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ТРАНСПОРТНА СИСТЕМА ПІВНІЧНОЇ БУКОВИНИ І ХОТИНЩИНИ У МІЖВОЄННИЙ ПЕРІОД

У статті автор характеризує основні тенденції розвитку системи шляхів сполучення Північної Буковини і Хотинщини у 1918 – 1940 рр. Досліджує стан залізниць, шосейних доріг, авіатранспорту та міського громадського транспорту.

У міжвоєнний період, окрім вдосконалення традиційних видів перевезень, були започатковані нові. Перешкодою до покращення транспортної інфраструктури стали значні руйнування в роки Першої світової війни. Впродовж 1918 – 1940 рр. довелося відбудовувати пошкоджені ділянки залізничного полотна, мости і станції, тому, лише у 1940 р. здано в експлуатацію нові залізниці: Чудей-Красноільск та Берегомет-Селешень (Стебні). Аналогічними були проблеми із шосейними дорогами, стан яких в регіоні у 1918-1940 рр. був одним з найгірших у Румунії.

До прогресивних зрушень варто зарахувати налагодження постійного внутрішньодержавного і міжнародного повітряного сполучення Північної Буковини й Хотинщини, що стало можливим завдяки будівництву в м. Чернівці найкращого в Румунії аеропорту.

Якісних змін у міжвоєнний період зазнав і міський громадський транспорт. Окрім трамваю, вулицями міста пасажирів почали перевозити автобуси і тролейбуси. Запрацювали регулярні автобусні маршрути й між основними населеними пунктами краю.

Ключові слова: Північна Буковина, Хотинщина, транспорт, залізниця, дороги, трамвай, тролейбус, автобус.

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TRANSPORT SYSTEM OF NORTHERN BUKOVYNA AND KHOTYN REGION IN THE INTERWAR PERIOD

Abstract. In the article the author describes the main tendencies of the development of the system of communication routes of Northern Bukovina and Khotyn region in 1918 – 1940.

In the interwar period, in addition to the improvement of traditional modes of transport, new ones were launched. A major impediment to the improvement of transport infrastructure was the devastation during the World War I. During 1918 – 1940 the damaged sections of rails, bridges and stations had to be rebuilt. Similar were the problems with highways, the condition of which was one of the worst in Romania.

The progressive shifts should include the establishment of a permanent domestic and international air connection between Northern Bukovina and Khotyn. Urban public transport has also undergone qualitative changes in the interwar period. There were regular bus routes between the main settlements of the region.

Keywords: Northern Bukovina, Khotyn region, transport, rail, roads, tram, trolleybus, bus.

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Transport has always played a decisive role in the economy of any region. Developed transport infrastructure is an indispensable condition for the development of all sectors of the economy. So, in Northern Bukovyna and Khotyn region an own system of communication routes has long been formed. By the time the region was incorporated into royal Romania in 1918, there was already a network of railways, highways, and urban public transport began to develop. However, after the joining of these territories to Romania, the government made considerable efforts to improve and restore existing communications (much of the railways and highways were destroyed during World War I). He also started the creation of new ones, such as air transportation, and such types of public transport as trolleybus and bus.

Despite the importance of the topic, there is no single holistic study in national historiography that reflects the basic tendencies of the development of the whole system of interconnections of the region in 1918-1940. Among these, there are only attempts to characterize certain types of communications (highways, trams). An exception is the work of I. Piddubnyi¹, in which the author describes in details all stages of civil aviation development in Bukovyna. Romanian historiography has focused on the development of railways. The work of Romanian researcher D. Ionescu is worth noting here².

The periodicals, among which the publications in newspapers «Chas» («Time») and «Holos Bukovyny» («Voice of Bukovyna»), play an important role, supplement the previous information on the history of the development of the routes of Northern Bukovyna and Khotyn region; statistics contained in the annual statistical compilation; archival materials of the funds of the V-th Road Inspectorate of Chernivtsi, Prefecture of Chernivtsi County, etc.

Taking into account the fact that the study, which would present a complete picture of the transport infrastructure, is still absent, the author aims to characterize comprehensively the main tendencies of development of the transport system of Northern Bukovyna and Khotyn region during the interwar period. The achievement of this goal has led to a number of tasks, namely: to investigate the development of traditional for the region, at that time, rail and road transport, to determine the state of highways; to trace the origin and distribution of aviation and certain types of public urban transport.

The leading place in the transport system of the region in 1918 – 1940 was given to the railways. Even during the period of its incorporation into the Austro-Hungarian and Russian empires, was built the lion's share of the railway lines, which operated in the years under study.

At the end of 1918, when the railways of Bukovyna and Bessarabia came into use of the Directorate of Railways of Romania, according to statistics of 1918, their length was 902,387³ and 1,140,852⁴ km, respectively. About half of them were narrow-gauge railway lines used by forestry. Moreover, in Bukovyna, almost all of them were dependent on a religious foundation⁵. It should be noted that in Bukovyna 443,355 km of railways were state property⁶. On the territory of Bessarabia – 969,924 km⁷.

In the first years of Romanian rule, the width of the track in Bukovyna was 1 m 43.5 cm, and in Bessarabia – 1 m 52.5 cm⁸. This was due to the fact that these territories at the time of construction of the railways were a part of different states that had different standards for the construction of railway tracks. But by 1924 this issue was resolved by the Romanian government and all railways of Bessarabia and Khotyn region in particular were refitted to the standard of width 1 m 43.5 cm⁹.

