

# DAILY MIGRATIONS FROM THE MUNICIPALITY OF TEMERIN TOWARDS NOVI SAD

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**ABSTRACT:** *Tendency of population growth in the municipality of Temerin and its functional dependency from Novi Sad, have reflected on the greater volume of daily migrations of this municipality in comparison with their amount that was analyzed at the end of the 20<sup>th</sup> century. This paper shows the current situation of everyday commuting of workers and students with a special reference to lines of public suburban traffic as the most common form of daily migrations in the municipality. It provides an overview of the volume and characteristics of daily migrations with the reference to a special problem that commuters meet every day. It is an illegal operating of line taxis, a new form of daily migrations which has not been standardized, but according to estimates it has a significant participation in transport of commuters. Monitoring daily migrations is very important to municipal authorities from the aspect of population policy and urban planning, so this paper can be a small contribution to this problem.*

**Key words:** *Daily migrations, municipality of Temerin, gravitational sphere of Novi Sad, secondary urbanization*

## INTRODUCTION

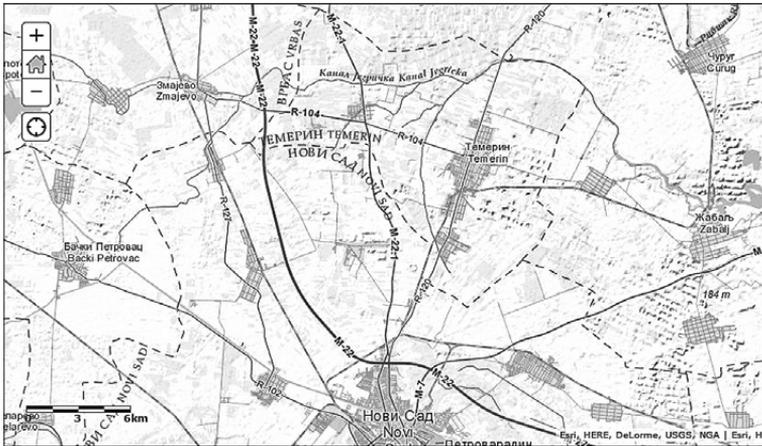
The municipality of Temerin belongs to Vojvodian municipalities that record continuous increase of the population during 20<sup>th</sup> century and 21<sup>st</sup> century. This is a case in Vojvodina. This is the reason why the positive trend of number and density of population draws the attention to itself. The analysis of the values of the parameters of natural movement of the population point to the fact that they were not of the crucial importance for the dynamics of the citizens because the population growth rate has been negative since 1996 until today, while the number of citizens grows every years. Accordingly, the population of the municipality of Temerin is increased only by mechanical movement of the population, by immigrations that have a long tradition here. The rea-

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sons are various, but the regional and local position, the 18 km distance from the Vojvodian center are stated as the main reasons. However, the closeness of Novi Sad has caused a new kind of migration that refers to the part of the population that goes to Novi Sad every day in order to acquire by work or to educate (Kalkan, 2014). Daily migrations of the population represent a very complicated phenomenon of geographical separation of work/education place and place of living of the part of active citizens and school children and students (Lukić, 2006). The first researches of disparity of place of work and place of living were conducted in Germany at the end of 19<sup>th</sup> century. In 1900 the first state census was conducted there and it took into consideration number of people who worked out of place of living. Switzerland (1910), England (1921), Netherlands (1947), Federal Republic of Germany (1950) and Czechoslovakia (1961) followed this example (Lukić, 2008). In Serbia, the perception of the flow of daily migrations was first provided by data of the census from 1961. Federal Bureau for Statistics conducted the survey about daily migrants in 75 places in Yugoslavia in 1957. In 1961 the issue of work place was first mentioned (Lukić 2006). Studying daily migration has not only scientific but also an applicative importance as well. It reflects in research of changing direction, volume and qualitative characteristics of the population of daily migrants in order to formulate suitable development population and economic policy (and the policy of work market), urban and rural planning of certain settlements that are connected by daily migration. Daily migrants are often potential migrants. It is assumed that a daily migrant will not decide to move to a place of work or education until the expenses of their everyday travelling are less than the expenses of movement, that is until the distance between the place of living and work does not reach certain critical value (Lukić, 2008).

