

## Transport Geography Papers of Polish Geographical Society

2018, 21(4), 30-43

DOI 10.4467/2543859XPKG.18.020.10778

**Received:** 20.11.2018

**Received in revised form:** 20.12.2018

**Accepted:** 21.12.2018

**Published:** 29.12.2018

---

# TRANSFORMATION OF THE CHOJNICE RAILWAY JUNCTION IN THE YEARS 1989-2017 AND FUTURE OPERATIONAL PERSPECTIVES

## *Przekształcenia węzła kolejowego w Chojnicach w latach 1989-2017 i perspektywy jego funkcjonowania w przyszłości*

**Damian Otta (1), Renata Anisiewicz (2), Tadeusz Palmowski (3)**

(1) Association of Rail Enthusiasts in Chojnice, Strzelecka 68, 89-600 Chojnice, Poland

E-mail: damian.otta@p-r.com.pl

(2) Department of Regional Development, Institute of Geography, Faculty of Oceanography and Geography, University of Gdańsk, Jana Bażyńskiego 4, 80-309 Gdańsk, Poland

E-mail: renata.anisiewicz@ug.edu.pl

(3) Department of Regional Development, Institute of Geography, Faculty of Oceanography and Geography, University of Gdańsk, Jana Bażyńskiego 4, 80-309 Gdańsk, Poland (corresponding author)

E-mail: tadeusz.palmowski@ug.edu.pl

### **Citation:**

Otta D., Anisiewicz R., Palmowski T., 2018, Transformation of the Chojnice railway junction in the years 1989-2017 and future operational perspectives, *Prace Komisji Geografii Komunikacji PTG*, 21(4), 30-43.

**Abstract:** The paper presents changes in the operation of the railway junction in Chojnice and neighbouring areas, and the impact thereof in the years 1989-2017. The analysis covers infrastructural changes, passenger traffic and organisational changes resulting from the transformation of the Polish State Railways (PKP) after 1989. The Chojnice railway junction, operating since the seventies of the nineteenth century is one of the biggest junctions in northern Poland.

Regress of railway transport in the studied period noted throughout Poland resulted in closing down a number of railway lines in the vicinity and a reduction of operating connections and technical facilities. This led to limiting access to rail transport and to the peripheral role of the area in the region. Plans for upgrading the rail network provide an opportunity for improving the situation, particularly the electrification of the junction and the establishing of a terminal for collective transport at the neglected railway station described in the final part of the paper.

**Key words:** Chojnice, Pomorze, railway junction

---

## 1. Introduction

Chojnice, a city located in Pomorskie Voievodship, boasts one of the biggest railway junctions in northern Poland. Various political and economic conditions determined the operation of the junction in the one hundred and fifty-year long lifespan of the Chojnice junction. The political and economic transformation at the end of the eighties and the beginning of the nineties of the previous century left a strong footprint on the state of railways and serviced regions. It also affected the railway junction in Chojnice and the neighbouring areas.

This article shows the transformation, which took place in transport operations in the Chojnice railway junction and the areas affected in the years 1989-2017, particularly in terms of infrastructure and rail connections for passengers. In addition, the paper refers to future perspectives for the Chojnice junction.

Studies of the railway network in Poland started in the thirties of the twentieth century. Nevertheless, the first rail monograph covering the territory of Poland at the time, by T. Bissaga (1938), appeared at the close of twenty-year period between the two world wars. Earlier interest in the Polish rail network can be seen in the works of a German researcher R. Röchling (1935). An analysis of the rail network on the territory of Poland appeared in the work of A. Wrzosek (1935) on the territory of Pomerania. Studies on rail transport progressed after the Second World War. Numerous studies appeared, including key monographs about the country. These included publications by T. Lijewski (1959, 1986, 1995, 2006), S. Koziarski (1993a, 1993b), Z. Taylor (2007), as well as joint studies of T. Lijewski and S. Koziarski (1995). The studies also covered communication districts and smaller sections of the rail network. The Pomeranian region was the subject of publications by R. Gwarek (1996) and G. Labuda (2012), whereas Chojnice junction was studied by D. Prochowski (2012) and D. Otta (2018).

The unpublished annals regarding the post war period of the PKP junction in Chojnice by R. Jaszczyszyn were the key source of data for this study. Data for determining the number of rail connections and their range for the Chojnice junction originates from the train timetables published in the years 1989 to 2016.

The first news on the railway line reaching Chojnice appeared in the forties of the nineteenth century with the initial proposals to build a connection between Berlin and Königsberg, the so-called *Royal Railway Division of the Eastern Railway* in Bromberg (Bydgoszcz). Among the three route options, two projected the route through Chojnice. In the end, the choice fell to the third option through Bydgoszcz, missing the city. In the fifties of the nineteenth

century, the idea of the railway reaching Chojnice emerged again and in 1868 the Prussian Diet passed a resolution on building the railway line Piła–Chojnice–Tczew (Prochowski, 2012). The first train from Piła arrived in Chojnice in 1871. The construction of the 'Chojnice section' of the *Royal Railway Division of the Eastern Railway* opened the way to developing other railway lines. In 1873, the line from Piła was extended to Tczew. In 1877, Chojnice became connected with Człuchów, and in 1883, a line was constructed to Laskowice Pomorskie. In 1894, Nakło nad Notecią was connected to Chojnice and in 1902 also Kościerzyna and Bytów gained a connection through Lipusz (Labuda, 2012). The construction of the Kościerska line gave the final form to the Chojnice railway junction, which converged six railway routes. At the time, Chojnice became one of the biggest rail junctions in Western Prussia.

Investments in the following years, up to the beginning of World War One, resulted in a more dense rail network reaching smaller towns in the region. The change of state borders following the declared independence of Poland in 1918, and later after World War Two, brought corrections to the rail network around Chojnice. A more important investment of the interwar period concerned the Czersk–Bąk–Kościerzyna route, which is a section of the coal trunk line Śląsk–ports (Gwarek, 1996). The rail network around Chojnice in the first half of the twentieth century did not undergo significant modifications in later years before the political and economic transformations of the eighties and nineties.

The development of railways in Chojnice and its vicinity stimulated economic revival of the city and the region. The operating rail connections gave the inhabitants the possibility of contacting bigger municipal centres in the country, of which Chojnice was part in the given historical period. Changes in the rail network and passenger traffic, at the end of the eighties and the beginning of the nineties of the twentieth century, had a detrimental impact on the region. They resulted in marginalising the region in terms of transport accessibility.

## 2. State of infrastructure

The railway network serviced by the Chojnice junction embraces six outgoing routes and various joining line sections of secondary or local significance (Tab. 1). None of the lines have been electrified. The length of the network decreased by approximately 25% in the years 1989-2017. In 1989, it stretched 949 km (Fig. 1), and in 2017, there were 727 km of railway lines around Chojnice (Fig. 2). The changes illustrate the process of optimising the network at the end of the eighties and the beginning of the nineties of the twentieth century.

