

TASHKENT INTERNATIONAL CONGRESS ON MODERN SCIENCES-III

REHABILITATION OF HIGHWAYS IN GEORGIA

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ABSTRACT

The paper discusses the construction of new highways in Georgia. It is established that the construction of highways has a positive effect on the development of economy, security and tourism. It is worth noting that the construction of these infrastructural facilities increases the efficiency of handling transit cargoes and the satisfaction of local customers.

Considering the current geopolitical situation, the territory of Georgia is only one corridor between Europe and Asia, the shortest land distance for cargo transportation, etc.

The example of the section of Rikoti (Khevi-Argveta), the number of bridges and tunnels, their difficulties, etc. are discussed.

The aforementioned construction site is a combination of the most complex engineering solutions and structures, where there are 97 bridges and 51 tunnels on a total of 51.6 kilometers of road.

Keywords: Highway, Modernization, Rehabilitation, Truism, Tunnel, Bridge

INTRODUCTION

Transportation routes play a significant role in the development of a country as they contribute significantly to the improvement and strengthening of various aspects of the country's social, cultural, economic, and other essential issues. From this perspective, it is considered that in a country where the problem of public transportation network is significantly resolved, there is progress and rapid progress in the country's development.

Good transportation routes fulfill an important role in showcasing the high culture of a country and contribute significantly to the development of rural areas, as well as the country's economic and political strength and progress.

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Georgia strategically and geopolitically occupies an intense zone. It can be said that Georgia actually represents a defense zone between Asia and Europe. Considering these factors, Georgia's position is generally significant in the region, and considering that it is the shortest distance between Europe and Asia, the transportation network is heavily loaded with transit movements.

MAIN PART

With consideration to the strategic interests of the state, active rehabilitation and continuous construction of the transnational highway network are ongoing, particularly focusing on the East-West Highway.

Intensive rehabilitation works are currently underway on major transnational highways such as E60, E117, E001, E70, and E692. (See image #1 for reference).



Image #1 – Transnational Highways in Georgia According to the E Index

Currently, the majority of these projects are modernized and well-maintained, while intense construction works are ongoing on the remaining projects. By 2027, it is anticipated that all strategic transnational transportation routes in the country will be modernized and upgraded, facilitating increased transit cargo turnover.

Taking into account the mountainous terrain, the Khashuri-Zestafoni section (see image #2) represents the most challenging engineering feat. Current engineering solutions and technologies involve cars passing through tunnels, bridges, viaducts, and so forth. This represents a complex combination of constructional challenges where both intellectual and physical labor, as well as significant resources, are heavily invested.

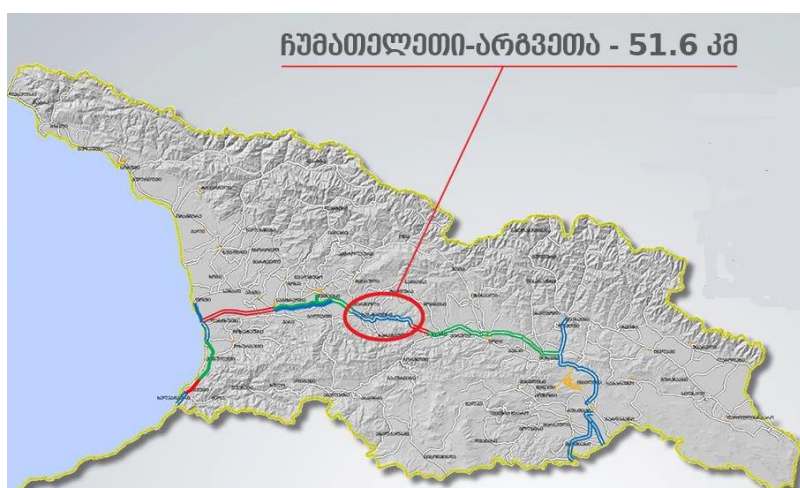


Image #2 – E60 Highway Viaduct (Khashuri - Zestafoni)

The main attention is drawn to the above mentioned section, which spans a total length of approximately 51.6 kilometers. Despite the challenging geographic terrain, featuring numerous large and small rivers, mountain systems, geologically and morphologically complex regions, the

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construction of a sophisticated four-lane section is progressing successfully. It is divided into four sections (see image 3): Chumateleti-Khevi section (Section I) with a length of 11.7 kilometers, Khevi-Ubisa section (Section II) spanning 12.2 kilometers, Ubisa-Shorapani section (Section III) covering 13 kilometers, and Shorapani-Argveta section (Section IV) extending over 14.7 kilometers.

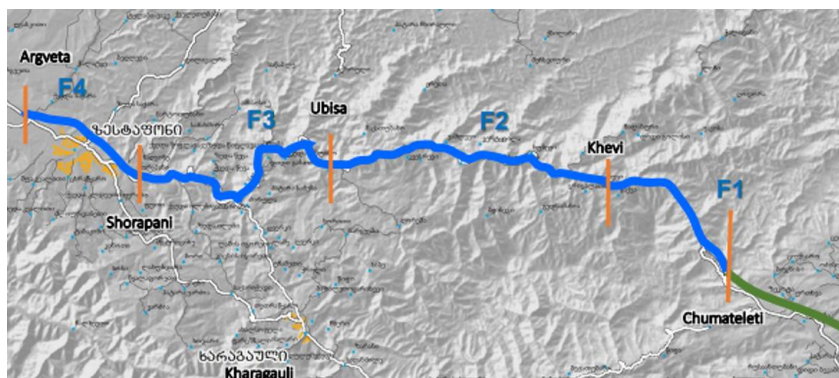


Image #3 – Rikoti Pass, Four Sections

Each section of the tunnel, where the construction works are completed and intense construction activities are ongoing, can be described as follows:

Chumateleti – Khevi (I Section):

- 11.7 km - Cement-concrete 4-lane road
- 17 Bridges – Total Length 1.8 km.
- 3 Tunnels – Total Length 2.7 km.

Khevi - Ubisa (II Section)

- 12.2 km - Cement-concrete 4-lane road
- 36 Bridges – Total Length 8.3 km.
- 20 Tunnels – Total Length 9.2 km.

Ubisa - Shorapani (III section)

- 13 km - Cement-concrete 4-lane road
- 27 Bridges – Total Length 6.2 km.
- 18 Tunnels – Total Length 14 km.

Shorapani – Argveta (IV section)

- 14.7 km - Cement-concrete 4-lane road
- 17 Bridges – Total Length 5.1 km.
- 10 Tunnels – Total Length 7.7 km.

In total, the summary is as follows: 97 bridges - 21,438m.; 51 tunnels - 33,6 km

The financing of the above mentioned projects are provided by various donor organizations (such as the World Bank, European Investment Bank, Asian Development Bank, etc.) as well as from the national budget of Georgia.

CONCIUSION

The mentioned projects contribute to the country's economy, enhance tourist attractions, and improve transit transport flows. Georgia reaffirms its strategic position on the Eurasian route and strengthens successful cooperation with the European Union, which is already open to us.

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