The density of the rail network (passenger and freight) in 1922 in the territory of Bukovyna was 11,116 km per 10,000 inhabitants, in Bessarabia – 3,858 km, while in the Old Kingdom – 5,517 km¹⁰.

In Northern Bukovyna there were several railway lines in the interwar period. In particular, the most important directions were: Vyzhnytsia – Vashkivtsi – Napolokivtsi – Luzhany – Chernivtsi (from the Napolokivtsi the branch passed to Sniatyn, from Luzhany to Zalizhchyky via Kitsman, Prylypche and Kostyryzhivka); Lopushna – Berehomet – Storozhynets – Hlyboka – Bagrynivka – Chervona Dibrova; Gilce – Karapchiv; Chernivtsi – Chagor – Velykyi Kuchuriv – Chervona Dibrova – Siret; Chernivtsi – Ostrytsia – Prypruttia – Novoselytsia (from Novoselytsia further to Khotyn); Verenchanka – Zastavna – Vikno; Stephanesty – Babyn and towards the border¹¹. Also on the territory of the region (18 km) from Kostyryzhivka via Stefanesti there was a transit line Horodenka-Zalizhchyky, used by Polish trains¹².

In Khotyn region the railway connected Novoselytsia, Mamalyga, Criva, Lipcani, Kelmentsi, Romanivtsi, Sokyriany, Ocnîța¹³. Novoselytsia had connections with the settlements of the then Dorohoi district, which today belong to the Hertsa district of Chernivtsi region. The railway passed through Molnytsia and Hertsa to Dorohoi¹⁴.

For the management of Bukovyna and Khotyn district, the VII-th Railway Inspectorate was established in 1918 under the authority of the General Directorate of Railways of Romania. The Railways Inspectorate was located in Chernivtsi¹⁵.

After 1918, the direction of Ițcani – Lviv became jointly owned by Romania and Poland. And «Lemberg – Czernowitz – Jassy – Eisenbahn» Company retained ownership of a part of the railways in Bukovyna (Ițcani – Chernivtsi – Nepolokivtsi) and received annual compensation for its use until 1957¹⁶. These conditions were established by the Trianon and Saint-Germain treaties and protocols drawn up by various commissions that examined the problem of reparations and compensations of the states that were a part of the Habsburg Empire.

On December 10, 1928, the first Convention, which was adopted by the General Meeting of the Company on July 6, 1929, was concluded in order to repay the debts to the owners of the shares. On January 17, 1932, the terms of liquidation of «Lemberg – Czernowitz – Jassy – Eisenbahn» Society were established by court (between the governments of Romania and Poland and the shareholders). These conditions were laid down in Law №1542 of April 28, 1932¹⁷. And in 1934, Ițcani – Chernivtsi – Nepolokivtsi line became a part of the Romanian railway. Until June 1940 it was owned by Romania¹⁸.

However, during the war of 1914 – 1918 considerable losses were caused as a result of the fighting and the frequent relocation of troops by the railways of Northern Bukovyna and Khotyn region. Scores of railway bridges across Prut, Siret and Cheremosh were destroyed¹⁹. The largest among them, bridges near Chernivtsi (238 m), Nepolokivtsi and Hlyboka (more than 100 m)²⁰. Exploded tunnels in the mountains. The armies of the warring countries dismantled sections of railways between settlements Chernivtsi – Novoselytsia, Verenchanka – Yurkivtsi, Hlyboka – Bagrynivka – Siret, Berehomiet – Lopushna²¹. In some places, only earthen mounds were reminiscent of the existence of a railway track. Most of the railway stations and adjacent shops were burned down, and practically all of their equipment was lost²².

The Romanian authorities began to restore railway infrastructure since 1919. However, Romania's financial situation did not allow to provide rapid work. Priority was given to the branch of Nepolokivtsi – Chernivtsi – Burdujeni. 6 bridges were reconstructed in this direction, including the large 118 m bridge over Siret. Over again the wooden bridge over the Prut was rebuilt²³. A bridge over Cheremosh was rebuilt on the line Nepolokivtsi – Vyzhnytsia. By the decree №6784 of February 17, 1920, issued by the General Directorate of the Railways of Romania, Nepolokivtsi Station was given a new name Grigore Ghica Voda Station²⁴.

During the reign of Ion I.C. Brătianu government, since January 1922 to August 1925, in Bukovyna 50 bridges, the buildings of stations in Chernivtsi and Vyzhnytsia were reconstructed, and the number of lines at Grigore Ghica Voda Station increased. In Khotyn region, the movement in the direction of Novoselytsia – Mamalyga – Kelmentsi – Sokyriani – Ocnița was restored²⁵.

In 1932 – 1935 the government rebuilt the branch of Verenchanka – Yurkivtsi (9 km), which was dismantled by the Austrian army. Later, through Pohorylivka it was extended to Vikno²⁶. By means of the Railway Society Zalizhchyky – Kolomyia was reconstructed Babyn – Stefaneshy – Sniatyn line, which was destroyed during the war. In order to facilitate the removal of timber, branches Chudei – Krasnoilsk – (4,4 km) and Berehomiet – Seleșeni (nowadays village of Stebni) – (4,4 km) were designed and erected during 1938-1940²⁷.