## GEOGRAPHIC POSITION OF THE MUNICIPALITY OF TEMERIN

Territory of the municipality of Temerin is situated in middle part of Vojvodina, in the southeast part of Bačka and administratively it belongs to Južnobačka district. In the north the municipality borders with the municipality of Srbobran, in the northeast with the municipality of Žabalj, in the south and southwest with the city of Novi Sad, and in the west with the municipality of Vrbas. All borders are artificially drawn lines and they are mostly rectilinear apart from the part in the northeast where the border is natural by the channeled flow of the river Jegrička (Ristanović, Jokić, 2006). With the surface of 170 square kilometers the territory of the municipality of Temerin belongs to the smallest municipalities in Vojvodina (Statistical yearbook 2008). According to the population census from 2011 to total number of the population is 28,287 (RSB, 2011), the density of population is 166,4 citizens per square km, which is above the average density of population in Vojvodina which is 89, 82 citizens per square km (Statistical yearbook 2008). There are three settlements in the municipality of Temerin: Temerin, Sirig and Bački Jarak. Temerin has the greatest population (19, 661), Bački Jarak is the next (5,687) and finally Sirig (2,939) (RSB, 2011).



**Map 1.** Geographic position of the municipality of Temerin

(<https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=30e5fe3149c34df1ba922e6f5bbf808f>)

## RESEARCH METHODS

Research of daily migrations of the population in Serbia is mostly based on studying data available in population censuses and surveys. In the world traffic studies and data of companies' administrations where daily migrants work are used as other sources of data. Each of the stated sources has certain advantages and limitations for studying this phenomenon (Lukić, 2008). For the needs of most elaborated research of this issue several methodological approaches have been used. Besides theoretical studying of international and domestic scientific and professional literature, the data on daily migrations taken over from the Census of Population of the Republic of Serbia and four surveys. Two surveys were conducted in the period from 9<sup>th</sup> to 14<sup>th</sup> June 2014. One survey records number and gender structure of daily migrants, the other records the attitude of daily migrants about everyday travelling. The results of the survey conducted in the period from 2010 and 2012 for the needs of Public City Transport Company and Urbanism Bureau "Novi Sad", which refer to study about possibility of introducing electric trams in Novi Sad. This survey is of great importance for this research because it had a great number of interviewed people and relatively little time in which any important changes have not occurred comparing to the state in 2014. Within terrain work the taxi drivers as a form of daily migration were specially interviewed. The only way which provided the collection of realistic number of daily migrants who use the services of suburban lines Novi Sad – Temerin is the usage of database of Public City Transport Company for the period from 2008 to 2014 considering the fact that data are only available to public in that period of time. Mathematical, statistical, graphical and cartographic methods were used for data processing (Google Earth и Google Map) (Kalkan, 2014).

## THE FORMS OF MIGRATION OF THE MUNICIPALITY OF TEMERIN

Based on the census from 2011 the population of the municipality of Temerin has 3,105 daily migrants towards Novi Sad. 1,684 are workers and pensioners and 1,532 are students. Gender structure of the daily migrants of the municipality of Temerin is characterized by greater participation of men (1,788) comparing to women (1,317) (RSB, 2011).

**Table 1.** Total number of commuters in the municipality of Novi Sad in 2011

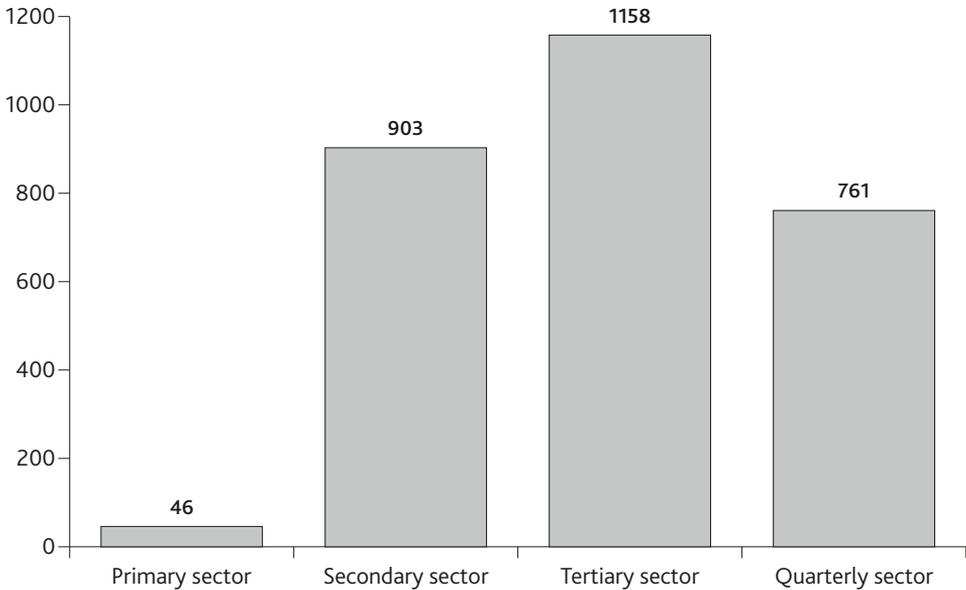
Settlement	Gender	The city of Novi Sad	The municipality of Novi Sad	The municipality of Petrovaradin
Bački Jarak	Total	854	838	16
	M	446	436	10
	F	408	402	6
Sirig	Total	395	369	26
	M	237	226	11
	F	158	143	15
Temerin	Total	1967	1898	69
	M	1149	1126	23
	F	818	772	46
The municipality of Temerin	Total	3216	3105	111
	M	1832	1788	44
	F	1384	1317	67