Tab. 1. Railway lines in the Chojnice junction area in 2017

Line No.	Section	Line status / importance	Length km	No of tracks	Max. speed km/h	Junction station	Passenger traffic
203	Tczew–Gutowiec	primary	75	2	100	Tczew, Starogard Gdański, Czersk	yes
	Gutowiec–Chojnice	primary	22	1	100	Chojnice	yes
	Chojnice–Lipka Krajeńska	primary	30	1	90	–	yes
	Lipka Krajeńska–Piła Główna	primary	53	1	100	Piła Główna	yes
208	Chojnice–Tuchola	primary	25	1	80	Chojnice, Tuchola	yes
	Tuchola–Wierzchucin	primary	19	1	80	Wierzchucin	yes
	Wierzchucin–Laskowice Pomorskie	primary	27	1	60	Laskowice Pomorskie	yes
210	Chojnice–Człuchów	primary	15	2	100	Chojnice, Człuchów	yes
	Człuchów–Czarne	primary	31	2	80	–	yes
	Czarne–Szczecinek	primary	16	1	80	Szczecinek	yes
211	Chojnice–Powalki	secondary	8	1	80	Chojnice	yes
	Powalki–Męcikał	secondary	12	1	120	–	tak
	Męcikał–Dziemiany Kaszubskie	secondary	21	1	50	–	yes
	Dziemiany Kaszubskie –Kościerzyna	secondary	29	1	80	Lipusz	yes
212	Lipusz–Bytów	local	25	1	20	Lipusz	yes
	Bytów–Korzybie	local	45	1	–	–	yes
215	Laskowice Pomorskie –Dąbrowy	secondary	4	1	80	Laskowice Pomorskie	yes
	Dąbrowy–Kwiatki	secondary	9	1	60	–	yes
	Kwiatki–Łązek	secondary	16	1	50	–	yes
	Łązek–Śliwiczki	secondary	5	1	70	–	yes
	Śliwiczki–Śliwice	secondary	3	1	50	–	yes
	Śliwice–Szlachta	secondary	8	1	60	Szlachta	yes
	Szlachta–Czersk	secondary	11	1	80	Czersk	yes
218	Czersk–Bąk	secondary	22	1	80	Bąk	no
	Szlachta–Smętowo	disconnected	58	1	–	Szlachta, Smętowo	no
240	Złotów–Więcbork	disconnected	33	1	–	–	no
	Więcbork–Pruszcz Bagienica	disconnected	31	1	–	–	no
	Pruszcz Bagienica–Terespol Pomorski	disconnected	39	1	–	Terespol Pomorski	no
241	Tuchola–Koronowo	local	43	1	–	Tuchola	no
243	Skórcz–Jabłowo	disconnected	16	1	–	–	no
	Jabłowo–Starogard Gdański	local	8	1	60	Starogard Gdański	no
	Starogard Gdański–Skarszewy	disconnected	19	1	–	–	no
281	Chojnice–Obkas	secondary	13	1	60	Chojnice	no
	Obkas–Nakło nad Notecią	secondary	62	1	20	Nakło nad Notecią	no
405	Szczecinek–Miastko	secondary	45	1	100	Szczecinek	yes
413	Człuchów–Przechlewo	local	25	1	–	Człuchów	no
	Przechlewo–Słosinko	disconnected	26	1	–	–	no

Source: own study.

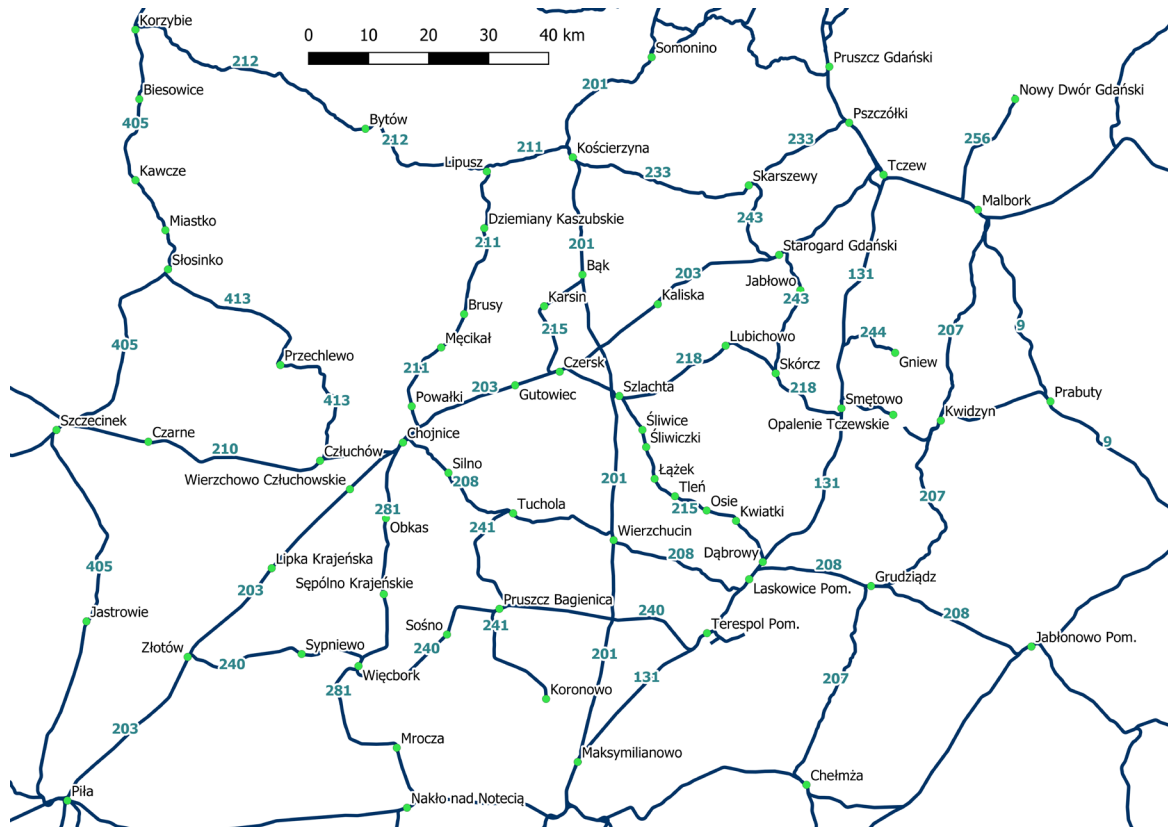


Fig. 1. Railway network in the Chojnice junction area in 1989

Source: own study.

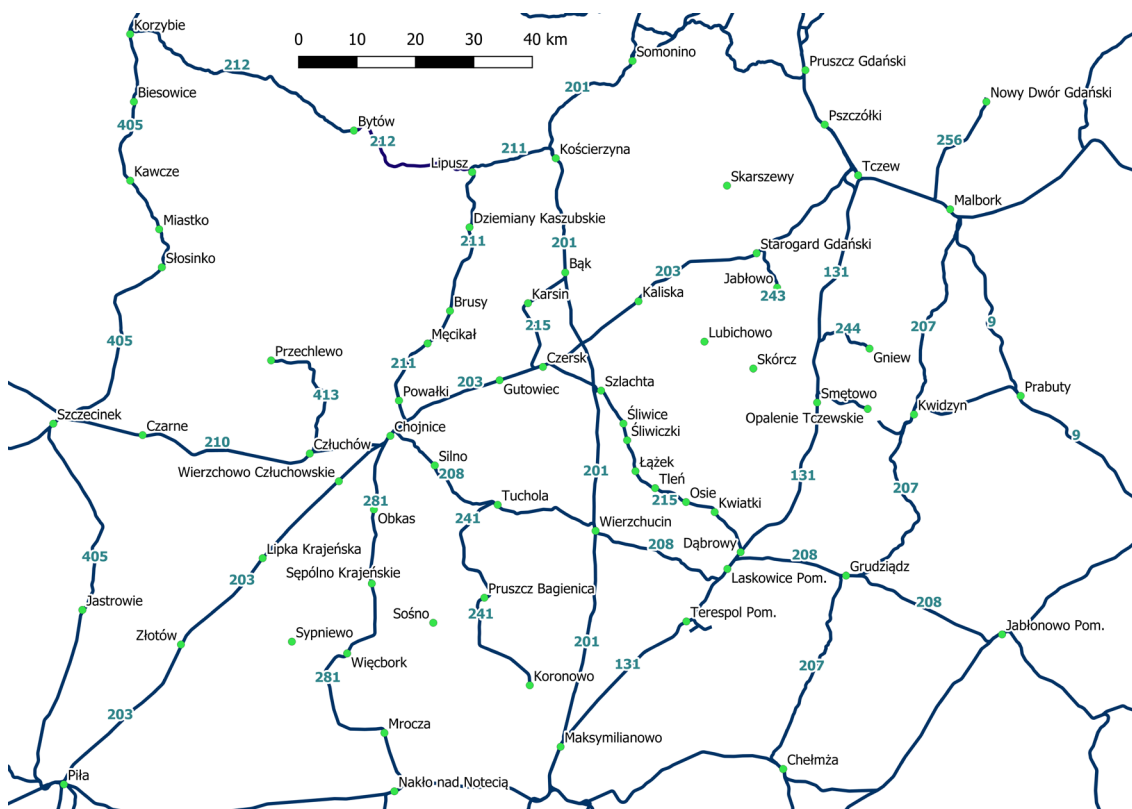


Fig. 2. Railway network in the Chojnice junction area in 2017

Source: own study.