On the territory of Northern Bukovyna and Khotyn region (as well as throughout Romania) railway transport operated exclusively during the light period of the day. In the summer, trains circulate between 5 a.m. and 9 p.m. and in winter from 7 a.m. to 7 p.m.²⁸ Although because of snowfalls in mountainous areas²⁹ or high water levels in rivers that flooded railroad bridges³⁰ or rails³¹, their cruising could stop indefinitely. The rail service manual also set a maximum speed limit of 12 km / h³².

The issue of highways was extremely problematic in the interwar period in Northern Bukovyna and Khotyn region. Finally, Romanian authorities could not solve it. Local highways, as well as railways, suffered greatly during the war years of 1914-1918 and from a series of floods that occurred quite frequently during the period under study³³. Bridges on the sections of highways have been particularly devastated in almost the entire region³⁴. Climatic conditions added problems: «It is impossible to travel after the winter of 1920. The cars were swamped to the axles. Only with the help of local dwellers it was possible to drive further. In many places huge stones interfere the movement. Almost all roads».

The highway roads of the region were managed by the X-th Directorate of Bridges and Highways (Chernivtsi), which was subordinated to the General Directorate of Bridges and Highways in Bucharest³⁵. The District Services of Bridges and Highways were in charge of the X-th Directorate. In addition to the districts of Northern Bukovyna, to the X-th Directorate was also subordinated Khotyn Bridges and Highway Roads Service³⁶.

Roads during the rule of the Romanian authorities in the region were divided into 3 categories: national, district and rural³⁷. The typical covering of the highways were: at the base a layer of large pebble 6-10 cm thick and above – a layer of small gravel – 2-6 cm³⁸. The bridges were constructed either of wood or of wood with using iron or reinforced concrete elements³⁹. Highway roads maintenance was taxed⁴⁰.

According to statistics, in 1922 there were 537 km of highways in Chernivtsi district, 178 km – in Kitsman, 554 km – in Storozhynets, 162 km – in Vashkivtsi, 473 km – in Vyzhnytsia, and 220 km – in Zastavna⁴¹. Sum total in Northern Bukovyna districts – 2124 km⁴². 1026 km of them were covered with pebble and gravel. There are data on Khotyn district, starting since 1923. There were 653 km of roads in the district⁴³, 129 km of which were covered⁴⁴. Moreover, the worst condition of roads and bridges was observed in the mountainous part of the region. There were the least covered roads here⁴⁵.

The value of road transport and, consequently, of roads increased rapidly. Confirmation of this is the fact of the opening of the driving school in Chernivtsi on March 1, 1920⁴⁶. There was a future with the cars⁴⁷, which made them more active in restoration work. Roads and bridges were rebuilding mainly during the first post-war years. Only the construction of some bridges was completed in the early 1930's. Among them was the bridge in Horecha in the outskirts of Chernivtsi, which was put into operation in 1932⁴⁸. Current road repairs were constantly carried out (coverage was renewed)⁴⁹.

However, even in the 1930s, the state of the highways of the mountainous part of Northern Bukovyna left much to be desired. The newspaper «Holos Bukovyny» reported: «There is a lack of good roads. In recent times mountain roads have been so spoiled by Cheremosh, Putyivka, and other waters that the connection between mountains and valleys is almost impossible. It became dangerous to move on them»⁵⁰. «The whole of Northern Bukovyna is in a swamp, nowhere a good road. In 1914, a district road was started to build through Clivodyn to Davyditsi, and from then no one was interested in it. The peasants complained – all in vain»⁵¹.

Often the poor condition of the roads was a consequence of the dishonesty of Romanian officials: «From Putyiv people cannot get to Seletyn, nor to Vyzhnytsia... Pretor from Seletyn builds a villa for himself and has no time to occupy with roads. There is not a single bridge between Putylov and Uste Putylov, if anyone walks, must cross in ford up to 2 meters depths of rushing water, where even life is threatened»⁵².

In Khotyn district in 1930's Khotyn – Kolinkivtsi – Chernivtsi, Khotyn – Novoselytsia highway was repaired. Khotyn – Briceni highway was being built. But even here, the state of the roads was one of the worst in the country⁵³.

Civil aviation was one of the new kinds of transport that became widespread in Northern Bukovyna and Khotyn region in 1918-1940. World War I gave a strong push to the development of aviation in many countries, including Romania. In addition to military operations, aircrafts were increasingly being used for peaceful purposes. These trends were also characteristic for the territory of Northern Bukovyna and Khotyn region during the interwar period.

The city of Chernivtsi played an important role in establishing the aviation industry of the region. It was here that the airport, which served domestic and international flights was opened, an air school was established. In addition, Chernivtsi became the centre of the VI-th Aviation Command (there were 9 in all in Romania), which included 11 districts. Among them were Chernivtsi, Storozhynets and Khotyn districts⁵⁴.

The issue of creating an airfield in Chernivtsi was raised in September 1926. After long discussion, on September 22, 1927 for its construction were chosen lands of common pasture of the village of Rohizna. Here in parallel the airfield functioned and cattle grazing took place. Only with the emergence of the aircraft the cattle driven off the runway⁵⁵.

