M39-A380
39	Route 39	95	4P20-A373-4P26-M34-M39-4P186
40	Route 40	1512	4P20-A373-M39-M37a-M37-A380
41	Route 41	218	A376-4P44b-A373b-A373
42	Route 42	313	A373-A373b-4P44b-A376-4P20-A373-4P26-M34-M39-4P186
43	Route 43	1730	A373-A373b-4P44b-A376-4P20-A373-M39-M37a-M37-A380
44	Route 44	1496	4P186-M39-M34-A373-M39-M37a-M37-A380
45	Route 45	1546	A381-A380-(4K-41-4R-174-4R-191-4R-176-4R-176v)-M37-M37a-M39-A373-A373b-4R126-A373
46	Route 46	1396	4R15g-4R156-IY-A380-M37-M37a-M39-A373-A373b-4R126-A373
47	Route 47	1025	M37 -M37a - M39 - A373 - A373b-4R126 - A373
48	Route 48	1044	4R23n - M39 - A378 - M37a - M39 -A373 - A373b - 4R126 -A373
49	Route 49	1058	M39a-M39-A378-M37a-M39-A373-A373b-4R126A373
50	Route 50	1208	M41-M39a - M39 - A378 - M37a -M39 - A373 - -A373b - 4R126 - A373
51	Route 51	502	A373 - 4R126-A373b - A373 M34- M39-4R18
52	Route 52	1946	-A373-4R126-A373b-A373-A373-M39-M37a-M37-A380 (4K-41-4R174-4R191-4R176-4R176v
53	Route 53	890	A381 - A380 (4K41 - 4R174 - 4R191 - 4R176 - 4R176v - M37 - M37a - A377
54	Route 54	1120	A381 - A380 - M37 - M37a -M39 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
55	Route 55	1170	A381 - A380 - M37 - M37a - M39 - A373 - M34 - M39 - M39b - 4R4 - 4R4a
56	Route 56	1088	A381 - A380 - M37 - M37a - M39 - A373 - M34 - 4R29
57	Route 57	690	4R156g - 4R156 -A380 - M37 - M37a - M39 - A377-IY
58	Route 58	1000	4R156g - 4R156 A380 - M37 - M37a - M39 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694 15-IY
59	Route 59	970	4R156g - 4R156 along the roads, along the way A380 - M37 - M37a - M39 - A373 - M34 - M39 - M39b - 4R4 - 4R4a-IY
60	Route 60	888	4R156g - 4R156 along the roads, along the way A380 - M37 - M37a - M39 - A373 - M34 - 4R29-IY
61	Route 61	412	M37 - M37a - M39 - A377
62	Route 62	722	M37 - M37a - M39 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
63	Route 63	692	The border of Turkmenistan - Olot vehicle launch pad