Primary lines operated during the entire period under study include route no 203 Chojnice–Tczew (97 km) and Chojnice–Piła (83 km), route no 208 Chojnice–Tuchola–Wierzchucin–Laskowice Pomorskie (71 km), and route no 210 Chojnice–Człuchów–Szczecinek (62 km). These routes constitute 43% of the entire active line length around the Chojnice junction.

The route 203 (Chojnice–Tczew) enjoys the highest status today (as of 2017), which in the section Tczew–Czersk is classified as a line of state significance and in the section Tczew–Łąg is entered to the Trans-European Transport Network TEN-T. Between the stations Tczew and Gutowiec, the route features double tracks for maximum speed of 100 km/h. The stations Gutowiec and Chojnice are linked by a single track for similar speeds. Part of the route no 203 also has single tracks from Chojnice to Piła Główna suitable for similar maximum speeds.

Routes that also enjoy a state status in the vicinity of Chojnice junction are route no 208 from Tuchola to Laskowice Pomorskie and no 210 Chojnice–Szczecinek. The single-track line no 208 has a speed limit of 60-80 km/h. Line 210 is in a better technical condition and has a set of double tracks from Chojnice to Czarne, and further on a single track with maximum admissible speed of 80-100 km/h.

The other two single-track routes from Chojnice are of secondary status in the railway network. These are the routes: no 211 connecting the junction with Kościerzyna (70 km) and running to Nakło nad Notecią (75 km). Their technical condition varies in particular sections with the best condition between the stations Powalki–Męcikał (line no 211, maximum speed up to 120 km/h), the worst condition between the station from Obkas to Nakło nad Notecią (line no 281), maximum speed 20 km/h. Among the six lines leaving Chojnice, five serve passenger and cargo traffic, whereas the route to Nakło nad Notecią provides solely cargo services.

The railway network serviced by the station Chojnice also covers two single-track lines of secondary status of importance: no 215 Laskowice Pomorskie–Śliwice–Szlachta–Czersk–Bąk (78 km) and no 405 Szczecinek–Miastko (45 km). Passenger transport is provided nearly along the entire length of these routes. The section Czersk–Bąk is an exception as it only provides for cargo traffic. The line no 405 is in a better technical condition enabling the maximum train speed of 100 km/h. Line no 215 is for travel at the speed of 50 to 89 km/h. Secondary lines cover in total approximately 37% of the railway network serviced by the Chojnice junction.

Four routes (no 212, 241, 243, 413) have the status of local lines in the area of Chojnice junction. None of them provided passenger transport in 2017. Pas-

senger traffic disappeared at the beginning of the nineties of the twentieth century.

The route no 2012 joining Lipusz–Korzybie is the property of the self-government of Bytów municipality in a 25 kilometre section from Lipusz to Bytów. It is managed by a group Stowarzyszenie Kolejowych Przewoźników Lokalnych (Association of Local Rail Carriers) and provides cargo services. In the years 2016-2017, it also provided weekend passenger trips for tourists. The section from Bytów to Korzybie (45 km) remains inactive, and in 2018 it became impassable. Cargo traffic was suspended here in 1999. Two nongovernmental organisations (Słupsk Powiat Handcar Rail, Bytów Handcar Rail) operate here clearing the tracks and providing tourist handcar traffic services.

Cargo traffic services are also provided between the stations Jabłowo and Starogard Gdański on the route no 243 from Skórcz to Skarszewy. The remaining sections of this route, referred to in the studied period on cargo traffic, have been dismantled. The tracks from Starogard Gdański to Skarszewy were dismantled in 1998 and works on dismantling the route from Skórcz to Jabłowo started in 2015 (Otta, 2018).

The inoperative line no 241 Tuchola–Koronowo in cargo transport for the grain plant in Koronowo was suspended in 2011. It is used by two nongovernmental organisations (Association of Railway Fans and Rehabilitation and Tourism Association "Na Szlaku") which run on the line handcars for tourists.

Following the suspension of cargo traffic in 2014, the line Człuchów–Przechlewo (nr 413) is not used for transporting cargo along the 25 kilometre-long section of the Człuchów–Słosinko line. The remaining section of the route (Przechlewo–Słosinko) was dismantled in 2006 (Otta, 2018).

Other sections of the rail network around the Chojnice junction were disassembled. The works initiated in 2015 covered a 103-kilometre route Złotów–Więcbork–Pruszcz Bagienica–Terespol Pomorski, which to the mid nineties was used for cargo transport. A decision was also made to dismantle the 58 kilometre line no 218 Szlachta–Smętowo used in cargo transport up to 1999. The disassembling works started at the beginning of 2018 (Otta, 2018).

### 3. Rail connection structure

The rail heritage of the Polish Peoples Republic was a well-developed network of passenger line connections. The 1989/1990, the timetable of departures and arrivals of the Chojnice station covered nearly 100 passenger connections daily. Such a number of trains was never noted at this location earlier nor later. In the following years, the number dropped reaching the level of 42 trains daily in 2004/2005. Chojnice experi-

enced an equally low number of connections just before World War Two, in the years 1938 and 1939 (Otta, 2018). This falling trend resulted from limited traffic along secondary lines, primarily Chojnice–Szczecinek. After the year 2005, traffic gained impetus reaching the level of 60 trains per day and remained at this stable level in the following years (Fig. 3).

Analysing the timetables of particular lines, we can see that the connection Tczew–Chojnice showed the greatest frequency oscillating 8-10 pairs per day (Fig. 4). From the time the self-government of the Pomorskie Voievodship took over the operational management, that is since 2009, the number remains stable reading ten pairs.