In the 1930s air-route Warsaw – Bucharest passed through Chernivtsi. Yet in 1925 experimented flight was made through this route by planes of the Polish Air Company «Aerolloyd», and in 1930 the Air Company «Lot», began to operate regular flights between the capitals of Poland and Romania, with an intermediate landing in Chernivtsi⁵⁶. Initially, the line was serviced by «Fokker» aircrafts and later – by «Lockheed»⁵⁷. On January 28, 1936, Bucharest – Chernivtsi Aviation Line, serviced by company «SARTA»,

started operating⁵⁸. Since 1937 the operation of Prague – Moscow route, which passed through Chernivtsi, began. «Douglas» aircraft operated here. In addition to regular flights, Chernivtsi Airport also received private planes. So, in 1935 a German plane, which was flying to Turkey, landed here⁵⁹.

With the development of aviation in Romania (the gradual creation of its own industrial aviation base, the establishment of the Civil Aviation Service and Air Connections and the Ministry of Air and Maritime Communications)⁶⁰, the aviation infrastructure of the region was improved. Yes, due to the need to create a permanent airport in Chernivtsi, it was decided to build a new airport. The land was allocated near the Grădina Publică Railway Station (nowadays Chernivtsi-South). The works lasted since 1930 to 1933. The financial costs for its construction were covered by the Ministry of Industry and Trade, Prefecture of Chernivtsi region and Chernivtsi City Hall. Although some works on ordering the airport itself, approaching to it and establishing of a permanent bus connection with the city took place and later, the solemn unveiling of the airport took place on May 25, 1933. It was attended by the King of Romania, Karol II, who stated that the airport was the first step in the development of Romanian commercial aviation⁶¹. The newspaper «Chas» then stated that Chernivtsi airport is the best in Romania⁶².

The Romanian leadership at the time approached the issue of building the country's air transport complex. The proof of this is the opening of aero clubs and aviation schools to train pilots alongside the creation of airports and the aviation industry. Thus, since July 1931 at Chernivtsi University began to operate the aviation school⁶³. The material and technical base of the school (3 planes, several gliders) made it possible to conduct high-level theoretical and practical training of cadets. Despite the underfunding of the air school, several of its graduates each year applied for a pilot's license⁶⁴.

With the development of air transport in the region, airmail⁶⁵ (an advanced type of communication at the time) has expanded, which could deliver a letter in any direction. The use of airplanes for forwarding correspondence greatly accelerated delivery to the addressee.

Promotion by the Romanian government of air transportation has led to the emergence of private planes. The first owner of a private plane in Chernivtsi in 1935 became the well-known at that time physician Emanuel Flor⁶⁶.

Chernivtsi city transport accounted for a significant share of the transport network of the region. In 1918 the city already had a tram connection, and in 1926 and 1939 began operating of city buses and trolleybuses respectively⁶⁷.

After the war for Chernivtsi tram was not easy. The rail and wagon fleet required immediate repair or complete replacement. To this was added the financial crisis of the company, caused by rising prices for fuel and lubricants for power plants and spare parts for trams⁶⁸. Therefore, in the first post-war years the tram was not fully operational⁶⁹. At that time the newspaper «Holos Bukovyny» rightly complained about the irregularity of tram trips and the late start of traffic⁷⁰.

In May 1920 the tram and power plants that served it became the property of the city. The supply of oil was gradually improved for power plants, which had been reequipped in 1922, all wagons were repainted, and the tram began to work from 7 a.m. to 9 p.m.⁷¹ In the late 1930's the tram traffic ended at 12 p.m., and only in winter at 10 o'clock. The tram track, which was 6500 m in length⁷², ran from the Central Railway Station to Prut, Rohatka and Grădina Publică Railway Station (Chernivtsi-South)⁷³.

In 1926 on the territory of the tram depot on Mihai Viteazu Street (nowadays Sadova Street) was built a new repair shop with modern equipment, and behind the depot – a new premises of the directorate of power plants and tram⁷⁴.

Due to the economic crisis, that since 1930 has plagued the tram company and the power plants, which serviced it since the beginning of 1933 a new commercial structure was created on its base – «The State Commercial Administration of Electromechanical Enterprises». Commercialization produced rapid results and by 1935 the effects of the economic downturn had been overcome⁷⁵.

During 1936-1940 the tram rails were replaced by new ones, all the wagons were repaired. In general in the 1930's, tram's work improved significantly. The result of it was a reduction in passenger complaints⁷⁶.

Another type of public transport in Chernivtsi, which began to run regularly through the streets of the city, was a bus. The movement of the first small buses was started in summer of 1926 by the society «Taxico» on the route from Square Unirii (nowadays Central Square) to the city hall, located in the area of modern Kanivska Street. During 1927-1929 the movement of buses was irregular⁷⁷.

In 1930 new bus route from Alba Iulia Street (nowadays Eminescu Street) through Iancu Flondor Street (nowadays Kobylianska Street) and Petru Rareș Street (nowadays Bukovynska Street) to the railway crossing on modern Karmaliuk Street⁷⁸.

Since 1933 the organization of bus transportation in the city was entrusted to «The State Commercial Administration of Electromechanical Enterprises». The new owner of the bus routes immediately began updating the bus fleet (new Romanian-made cars were purchased with the motors of Italian firm «Fiat») and a bus garage was built next to the tram depot⁷⁹. In December 1933 special bus stopping places were made to improve the quality of bus services⁸⁰. In 1934, the bus fleet was renewed again – were purchased buses of the Romanian production «International» and the Swedish – «Volvo» with more powerful engines and higher passenger capacity⁸¹.