			(Bukhara region) - Zangiota vehicle launch pad (Tashkent region) - the border of Kazakhstan.
64	Route 64	610	M37 - M37a - M39 - A373 - M34 - 4R29
65	Route 65	420	4R23n - M39 - A378 - M37a - M39 - A377
66	Route 66	740	- 4R23n - M39 - A378 - M37a - M39 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
67	Route 67	710	4R23n - M39 - A378 - M37a - M39 - A373 - M34 - M39 - M39b - 4R4 - 4R4a
68	Route 68	628	4R23n - M39 - A378 - M37a - M39 - A373 - M34 - 4R29
69	Route 69	427	M39a - M39 - A378 - M37a - M39 - A377
70	Route 70	747	M39a - M39 - A378 - M37a - M39 - A373 - M34 - M39 - M39b - M39 - 4R8
71	Route 71	717	M39a - M39 - A378 - M37a - M39 - A373 - M34 - M39 - M39b - 4R4 - 4R4a
72	Route 72	635	M39a - M39 - A378 - M37a - M39 - A373 - M34 - 4R29
73	Route 73	590	M41 - M39a - M39 - A378 - M37a - A377
74	Route 74	904	M41 - M39a - M39 - A378 - M37a - M39 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
75	Route 75	874	M41 - M39a - M39 - A378 - M37a - M39 - A373 - M34 - M39 - M39b - 4R4 - 4R4a
76	Route 76	792	M41 - M39a - M39 - A378 - M37a - M39 - A373 - M34 - 4R29
77	Route 77	298	A377 - M39 - A373 - 4R20
78	Route 78	516	A377 - M39 - A373 - 4R20
79	Route 79	676	A377 - M39 - A373 - A373b - 4R126 - A373
80	Route 80	383	A377 - M39 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
81	Route 81	352	A377 - M39 - A373 - M34 - M39 - M39b - 4R4
82	Route 82	282	A377 - M39 - A373 - M34 - M39 - 4R186
83	Route 83	267	A377 - M39 - A373 - M34 - 4R29
84	Route 84	1290	A377 - M39 - M37a - M37 - A380 4K41 - 4R174 - 4R191 - 4R176 - 4R176v
85	Route 85	225	4R20 - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
86	Route 86	194	4R20 - A373 - M34 - M39 - M39b - 4R4 - 4R4a
87	Route 87	112	4R20 - A373 - M34 - 4R29
88	Route 88	468	A376 - 4K894 - 4K924 - 4R17e - A373b - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
89	Route 89	437	A376 - 4K894 - 4K924 - 4R17e - A373b - A373 - M34 - M39 - M39b - 4R4 - 4R4a
90	Route 90	359	A376 - 4K894 - 4K924 - 4R17e - A373b - A373 - M34 - 4R29
91	Route 91	378,4	A373 - A373b - 4R44b - A376 4R20 - A373 - 4R26 - M34 - M39 - M39b - M39 - 4R8 - 4K694



92	Route 92	347	A373 - A373b - 4R44b - A376 - 4R20 - A373 - 4R26 - M34
93	Route 93	346,5	A373 - A373b - 4R44b - A376
94	Route 94	520	A373 - 4R126 - A373b - A373 - M34 - M39 - M39b - M39 - 4R8 - 4K694
95	Route 95	490	A373 - 4R126 - A373b - A373 - M34 - M39 - M39b - 4R4 - 4R4a
96	Route 96	506	A373 - 4R126 - A373b - A373
97	Route 97	1546	4K694 - 4R8 - M39 - M39b - M39 - M34 - A373 - M39 - M37a - M37 - A380 (4K41 - 4R174 - 4R191 - 4R176 - 4R176v
98	Route 98	1515	4R4a - 4R4 - M39b - M39 - M34 - A373 - M39 - M37a - M37 - A380 (4K41 - 4R174 - 4R191 - 4R176 - 4R176v
99	Route 99	1480	4R29 - M34 - A373 - M39 - M37a - M37 - A380 (4K41 - 4R174 - 4R191 - 4R176 - 4R176v

Analysis. For international drivers who transport international cargo in vehicles through existing transit routes in the Republic, the repetition of 35 highways was calculated [8].

These transit routes are connected by 35 highways. The length and distance of these are detailed in the table below.

**A vehicle used as transit roads
naming of roads**

Table 1.2

s/n	The name of the road	Length km	From where to where
1	A373	399	From the city of Chinoz - to the "Dostlik" post (Kyrgyzstan border)
2	A373b	45	From the highway A373 - to the city of Tashkent
3	A376	168	From the city of Kokan - to the city of Jizzah
4	A377	42	
5	A378	152	From the city of Samarkand to the city of Guzor
6	A380	1204	From the city of Guzor to Boysun
7	A381	12	From Khojaly to Toshovuz
8	M34	160	From Tashkent to Khovos
9	M37	365	From the city of Samarkand to Olot
10	M37a	46	Samarkand ring road
11	M39	628	Kazakhstan r. from the border to Termiz
12	M39a	30	From the M39 highway to Hayraton
13	M39b	67	Tashkent ring road
14	M41	191	From Madaniyat (Kyrgyzstan border) to Termiz
15	4R17e	38	
16	4P20	109	From the village of Karasuv to the city of Bekobad
17	4R23n	5	M39 highway from 1458 km to Termiz river port