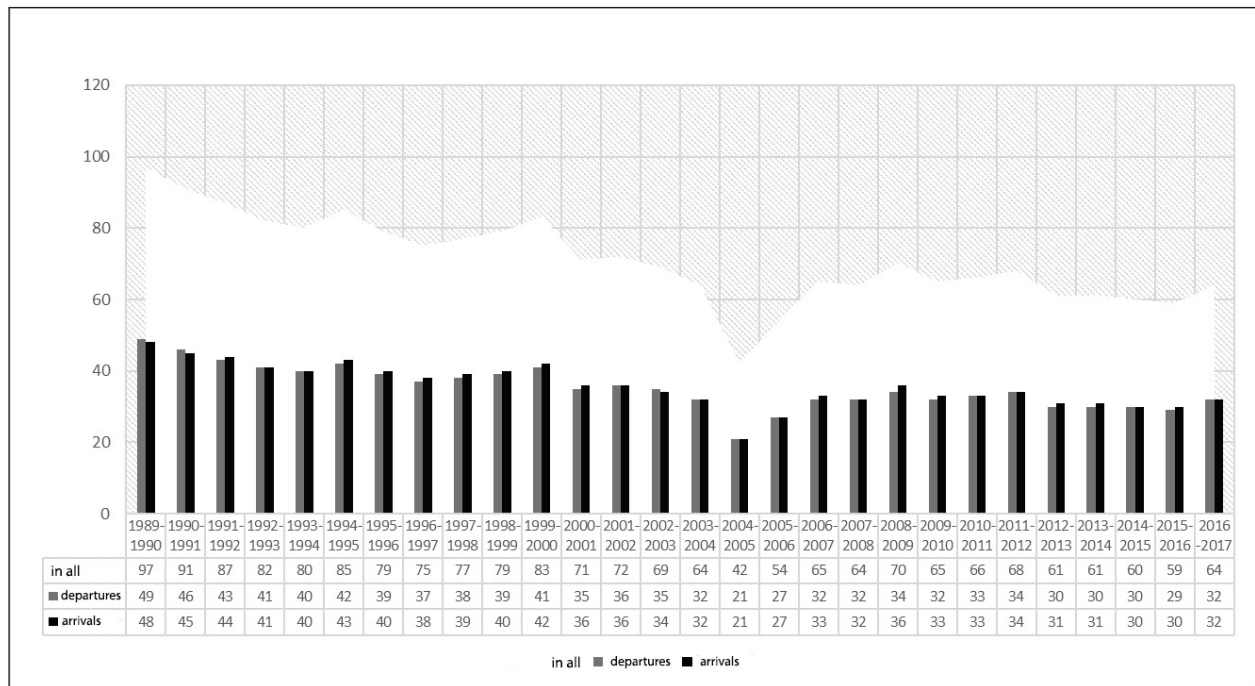


Fig. 3. Train traffic in Chojnice in the years 1989-2017

Source: own study based on train timetables in the years 1989-2017.

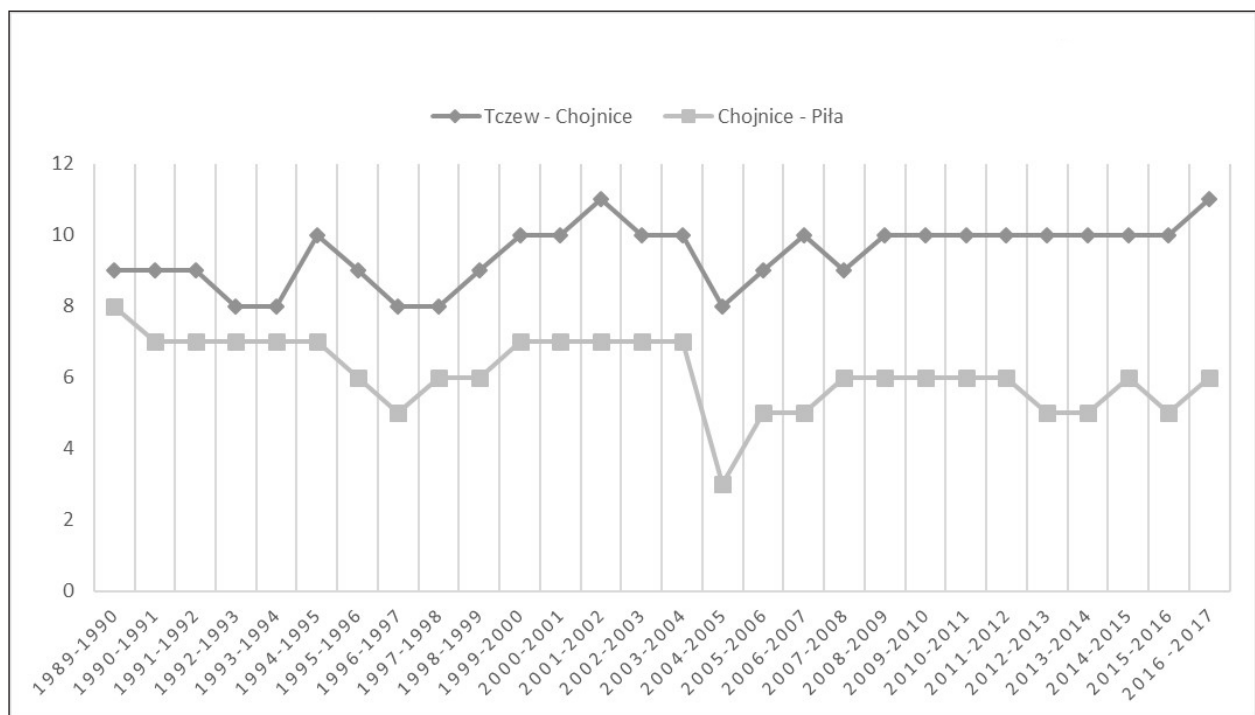


Fig. 4. Train pairs on route 203 Piła–Chojnice–Tczew in the years 1989-2017

Source: own study based on train timetables in the years 1989-2017.

The section Chojnice–Piła showed greater dynamics. The number of connections fell from eight pairs in 1989 to six in 2017. The worst period is noted in the 2004/2005 timetable when the number of connections dropped to three train pairs (Fig. 4). The timetable 2016/2017 shows the revival of the long-distance connections Piła–Chojnice–Tczew after a several year-long break. The timetable referred to above featured a daily connection TLK 'Kociewie', operated by PKP Intercity, Gdynia Główna–Gorzów Wielkopolski and back.

The line Chojnice–Kościerzyna had seven train pairs. In the year 2000, line no 211 suffered the same fate as line no 281 (Chojnice–Nakło nad Notecią), where passenger traffic was suspended. This information can be seen in the 2000/2001 timetable where the number of trains was limited to two pairs. The actions undertaken by local social activists resulted in maintaining the earlier number of trains.

Due to the deteriorating infrastructure of the rail line no 211 lower train speeds were introduced. Before 2015, the speed along the section Chojnice–Dziemiany was limited to 50 km/h and in the section Dziemiany–Kościerzyna to 80 km/h. PKP Polish Railway Lines introduced upgrading measures in 2015, when the multi yearlong upgrading program was adopted for the line. To December 2016, three train pairs linked Chojnice and Kościerzyna and one pair Chojnice–Brusy. Due to the light passenger traffic and low speeds (Tab. 1) bus connections replaced some of the train connections in December 2016. Starting with the timetable for 2016/2017 two train pairs travel

along the route and two bus pairs provide passenger transport services Chojnice–Kościerzyna and an additional bus pair Chojnice–Dziemiany Kaszubskie. Passenger traffic Chojnice–Nakło nad Notecią was suspended in the year 2000.

Route no 210 Chojnice–Szczecinek is in the worst situation. In 1989, 13 train pairs operated between Chojnice and Człuchów – a number relevant for this small bio-centric agglomeration. With time, the number diminished and reached a critical level of two pairs in 2004–2006. The situation slightly improved in consecutive years but starting 2012 three pairs remain, which is not sufficient for servicing the area of two towns (Fig. 5).

The only line leaving Chojnice, which is presently operated by the company Polregio (Przewozy Regionalne), is the line no 208 Chojnice–Laskowice Pomorskie in the Kujawsko-Pomorskie Voievodship. Since 2007, the carrier Arriva RP provides transport services on non-electrified lines in the Voievodship. Although the number of connections of line 208 did not experience any major modifications in the studied period, it was completely remodelled. From the very beginning of the line, trains ran along this section Chojnice–Wierzchucin–Laskowice Pomorskie, or longer routes to Grudziądz, Brodnica and Działdowo. When carrier services were taken over by Arriva, the connection Chojnice–Laskowice Pomorskie was substituted by the route Chojnice–Bydgoszcz through Wierzchucin, and the section of the line 208 between Wierzchucin and Laskowice Pomorskie was closed for daily rail commuting.



Fig. 5. Train pairs on route no 210 (Człuchów–Chojnice) and no 208 (Chojnice–Tuchola) in the years 1989–2017

Source: own study based on network train timetables in the years 1989–2017.