By combining bus and tram companies into a single complex, it was managed to ensure the interaction of these modes of transport. The tram continued to serve the central part of the city, which the bus – with new routes – joined with the outskirts: Horecha, Rosha and Sadgora⁸².

But due to heavy expenses of exploitation, in 1937 buses were decided to replace by trolleybuses on part of the routes. For this purpose, a trolleybus garage was built on the territory of the tram depot⁸³. The first trolleybus route ran from the Residence of Bukovynian and Dalmatian Metropolitans via Square Unirii (nowadays Central Square), Romanian Street (nowadays Ruska Street) to the city cemetery. It was opened on February 1, 1939. It should be noted that Chernivtsi trolleybus was the first in Romania and allowed to increase significantly the profitability of passenger transportation in the city⁸⁴.

In 1930 regular intercity bus transportations began. From Chernivtsi buses began to run in the direction of Gura-Humorului, Cluj, Botoșani, Târgu Neamț, Dorohoi, Suceava and others⁸⁵.

Thus, the routes of connection between Northern Bukovyna and Khotyn region were severely destroyed during the World War I. This is especially pertain to railways and highways. During 1918-1940, all damaged sections of the railway, bridges, stations and adjacent shops were rebuilt. Some parts of the rails had to be rebuilt. In 1940 new Chudei – Krasnoilsk and Berehommet – Seleșen railways were put into operation.

The state of highways in the region in 1918-1940 was one of the worst in the country. Although old bridges and roads were being repaired, it was difficult to reach individual settlements.

Along with the modes of transport, existing at the time of the joining of Northern Bukovyna and Khotyn region to Romania, a new field of transport – the aviation one – was booming in the region. The best airport in interwar Romania was opened, a permanent interstate air service was established in Chernivtsi, international air transportation was started, an air school was established and air mail activity started. In general, the development of aviation transport in Northern Bukovyna and Khotyn region showed an improvement of the transport connection of the region, its access to a qualitatively new, advanced at that time level.

After World War I, a new stage in the development of urban public transport began. If in the first post-war years there was only a tram connection in the city, then later the movement of buses and trolleybuses began. The commissioning of trolleybuses was an extremely progressive step in the development of the city's transport infrastructure. And the opening of long-distance buses made it much easier for dwellers of the region to move to Chernivtsi.

¹ I. Піддубний, *Історія авіації на Буковині (1910-1945)* [History of Aviation in Bukovyna (1910-1945)], Чернівці, Зелена Буковина, 2006, 112 с.

² D. Ionescu, *Construirea căilor ferate în Bucovina* [The Construction of Railways in Bukovyna], in «Revista Istorică», București, Editura Academiei Române, 1995, №9-10, p. 847-857.

³ D. Ionescu, *Construirea căilor ferate în Bucovina*, p. 854.

⁴ *Anuarul statistic al Romaniei 1922* [Statistical Yearbook of Romania 1922], București, Tipografia Curții Regale, 1923, p. 112-113.

⁵ I. Lupu, *Scurt istoric al căilor ferate din Bucovina* [Short History of Railways in Bukovyna], in «Glasul Bucovinei. Revistă trimestrială de istorie și cultură», Cernăuți-București, 1997, №1(13), p. 37.

⁶ D. Ionescu, *Construirea căilor ferate în Bucovina*, p. 854.

⁷ *Anuarul statistic al Romaniei 1922*, p. 112-113.

⁸ *Anuarul statistic al Romaniei 1922*, p. 112-113.