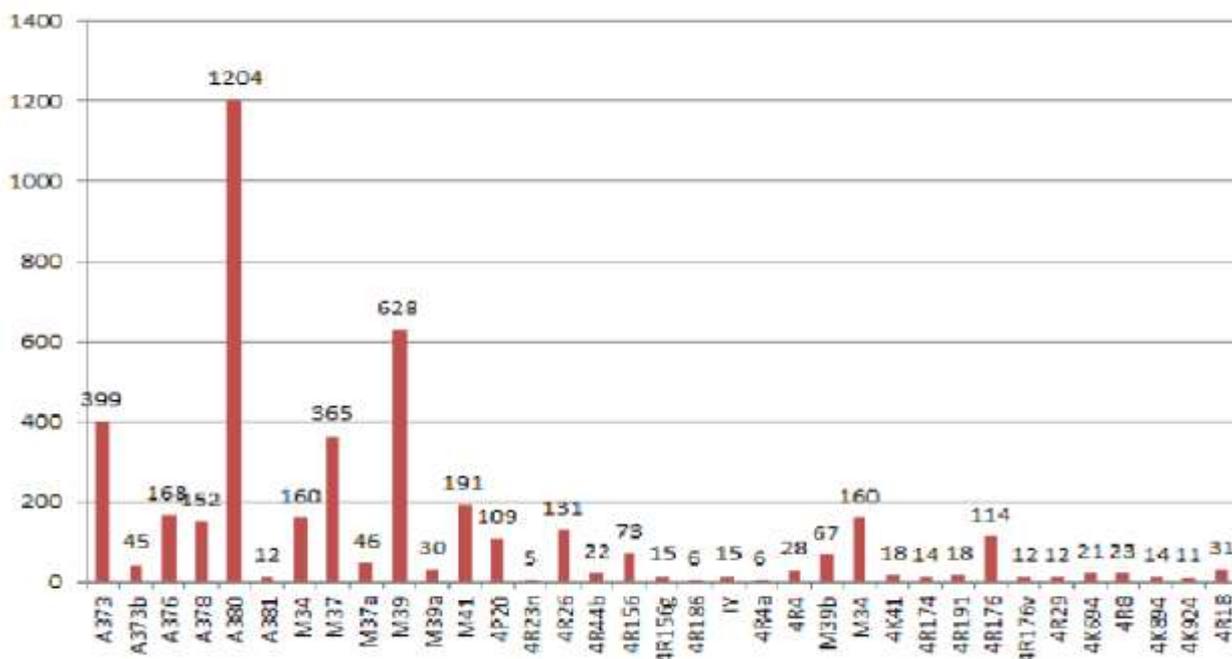


18	4R26	131	From the city of Syrdaryo to the village of Qiyot
19	4R44b	22	From highway A376 to Fergana ring road
20	4R156	73	From the city of Urganch to 570 km of the A380 highway
21	4R156g	15	From highway 4R156 - Rep.Turkmenistan to the limit
22	4R186	6	From the city of Chinoz - Rep.Kazakhstan. to the limit
23	4R4a	6	From the city of Tashkent to the city of Saryogoch
24	4R4	28	From the city of Tashkent to the Keles border
25	4K41	18	797 km of highway A380 to Kumjikkon DFX
26	4R174	14	From the city of Nukus to the city of Khojaly
27	4R191	18	Nukus Small Ring Road
28	4R176	114	From the city of Nukus to the city of Takhtakopir
29	4R176v	12	From highway 4R176 to highway A380
30	4R29	12	From the M34 highway - Rep.Kazakhstan to the limit (Il'ich)
31	4K694	21	From the village of May to the village of Bogish (Tashkent region)
32	4R8	23	813 km of the M39 highway to the city of Chirchik
33	4K894	14	From Shukhay village to Dostlik village (Fergana v.)
34	4K924	11	"Urganch-Mangit" highway - Dosimbay village. - Margugat village. - Gulistan village. Khorezm region
35	4R18	31	From highway A373 - to the city of Gulistan - 22 km, from highway A373 - to the city of Almalyk - 9 km
	Total:	4325	

Note: There is "IR"-Inspector road, the length of this road is 15 km. 4R156 highway to A380 highway is counted up to the control track [9].