#### 4. Organisational transition

The restructuring of the state enterprise PKP, instigated in July 1991, had a meaningful impact on the functioning of the studied rail junction station and the economy of the region. Under the restructuring project, Lokomotywnia Pozaklasowa w Chojnicach (Unclassified Locomotive Depot in Chojnice) was merged with the Oddział Napraw Wagonów oraz Rewizji Technicznej i Obsługi Wagonów (Chojnice Branch for Repairing Carriages and Technical Inspection and Servicing of Rail Carriages) giving rise to a new organisation unit – Zakład Taboru Chojnice (Chojnice Rolling Stock Unit).

On 1 July 1997, Chojnice Rolling Stock Unit merged with Zakład Taboru Zajączkowo Tczewskie (Zajączkowo Tczewskie Rolling Stock Unit). Chojnice Rolling Stock Unit (ZT Chojnice) was directly subordinate to Dyrekcja Trakcji i Zaplecza Warsztatowego (Traction and Backup Facilities Management) in Cracow. In territorial terms, ZT Chojnice embraced facilities and devices of railway stations: Chojnice, Wierzchowo Człuchowskie, Czersk, Zajączkowo Tczewskie, Tczew, Malbork, Elbląg, Braniewo and Kwidzyn (Fig. 6).

The next administrative change took place on the first of September 1999 and involved the merge of Rolling Stock Units in Chojnice and Gdynia into one unit called Zakłady Taboru w Gdyni (Rolling Stock Unit in Gdynia). Inspectors from the liquidated ZT Chojnice moved to PKP Zakład Przewozów Pasażerskich (Passenger Carriage Unit) in Gdynia. Sekcja Eksploatacji Taboru Spalinowego (SETS) (Section for Exploitation of IC Rolling Stock) was established in Chojnice, which comprised: Dział Eksploatacji Taboru (Rolling Stock Operation Unit), Dział Napraw Taboru Trakcyjnego (Traction Rolling Stock Unit), Dział Utrzymania i Napraw Wagonów (Carriage Maintenance and Repair Unit), Dział Techniczny (Technical Unit), Magazyn Zakładowy (Unit Warehouse) and Laboratorium Zakładowe (Unit Laboratory).

These reorganisation changes brought an employment drop in the Chojnice Locomotive Depot. For years, the Unit was one of the biggest employers in Chojnice. In consequence of the changes introduced at the beginning of the nineties, employment showed a falling trend strongly affecting the labour market in the region (Tab. 2).

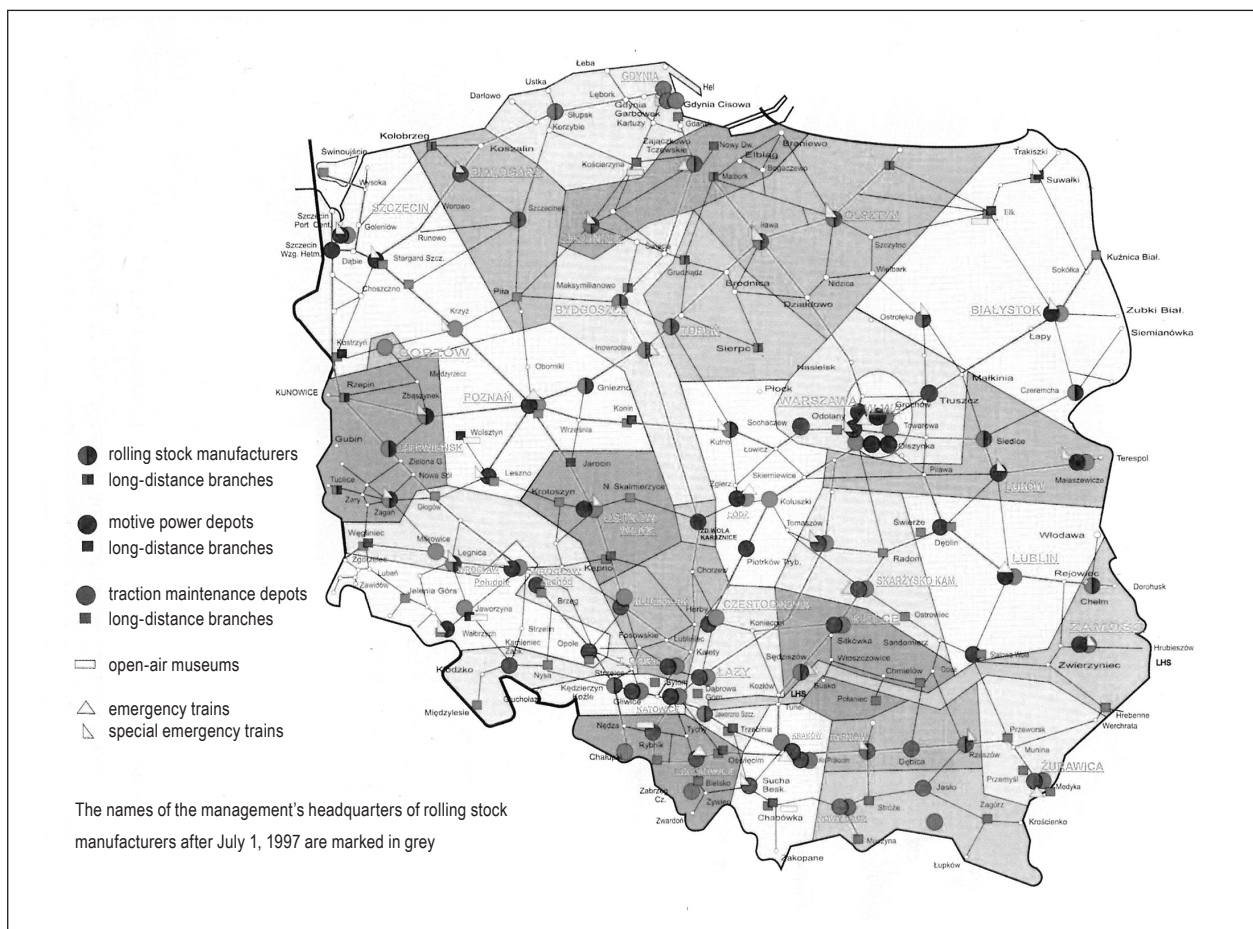


Fig. 6. The structure of Rolling Stock Unit starting July first 1997

Source: *Nowe Sygnały*, no 2/1999 (2519), p. 31.



Tab. 2. Employment in Chojnice Locomotive Depot in the years 1982-2001

Year	Total number of employees	Traction teams	Locomotive repair	Carriage repair	Carriage technical inspectors	Other teams	White collar workers
1982	1012	400	304	0	0	256	52
1986	952	430	201	0	0	267	54
1988	892	401	162	0	0	275	54
1990	836	340	156	0	0	290	50
1992	752	257	134	134	36	127	64
1993	664	231	110	111	34	114	64
1994	609	237	89	78	33	109	63
1995	591	233	84	80	33	97	64
1996	597	244	85	77	30	97	64
1997	1621 <sup>a</sup>	615	218	143	186	271	188
1998	1485 <sup>a</sup>	569	210	124	186	249	147
1999	448 <sup>b</sup>	201	63	48	0	88	48
2001	365 <sup>b</sup>	161	62	31	0	75	36

a – the entire Chojnice Rolling Stock Unit, b – employment in Chojnice

Source: R. Jaszczyszyn, 2001.

More profound transformations in the rail sector were initiated by the Act dated 8 September 2000 on commercialisation, restructuring and privatisation of the state enterprise Polskie Koleje Państwowe (Polish State Railways). The first to spin off the PKP structures was Szybka Kolej Miejska w Trójmieście Sp. z o.o. (Fast TriCity Urban Railway Co. Ltd.). PKP Cargo followed operating cargo services and cargo rolling stock, as well as Intercity which provided international and fast rail services, and Przewozy Regionalne (Regional Carriers) and a company dealing with the rail infrastructure PKP Polskie Linie Kolejowe (PKP Polish Railway Lines). Supervision over the new companies was entrusted to PKP S.A. managing the property.