- ⁹ *Anuarul statistic al Romaniei 1924* [Statistical Yearbook of Romania 1924], București, Tipografia Curții Regale, 1925, p. 81.
- ¹⁰ *Anuarul statistic al Romaniei 1922*, p. 24-26; 112-113.
- ¹¹ ДАЧО, ф. 242, оп. 1, спр. 140, арк. 23, 39.
- ¹² *Польські поїзди через Буковину* [Polish Trains Through Bukovyna], in «Час», 1929, 30 квітня, с. 1.
- ¹³ ДАЧО, ф. 242, оп. 1, спр. 140, арк. 13.
- ¹⁴ ДАЧО, ф. 242, оп. 1, спр. 140, арк. 14.
- ¹⁵ I. Lupu, *Scurt istoric al căilor ferate din Bucovina*, p. 45.
- ¹⁶ I. Lupu, *Scurt istoric al căilor ferate din Bucovina*, p. 46.
- ¹⁷ I. Lupu, *Scurt istoric al căilor ferate din Bucovina*, p. 47.
- ¹⁸ I. Lupu, *Scurt istoric al căilor ferate din Bucovina*, p. 46.
- ¹⁹ ДАЧО, ф. 242, оп. 1, спр. 140, арк. 1.
- ²⁰ *Lucrările executate în 1921* [Works Executed in 1921], in «Arhiva C.F.R.», 1922, №8, p. 122.
- ²¹ D. Ionescu, *Construirea căilor ferate în Bucovina*, p. 854.
- ²² D. Ionescu, *Construirea căilor ferate în Bucovina*, p. 854.
- ²³ C. Răileanu, *Starea podurilor de cale ferată din Bucovina* [The Condition of the Railway Bridges from Bukovyna], in «Buletinul Căilor Ferate Române», 1920, №10, p. 326.
- ²⁴ C. Răileanu, *Starea podurilor de cale ferată din Bucovina*, p. 310.
- ²⁵ I. Miculescu, *Căile noastre ferate de după războiu* [Our Railways After the War], in «Buletinul Căilor Ferate Române», 1926, №83-84, p. 2026.
- ²⁶ D. Ionescu, *Construirea căilor ferate în Bucovina*, p. 856.
- ²⁷ I. Miculescu, *Problema transporturilor în România* [Transport Problem in Romania], București, Tip. Rotativa, 1938, p. 9.
- ²⁸ I. Țighiliu, *Considerații asupra căilor ferate particulare din România* [Considerations Over Railways Particularly From Romania], in «Revista Istorică», București, Editura Academiei Române, 1990, №7-8, p. 733.
- ²⁹ *Порядки на Залізниці* [Rules at Railways], in «Час», 1929, 9 лютого, с. 3.
- ³⁰ *Великі повені* [Great Floods], in «Час», 1929, 28 березня, с. 1.
- ³¹ *Знов катастрофа повенів* [Again Catastrophe of Floods], in «Час», 1929, 14 липня, с. 1.
- ³² I. Țighiliu, *Considerații asupra căilor ferate particulare din România*, p. 733.
- ³³ ДАЧО, ф. 242, оп. 1, спр. 32, арк. 7; *Calendarul Glasul Bucovinei pe anul 1928* [Voice of Bukovyna Calendar for 1928 Year], Cernăuți, Glasul Bucovinei, 1928, p. 102.
- ³⁴ ДАЧО, ф. 242, оп. 1, спр. 26, арк. 227-231, 257-255.
- ³⁵ ДАЧО, ф. 242, оп. 1, спр. 33, арк. 42.
- ³⁶ ДАЧО, ф. 242, оп. 1, спр. 110, арк. 1.
- ³⁷ ДАЧО, ф. 242, оп. 1, спр. 140, арк. 23.
- ³⁸ ДАЧО, ф. 242, оп. 1, спр. 6, арк. 1.
- ³⁹ ДАЧО, ф. 242, оп. 1, спр. 26, арк. 227.
- ⁴⁰ *Голос Буковини* (Чернівці), 1933, 3 вересня.
- ⁴¹ *Anuarul statistic al Romaniei 1922*, p. 130.
- ⁴² *Anuarul statistic al Romaniei 1922*, p. 134.
- ⁴³ *Anuarul statistic al Romaniei 1923* [Statistical Yearbook of Romania 1923], București, Tipografia Curții Regale, 1924, p. 91.
- ⁴⁴ *Anuarul statistic al Romaniei 1923*, p. 94.
- ⁴⁵ *Anuarul statistic al Romaniei 1923*, p. 91, 94.
- ⁴⁶ ДАЧО, ф. 6, оп. 1, спр. 464, арк. 2.
- ⁴⁷ I. Miculescu, *Căile ferate, criza și politica transporturilor* [Railways, Crisis and Transport Policy], in «Aspectele crizei românești în cadrul crizei mondiale. Comunicări făcute la asociația generală a economiștilor din România», București, Tip. «Bucovina» I. E. Torouțiu, 1937, p. 567.
- ⁴⁸ ДАЧО, ф. 242, оп. 1, спр. 32, арк. 170.
- ⁴⁹ ДАЧО, ф. 242, оп. 1, спр. 33, арк. 42.
- ⁵⁰ *Голос Буковини* (Чернівці), 1933, 23 квітня.
- ⁵¹ *Голос Буковини* (Чернівці), 1933, 25 червня.
- ⁵² *Голос Буковини* (Чернівці), 1933, 3 вересня.
- ⁵³ О. Добржанський, Ю. Макара, О. Масан, *Хотинщина: Історичний нарис* [Khotynshchyna: Historical Essay], Чернівці, Молодий буковинець, 2002, с. 214.
- ⁵⁴ ДАЧО, ф. 14, оп. 1, спр. 6341, арк. 1.
- ⁵⁵ І. Піддубний, *Історія авіації на Буковині (1910-1945)*, с. 55.
- ⁵⁶ І. Піддубний, *Історія авіації на Буковині (1910-1945)*, с. 52.
- ⁵⁷ І. Піддубний, *Історія авіації на Буковині (1910-1945)*, с. 52.