We can see table 1.2 in the form of the following histogram.

Histogram1.1



Histogram 1.1. Number and lengths of transit highways.



These transit roads consist of 35 highways, the total length of which is 4325 km. We have analyzed the repeated movement of international cargo vehicles moving in transit on this road. You can see this in the table below [10].

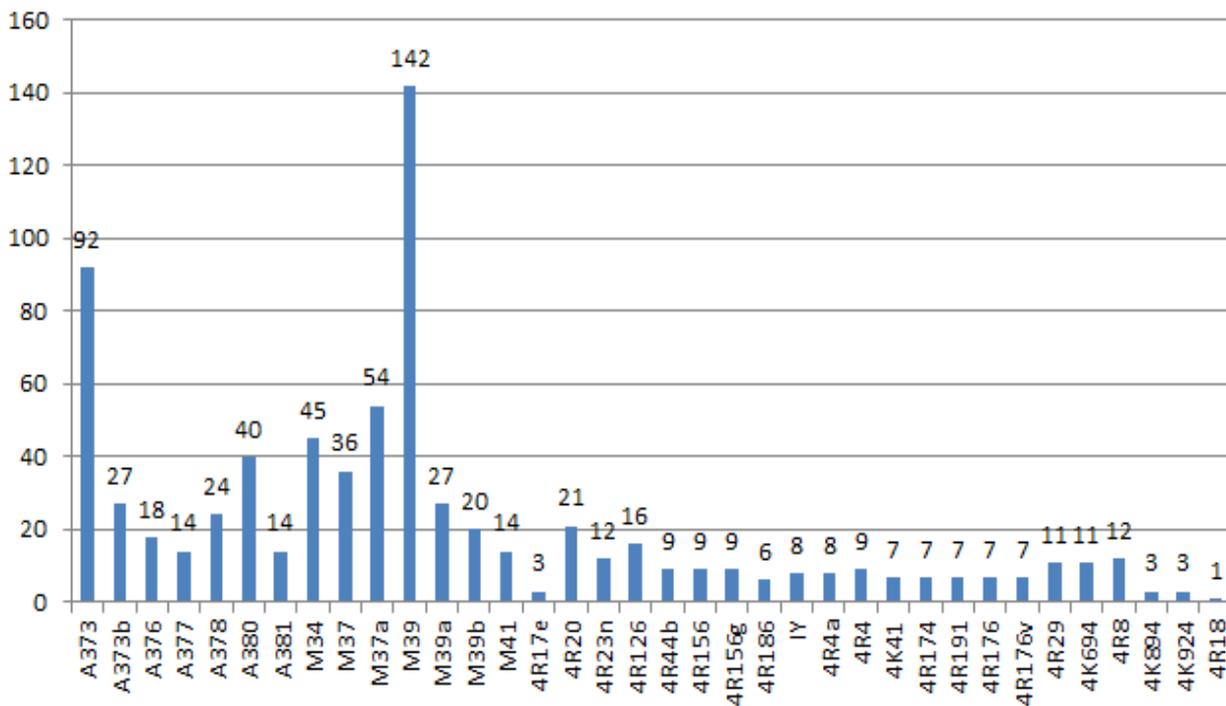
Repetition of highways in transit routes