In Chojnice, the reform in the year 2000 resulted in moving the SETS employees into two PKP companies: Cargo, which took over cargo carriage and locomotives, and Przewozy Regionalne (PR) (Regional Carriers), which took over passenger services. This situation lasted to the first of January 2009 when the Gdynia Rolling Stock Unit merged with Cargo Carriers in Gdynia and part of the employees and rolling stock were transferred to PKP PR. On 8 December 2009, PKP PR was transformed into Przewozy Regionalne Sp. z o.o. (Regional Carriers Co. Ltd.). Starting 1 January 2017, the company introduced a new carrier trademark and is now known as Polregio.

## 5. Perspectives for the Chojnice rail junction

### 5.1. Polregio technical back office

Before 1989, Chojnice boasted one of the biggest and most modern rolling stock repair works in the country. At present, after numerous organisational transitions, it belongs to Polregio and operates as a nationwide unit for maintenance and repair of IC locomotives. For several years now, SU42/SM42 locomotives of the company qualifying for repair or overhauls at level four of maintenance are directed to this unit. Earlier the unit also repaired SU45 and SP32 locomotives until the carrier withdrew their service. The section in Chojnice also provides maintenance of IC locomotives, which belong to other carriers.

The Chojnice unit is the key unit for Pomorski Oddział Przewozów Regionalnych (Pomorskie Regional Carrier Unit) rolling stock maintenance together with Repair and Maintenance Unit in Słupsk. Subordination of the Słupsk unit to the Chojnice Section resulted in the latter becoming involved in maintenance and repair of electric traction units EN57, which up to 2016 were handled in Słupsk. Today, the locomotive depot in Chojnice also handles works that do not require a traction line.

The Chojnice Unit as the only one on Poland repairs 120A type carriages and upgrades these types

of units. Because of the heavy traffic on the Chojnice–Gdynia–Hel line, Polregio continues to operate the classic trains set of IC locomotives and carriages in the summer season. Out of season, all connections are served by IC traction units, with extra 120A type carriages in time of high traffic. The workshop provides services not only for own rolling stock but also that operated by Przewozy Regionalne (Regional Carriers) in other parts of the country.

The nationwide range of services of the rolling stock repair unit in Chojnice shows the significance of the unit on the railway map in Poland. In future, the status of the Unit may rise thanks to the projected electrification of the junction. This step will extend the scope of services to include repair of electric locomotives and electrical traction units used by carriers in the country.

## 5.2. Modernisation of the railway station

The transformation process of Polish railways after 1989 embraced railway institutions not directly re-

2017 Sala Tradycji Kolejowej SMK Chojnice (Chojnice SMK Rail Tradition Showroom).

The substandard condition of the station facility induced Chojnice authorities to work out a plan for developing a modern passenger terminal for collective transport. The first project was prepared in 2007 (Fig. 7). The project eliminated the use of tracks on the northern side of the railway station and projected the construction of a bus terminal (PKS), and by the hand-car facility a small rail museum. Preparatory works never started because the parties involved failed to reach an understanding as to the ownership rights to the station building.

The question of the station's conversion came to light again in 2014 when the municipality decided it was a priority for the Chojnicko–Człuchowski Municipal Functional Area. Eight concepts were prepared at the time projecting the conversion of the railway station premises to develop an integrating node. The railway station premises were to host a bus terminal, bus stops for municipal busses, parking slots for taxis, a parking lot and a stand for municipal bicycles.

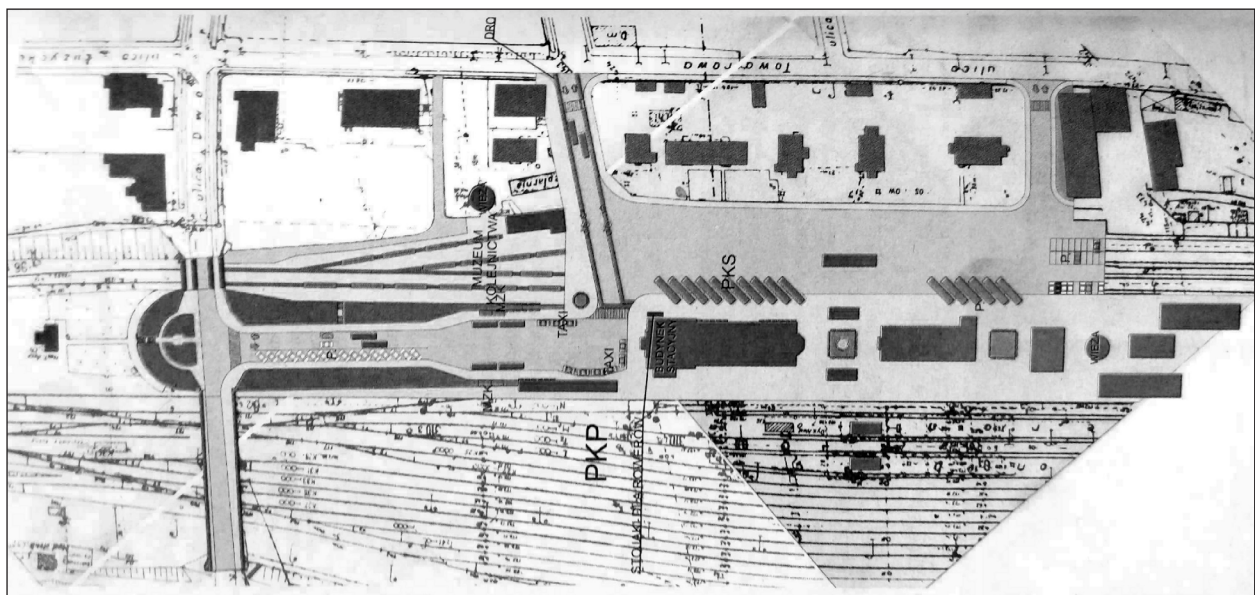


Fig. 7. Concept design for conversion of the PKP station by Andrzej Ciemiński, 2007

Source: *Czas Chojnic*, 22.11.2007, no 47/282.

lated to rail traffic. In effect, many buildings used by PKP were abandoned. This situation also affected numerous facilities of the Chojnice station, for example lodgings, apprentice workshops and water towers. The station building itself lost the administration offices on the first floor, luggage storage facilities, traffic control duty room, and Railroad Guard room. Only the ticket office, the toilet were left, and since June

The Chojnice Railway Station did not leave many options to the designers as it is located between two railway embankments and only one wide avenue links all the functions.

Particular concept designs projected varied solutions, for example, a tunnel under the tracks to provide bus access to the station and demolition of redundant rail facilities to built parking lots or

remove the platforms on the northern side of the station to built parking space and a bus terminal (Otta, 2018). Finally, concept design no 8 by Z. Kufel was chosen, which does not interfere with the existing tracks layout (Fig. 8). The bus terminal and parking lot are to be constructed in place of two houses foreseen for demolition on Nad Dworcem street, which runs northwards from the existing facility. The station building is also to be upgraded.

Chojnice vicinity in the project. In July that year, PKP PLK announced a tender for developing a pre-design documentation for the project 'Works on other rail lines belonging to the alternative transport stream Bydgoszcz–TriCity and adjacent lines to the Chojnice railway junction (Fig. 9).