- ⁵⁸ I. Піддубний, *Історія авіації на Буковині (1910-1945)*, с. 61.
- ⁵⁹ *Час* (Чернівці), 1935, 1 серпня.
- ⁶⁰ ДАЧО, ф. 15, оп. 1, спр.12735, арк. 1.
- ⁶¹ *Glasul Bucovinei* (Cernăuți), 1935, 29 august.
- ⁶² *Час* (Чернівці), 1936, 1 лютого.
- ⁶³ *Anuarul universității regele Carol II din Cernăuți pe anii de studii 1933-1936* [Yearbook of Chernivtsi King Carol II University for 1933-1936 Study Years], Cernăuți, Glasul Bucovinei, 1937, p. 150.
- ⁶⁴ *Anuarul universității regele Carol II din Cernăuți pe anii de studii 1933-1936*, p. 264, 268.
- ⁶⁵ *Час* (Чернівці), 1936, 2 липня.
- ⁶⁶ I. Піддубний, *Історія авіації на Буковині (1910-1945)*, с. 68.
- ⁶⁷ С. Тархов, *Історія міськелектротранспорту Чернівців* [History of Chernivtsi City Electric Transport], Чернівці, Прут, 1997, с. 96, 137, 138.
- ⁶⁸ *Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937* [Monograph of the Electrical Plants and Trams of Chernivtsi Municipality. Elaborated by the Administration of the I.E.M.C. on the Occasion of the 40th Anniversary of the 1897-1937 Activity], Cernăuți, Glasul Bucovinei, 1937, p. 25-26.
- ⁶⁹ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 97.
- ⁷⁰ *Голос Буковини* (Чернівці), 1919, 19 січня.
- ⁷¹ *Голос Буковини* (Чернівці), 1920, 5 серпня.
- ⁷² *Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937*, p. 54.
- ⁷³ *Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937*, p. 34.
- ⁷⁴ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 109.
- ⁷⁵ *Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937*, p. 32-33.
- ⁷⁶ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 135.
- ⁷⁷ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 141.
- ⁷⁸ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 141.
- ⁷⁹ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 143.
- ⁸⁰ *Час* (Чернівці), 1933, 15 грудня.
- ⁸¹ *Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937*, p. 58.
- ⁸² *Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937*, p. 57.
- ⁸³ I. Sava, *Tracțiunea electrică cu troleibuse la Cernăuți. Extras din buletinul A.P.D.E.* [Trolley Buses Electric Traction in Chernivtsi. Excerpt From A.P.D.E.], 1939, №5-8, p. 3.
- ⁸⁴ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 161.
- ⁸⁵ С. Тархов, *Історія міськелектротранспорту Чернівців*, с. 141.

Reference

1. Piddubnyi, Istoriia aviatsii na Bukovyni (1910-1945) [History of Aviation in Bukovyna (1910-1945)], Chernivtsi, Zelena Bukovyna, 2006, 112 s.
2. D. Ionescu, Construirea căilor ferate în Bucovina [The Construction of Railways in Bukovyna], in «Revista Istorică», București, Editura Academiei Române, 1995, №9-10, p. 847-857.
3. D. Ionescu, Construirea căilor ferate în Bucovina, p. 854.
4. Anuarul statistic al Romaniei 1922 [Statistical Yearbook of Romania 1922], București, Tipografia Curții Regale, 1923, p. 112-113.
5. I. Lupu, Scurt istoric al căilor ferate din Bucovina [Short History of Railways in Bukovyna], in «Glasul Bucovinei. Revistă trimestrială de istorie și cultură», Cernăuți-București, 1997, №1(13), p. 37.
6. D. Ionescu, Construirea căilor ferate în Bucovina, p. 854.
7. Anuarul statistic al Romaniei 1922, p. 112-113.
8. Anuarul statistic al Romaniei 1922, p. 112-113.
9. Anuarul statistic al Romaniei 1924 [Statistical Yearbook of Romania 1924], București, Tipografia Curții Regale, 1925, p. 81.
10. Anuarul statistic al Romaniei 1922, p. 24-26; 112-113.
11. DACHO, f. 242, op. 1, spr. 140, ark. 23, 39.
12. Polski potiahy cherez Bukovynu [Polish Trains Through Bukovyna], in «Chas», 1929, 30 kvitnia, s. 1.
13. DACHO, f. 242, op. 1, spr. 140, ark. 13.