Table 1.2

s/n	The name of the road	Length km	Repetition of transit routes in directions
1	A373	399	92
2	A373b	45	27
3	A376	168	18
4	A377	42	14
5	A378	152	24
6	A380	1204	40
7	A381	12	14
8	M34	160	45
9	M37	365	36
10	M37a	46	54
11	M39	628	142
12	M39a	30	27
13	M39b	67	20
14	M41	191	14
15	4R17e	38	3
16	4R20	109	21
17	4R23n	5	12
18	4R126	131	16
19	4R44b	22	9
20	4R156	73	9
21	4R156g	15	9
22	4R186	6	6
23	4R4a	6	8
24	4R4	28	9
25	4K41	18	7
26	4R174	14	7
27	4R191	18	7
28	4R176	114	7
29	4R176v	12	7
30	4R29	12	11
31	4K694	21	11
32	4R8	23	12
33	4K894	14	3
34	4K924	11	3
35	4R18	31	1
	Total:	4325	



Histogram 1.2



Histogram 1.2. Car in transit routes
analysis of repetition of paths

The length of the A373 highway is 399 km. 99 transits are repeated 92 times in the designated directions for movement [11]. From this histogram, we can see that the A373 highway is the second busiest area in the country for international cargo vehicles [12].

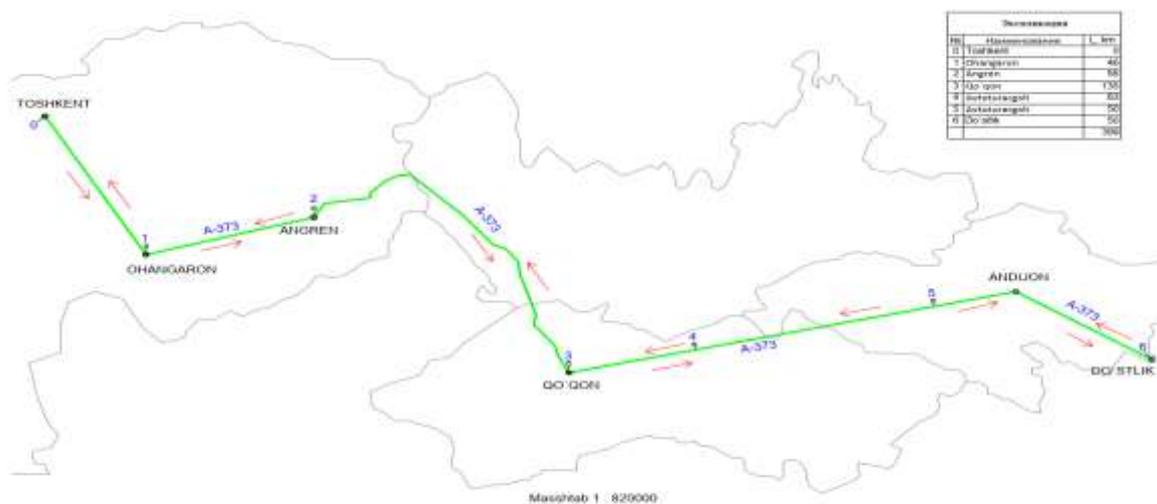


Figure 1. Map of the A373 highway and proposed safe parking areas

Conclusion. The process of globalization is increasingly leading to an increase in the flow of global cargo [13]. As a result of comprehensive reforms carried out by our President Sh. Mirziyoyev, international cooperation relations are developing and this can be clearly seen in transport logistics [14].

Transportation on international transport corridors (TRASEKA, MOMIH) is increasing sharply. As a result, our economy grew. A clear example of this is the sharp increase and increase of the transport material base of the republic [15].



According to the decision of the Presidential Decree No. 3422, facilities were created for the import of large trucks.

Facilitation was created in the trade of international goods and multilateral trade relations were established.

If we put them in one table, it will look like this.

Over the years, tons				
2017	2018	2019	2020	2021
1 407 267,4	5 043 435	6 893 630	6 164 169	8 691 026

The following conclusions can be drawn from these:

- The transit potential of the Republic of Uzbekistan has now been properly used, and in order to further increase it, it is necessary to introduce safe parking places throughout the republic for trucks engaged in international transportation and in transit;
- to further improve the quality of border post services (preventing motor vehicles from standing idle);
- it is necessary to organize high-quality services along the highways [16].

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