The project assumed supplementing the study with alternative options for transport thoroughfare linking Silesia and ports in Gdynia and Gdańsk, which

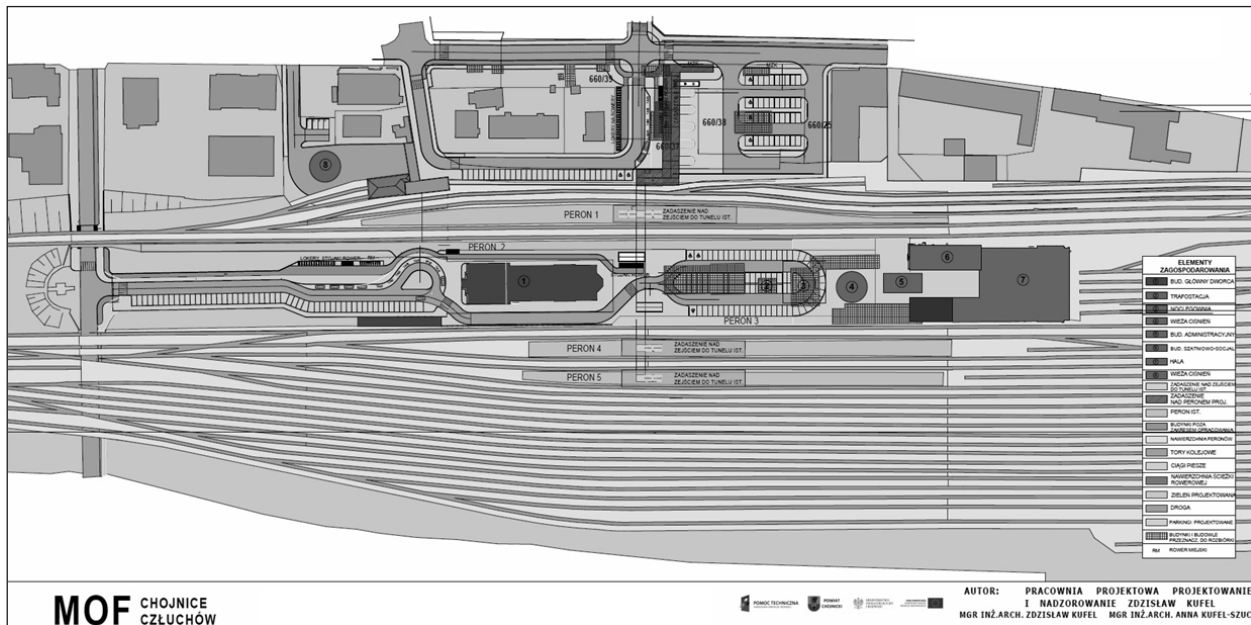


Fig. 8. Conception 08 - Integration hub in Chojnice

Source: D. Otta, 2018, p. 162.

In September 2015, preliminary documents were signed regarding the takeover of the station building by the municipality, with the takeover effected in 2016. Financing for the project was found from the resources of ROP of Pomorskie Voievodship and own means of PKP PLK. The investment was registered in the National Rail Programme. The tender procedure for performance of the investment to improve passenger services was announced at the end of 2017.

### 5.3. Modernisation plans of PKP Polish Railway Lines and self-governments

Modernisation investments in the Chojnice railway station would not make sense without upgrading the railway lines in the junction. A breakthrough took place in 2017, when the Ministry of Infrastructure and Construction and the authorities of PKP PLK embarked on a study regarding the upgrading and electrification of the line 201, and included the lines in

comprise rail line 201 (Nowa Wieś Wielka–Gdynia Port) and line no 203 in the section Czersk–Tczew, along the following line sections:

1. Rail line no 208 Działdowo–Chojnice, the section from the station km 156.175 to the station Chojnice km 200.378;
2. Rail line no 203 Tczew–Kostrzyn, the section from the station Tczew km 0.437 to the station Wierzchowo Człuchowskie km 108.864;
3. Rail line no 215 Laskowice Pomorskie–Bąk from the passenger stop Śliwice km 36.250 to the station Bąk km 78.594;
4. Rail line no 210 Chojnice–Runowo Pomorskie, in the section from the station Chojnice km 0.672 to the station Człuchów km 15.625;
5. Rail line no 743 Lipowa Tucholska–Szlachta, from the station Lipowa Tucholska km 0.338 to the station Szlachta km 1.711;
6. Rail line no 744 Lipowa Tucholska–Szlachta Zachód from the station Lipowa Tucholska km 0.0 to branching post Szlachta Zachód km 1.744;

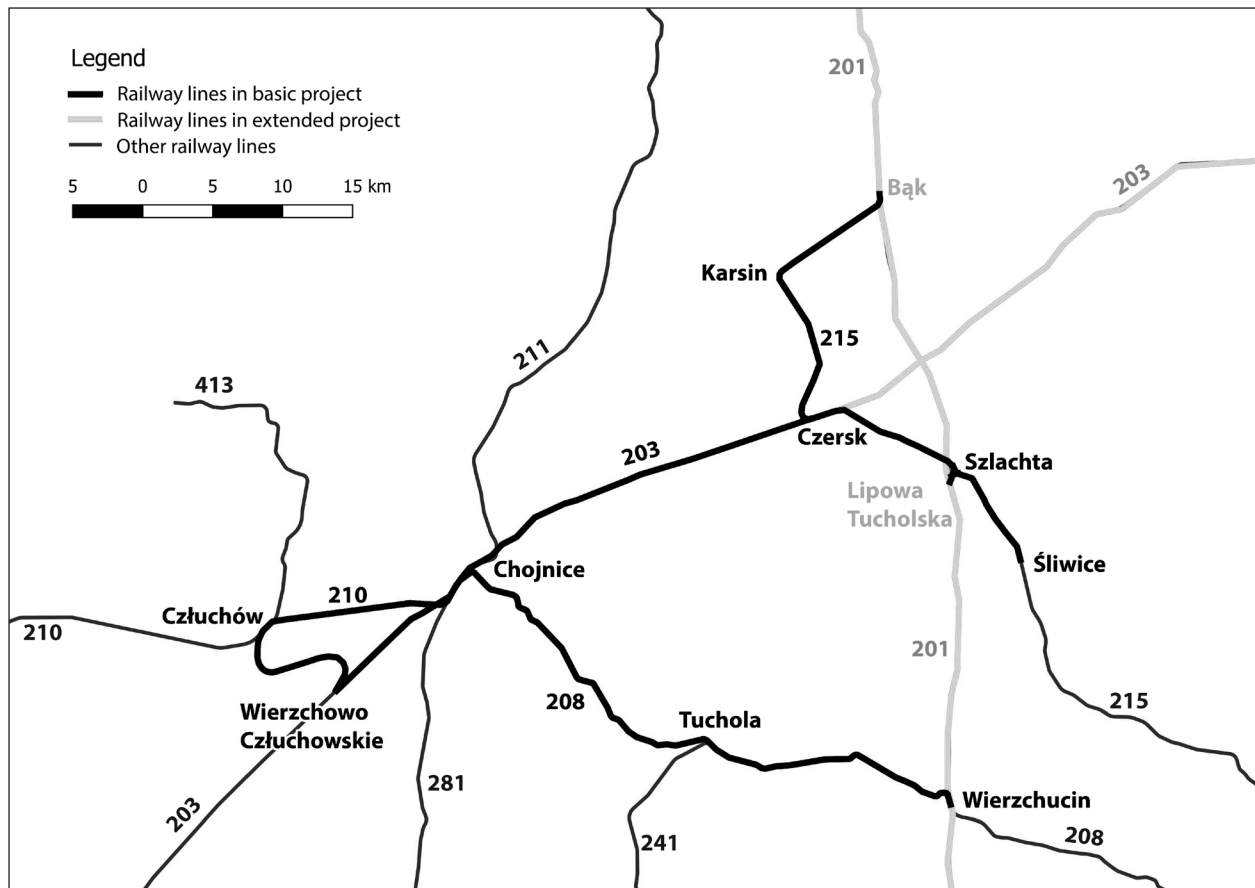


Fig. 9. Planned investments for railway lines in the vicinity of the Chojnice junction in the years 2020-2023

Source: own study.