14. DACHO, f. 242, op. 1, spr. 140, ark. 14.
15. I. Lupu, Scurt istoric al căilor ferate din Bucovina, p. 45.
16. I. Lupu, Scurt istoric al căilor ferate din Bucovina, p. 46.
17. I. Lupu, Scurt istoric al căilor ferate din Bucovina, p. 47.
18. I. Lupu, Scurt istoric al căilor ferate din Bucovina, p. 46.
19. DACHO, f. 242, op. 1, spr. 140, ark. 1.
20. Lucrările executate în 1921 [Works Executed in 1921], in «Arhiva C.F.R.», 1922, №8, p. 122.
21. D. Ionescu, Construirea căilor ferate în Bucovina, p. 854.
22. D. Ionescu, Construirea căilor ferate în Bucovina, p. 854.
23. C. Răileanu, Starea podurilor de cale ferată din Bucovina [The Condition of the Railway Bridges from Bukovyna], in «Buletinul Căilor Ferate Române», 1920, №10, p. 326.
24. C. Răileanu, Starea podurilor de cale ferată din Bucovina, p. 310.
25. I. Miclescu, Căile noastre ferate de după războiu [Our Railways After the War], in «Buletinul Căilor Ferate Române», 1926, №83-84, p. 2026.
26. D. Ionescu, Construirea căilor ferate în Bucovina, p. 856.
27. I. Miclescu, Problema transporturilor în România [Transport Problem in Romania], București, Tip. Rotativa, 1938, p. 9.
28. I. Țighiliu, Considerații asupra căilor ferate particulare din România [Considerations Over Railways Particularly From Romania], in «Revista Istorică», București, Editura Academiei Române, 1990, №7-8, p. 733.
29. Poriadky na Zaliznytsi [Rules at Railways], in «Chas», 1929, 9 liutoho, s. 3.
30. Velyki poveny [Great Floods], in «Chas», 1929, 28 bereznia, s. 1.
31. Znov katastrofa poveniv [Again Catastrophe of Floods], in «Chas», 1929, 14 lypnia, s. 1.
32. I. Țighiliu, Considerații asupra căilor ferate particulare din România, p. 733.
33. DACHO, f. 242, op. 1, spr. 32, ark. 7; Calendarul Glasul Bucovinei pe anul 1928 [Voice of Bukovyna Calendar for 1928 Year], Cernăuți, Glasul Bucovinei, 1928, p. 102.
34. DACHO, f. 242, op. 1, spr. 26, ark. 227-231, 257-255.
35. DACHO, f. 6, op. 1, spr. 465, ark. 1.
36. DACHO, f. 242, op. 1, spr. 33, ark. 42.
37. DACHO, f. 242, op. 1, spr. 110, ark. 1.
38. DACHO, f. 242, op. 1, spr. 140, ark. 23.
39. DACHO, f. 242, op. 1, spr. 6, ark. 1.
40. DACHO, f. 242, op. 1, spr. 26, ark. 227.
41. Holos Bukovyny (Chernivtsi), 1933, 3 veresnia.
42. Anuarul statistic al Romaniei 1922, p. 130.
43. Anuarul statistic al Romaniei 1922, p. 134.
44. Anuarul statistic al Romaniei 1923 [Statistical Yearbook of Romania 1923], București, Tipografia Curții Regale, 1924, p. 91.
45. Anuarul statistic al Romaniei 1923, p. 94.
46. Anuarul statistic al Romaniei 1923, p. 91, 94.
47. DACHO, f. 6, op. 1, spr. 464, ark. 2.
48. I. Miclescu, Căile ferate, criza și politica transporturilor [Railways, Crisis and Transport Policy], in «Aspectele crizei românești în cadrul crizei mondiale. Comunicări făcute la asociația generală a economiștilor din România», București, Tip. «Bucovina» I. E. Torouțiu, 1937, p. 567.
49. DACHO, f. 242, op. 1, spr. 32, ark. 170.
50. DACHO, f. 242, op. 1, spr. 33, ark. 42.
51. Holos Bukovyny (Chernivtsi), 1933, 23 kvitnia.
52. Holos Bukovyny (Chernivtsi), 1933, 25 chervnia.
53. Holos Bukovyny (Chernivtsi), 1933, 3 veresnia.
54. O. Dobrzhanskyi, Yu. Makar, O. Masan, Khotynshchyna: Istorychnyi narys [Khotynshchyna: Historical Essay], Chernivtsi, Molodyi bukovynets, 2002, s. 214.
55. DACHO, f. 14, op. 1, spr. 6341, ark. 1.
56. I. Pidubnyi, Istoriia aviatsii na Bukovyni (1910-1945), s. 55.
57. I. Pidubnyi, Istoriia aviatsii na Bukovyni (1910-1945), s. 52.
58. I. Pidubnyi, Istoriia aviatsii na Bukovyni (1910-1945), s. 52.
59. I. Pidubnyi, Istoriia aviatsii na Bukovyni (1910-1945), s. 61.
60. Chas (Chernivtsi), 1935, 1 serpnia.
61. DACHO, f. 15, op. 1, spr. 12735, ark. 1.
62. Glasul Bucovinei (Cernăuți), 1935, 29 august.
63. Chas (Chernivtsi), 1936, 1 liutoho.

64. Anuarul universității regele Carol II din Cernăuți pe anii de studii 1933-1936 [Yearbook of Chernivtsi King Carol II University for 1933-1936 Study Years], Cernăuți, Glasul Bucovinei, 1937, p. 150.
65. Anuarul universității regele Carol II din Cernăuți pe anii de studii 1933-1936, p. 264, 268.
66. Chas (Chernivtsi), 1936, 2 lypnia.
67. I. Piddubnyi, Istoriia aviatsii na Bukovyni (1910-1945), s. 68.
68. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv [History of Chernivtsi City Electric Transport], Chernivtsi, Prut, 1997, s. 96, 137, 138.
69. Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937 [Monograph of the Electrical Plants and Trams of Chernivtsi Municipality. Elaborated by the Administration of the I.E.M.C. on the Occasion of the 40th Anniversary of the 1897-1937 Activity], Cernăuți, Glasul Bucovinei, 1937, p. 25-26.
70. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 97.
71. Holos Bukovyny (Chernivtsi), 1919, 19 sichnia.
72. Holos Bukovyny (Chernivtsi), 1920, 5 serpnia.
73. Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937, p. 54.
74. Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937, p. 34.
75. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 109.
76. Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937, p. 32-33.
77. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 135.
78. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 141.
79. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 141.
80. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 143.
81. Chas (Chernivtsi), 1933, 15 hrudnia.
82. Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937, p. 58.
83. Monografia uzinelor și tramvaielor electrice ale Municipiului Cernăuți. Elaborată de administrația Regiei I.E.M.C. cu ocazia sărbătoririi jubileului de 40 ani activitate 1897-1937, p. 57.
84. I. Sava, Tracțiunea electrică cu troleibuse la Cernăuți. Extras din buletinul A.P.D.E. [Trolley Buses Electric Traction in Chernivtsi. Excerpt From A.P.D.E.], 1939, №5-8, p. 3.
85. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 161.
86. S. Tarkhov, Istoriia miskelektrotransportu Chernivtsiv, s. 141.