7. The projected rail line Człuchów–Wierzchowo Człuchowskie (Terms of reference..., 2017, p. 9-10).

A feasibility study is projected to be conducted for the above lines, studying the possible modernisation, increasing train speed and electrification of the sections referred to above. The results of this study will be the subject of further analysis necessary to undertake decisions on conducting works in these line sections. Nevertheless, the fact of initiating studies constitutes a positive premise for the future operation of the Chojnice railway junction.

The hope for reviving rail traffic is related to route no 212 Lipusz–Bytów. In 2013, a study justifying revival of connections in this section was updated. The stage of analysis identified two investment variants. The first one assumed modernisation of the existing infrastructure and the connection of Bytów–Lipusz with the trains Chojnice–Kościerzyna. The second one projected modernisation of the existing infrastructure and construction of a new passenger stop in Lipusz by the existing siding no 738, which would enable travel from Bytów to Kościerzyna eliminating the time consuming change of direction in Lipusz.

The investment is to be stage two of the Pomorskie Metropolitan Rail.

On 11 February 2015, an agreement was signed by the self-government Gmina Bytów, PKM S.A. and Biuro Projektów Komunalnych S.A. (Municipal Project Bureau) to prepare a Feasibility Study and terms of reference together with a building permit for modernisation of line 212. The documentation was complete in September 2015. Variant two was adopted, which assumed upgrading the line and constructing a new railway station in Lipusz Północny. The maximum speed of the modernised line will be 120 km/h. However, the project has not yet found financing.

#### 5.4. Conclusions

The big railway junction in Chojnice, which connected six route directions, developed in the second half of the nineteenth century played a significant role in the economic development of the region, particularly towns lying in the Bory Tucholskie (Tuchola Forest) region. The regression of railways in Poland following the political and economic transformation in 1989 left a clear mark on the status of the Chojnice railway

junction. Closing down of unprofitable railway lines, technical back offices and the reduction of connections for passenger contributed to the junction's decline. Earlier planned development of the junction was abolished. The areas had to face, to a significant extent, communication exclusion.

Modernisation plans, in particular electrification of the major lines in the region, are a premise for improvement and restoration of the lost status to the rail junction in Chojnice. The projected conversion of the railway station in Chojnice and the development of an integrating multimode transport centre is an opportunity to improve the communication accessibility of the city. A slight rise in the number of passenger connection, including long-distance routes serviced by Chojnice was already noted in 2005. Thus, demand is rising for a modern passenger service infrastructure. All the above factors indicate a prospect for economic revival in the area of the Chojnice rail junction.

## References

- Bissaga T., 1938, *Geografia kolejowa Polski*, Wyd. Techniczne Ministerstwa Komunikacji, Warszawa.
- Czas Chojnic, 22.11.2007, no 47/282.
- Gwarek R., 1996, 1921-1996 – 75 lat Północnego Okręgu Kolei Państwowych, Północna Dyrekcja Okręgowa Kolei Państwowych, Gdańsk.
- Jaszczyszyn R., 2001, *Historia Parowozowni, Lokomotywowni i Zakładu Taboru w Chojnicach*, typescript.
- Koziarski S., 1993a, *Sieć kolejowa Polski w latach 1842-1918*, Instytut Śląski, Opole.
- Koziarski S., 1993b, *Sieć kolejowa Polski w latach 1918-1992*, Instytut Śląski, Opole.
- Labuda G., 2012, *Dzieje kolei normalnotorowych na Pomorzu Gdańskim [w:] D. Keller (red.), Dzieje kolei w Polsce*, Eurosprinter, Rybnik, pp. 247-264.
- Lijewski T., 1959, *Rozwój sieci kolejowej Polski*, Dokumentacja Geograficzna, 5.
- Lijewski T., 1986, *Geografia transportu Polski*, Państwowe Wydawnictwo Ekonomiczne, Warszawa.
- Lijewski T., 1995, *Ekspansja i regres przestrzenny kolei w Polsce w okresie 150 lat jej istnienia*, *Problemy Ekonomiki Transportu*, 2(90), pp. 37-45.
- Lijewski T., 2006, *Świetność i upadek Polskich Kolei Państwowych*, *Prace Komisji Geografii Komunikacji PTG*, 12, Warszawa–Rzeszów, pp. 109-112.
- Lijewski T., Koziarski S., 1995, *Rozwój sieci kolejowej w Polsce*, Kolejowa Oficyna Wydawnicza, Warszawa.
- Nowe Sygnały, no 2/1999 (2519).
- Otta D., 2018, *Po kolei o chojnickiej kolei*, Wyd. Miasto Chojnice, Chojnice.
- Prochowski D., 2012, *Kolej chojnicka w okresie pruskim i międzywojennym. W 140 rocznicę utworzenia kolei w Chojnicach*, *Słowo Młodych*, no 11 (16) 2011-4 (23).
- Rühling R., 1935, *Eisenbahngeographie Polens*, M. Dittert & Co, Dresden.
- Sieciowy Rozkład Jazdy Pociągów 1988/89, 1988, Wyd. Komunikacji i Łączności, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 1989/90, 1989, Wyd. Komunikacji i Łączności, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 1990/92, 1990, Wyd. Komunikacji i Łączności, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 1991/92, 1991, Wyd. Komunikacji i Łączności, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 1992/93, 1992, Wyd. Komunikacji i Łączności, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów Lato 1993, 1993, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów Zima 93-94, 1993, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów Lato 94, 1994, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów Zima 94/95, 1994, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 28.05.95 – 01.06.96, 1995, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2.06.96 – 31.05.97, 1996, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 1.06.97 – 23.05.98, 1997, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 24.05.98 – 29.05.99, 1998, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 30.05.1999 – 27.05.2000, 1999, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 28.05.2000 – 9.06.2001, 2000, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 10.06.2001–14.12.2002, 2001, Kolejowa Oficyna Wydawnicza, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 06.01.2002 – 14.12.2002, 2001, PKP Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2003, 2002, PKP Przewozy Regionalne Spółka z o.o., Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 14.12.2003 – 11.12.2004, 2003, PKP Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2004/2005, 2004, PKP Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2005/2006, 2005, PKP Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 10.12.2006–08.12.2007, 2006, PKP Przewozy Regionalne., Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 09.12.2007 – 13.12.2008, 2007, PKP Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 14.12.2008 – 12.12.2009, 2009, PKP Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2009/2010, 2009, Przewozy Regionalne, Warszawa.

- Sieciowy Rozkład Jazdy Pociągów 2010/2011, 2010, Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2011/2012, 2011, Przewozy Regionalne, Warszawa.
- Sieciowy Rozkład Jazdy Pociągów 2012/2013, 2012, PKP Polskie Linie Kolejowe (PDF).
- Sieciowy Rozkład Jazdy Pociągów 2013/2014, 2013, PKP Polskie Linie Kolejowe (PDF).
- Sieciowy Rozkład Jazdy Pociągów 2014/2015, 2014, PKP Polskie Linie Kolejowe (PDF).
- Sieciowy Rozkład Jazdy Pociągów 2015/2016, 2015, PKP Polskie Linie Kolejowe (PDF).
- Sieciowy Rozkład Jazdy Pociągów 2016/2017, 2016, PKP Polskie Linie Kolejowe (PDF).
- Taylor Z., 2007, *Rozwój i regres sieci kolejowej w Polsce*, Polska Akademia Nauk, Instytut Geografii i Przestrzennego Zagospodarowania im. Stanisława Leszczyckiego, Warszawa.
- Wrzosek A., 1935, *Z geografii komunikacyjnej Pomorza*, Wydawnictwa Instytutu Bałtyckiego, Toruń.