(RSB, 2011)

The total number of people who work at the territory of the other municipality is 3.368. That means that the most part of daily migrants is absorbed by the municipality of Novi Sad, the city of Sad that is while the difference of 152 daily migrants is absorbed by other municipalities (RSB, 2011).

The volume, directions and structure of the flow of daily migrations are significantly influenced by concentration and de-concentration of certain activities, in accordance with specific locational demands (Lee, Mc Donald, 2003). The greatest number of the citizens of the municipality of Temerin that work in Novi Sad is employed in tertiary sector (1158 people in total), and the least in primary sector (46 people in total) which is in accordance with general situation at the level of the Republic of Serbia from the aspect of economic structure (Kalkan, 2014).

In accordance with the findings of the migration theory according to which the population that is more educated participates more in migration, educational structure of active daily immigrants of the municipality of Temerin was formed. Of total number of daily migrants (3105 people) that work at the territory of Novi Sad, 2,809 finished high school, college and university. However, the most people finished high school (2.267). According to school that they attend most students finish basic/academic/vocational



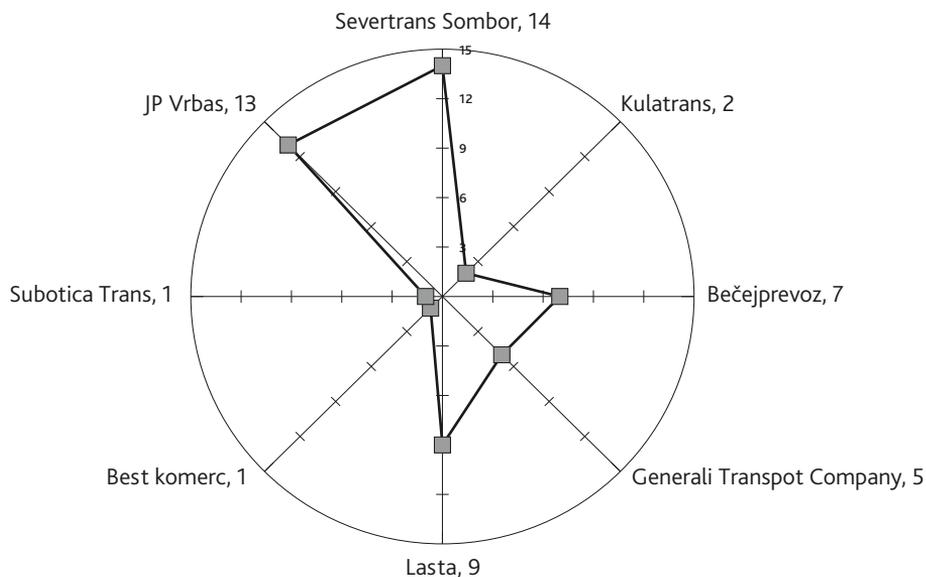
**Chart 1.** Structural activity of people in accordance with the activity they do in Novi Sad  
(Kalkan, 2014)

studies and high school (about 670) and studies of the second degree (151). The number of those who finish specialization after finished high school and PhD studies is 40 in total. The part of those who attend primary school is negligible.

## THE ANALYSIS OF DAILY MIGRATIONS ON THE BASIS OF PUBLIC SUBURBAN BUS TRAFFIC

In the structure of traffic means, a participation of Public Transportation Company (PTC) in daily migrations in the case of the municipality of Temerin is the highest.<sup>1</sup> (Nađ, 1978). It is impossible to include the daily migrants who use their own transport means into the analysis because the unique register of such data does not exist. This is why the analysis of that group of migrants will be excluded from further considerations (although the fact that there are more official cars, van carriers and buses) and the research focus is directed towards public suburban bus traffic (Kalkan, 2014). The new forms of daily migrants are line taxis to which a special reference is given. Until March 2011 there were four suburban bus lines of PCT that operated through the municipality of Temerin 31, 32, 33 and 34). Today there are three bus lines 31 (Novi Sad – Bački Jarak), 32 (Novi Sad – Temerin) and 33 (Novi Sad – Gospođinci). Line 34 used to operate in direction Novi Sad – Sirig over Bački Jarak and Temerin. This line was abolished in

<sup>1</sup> Intercity public transport has the greatest influence for Sirig. However it is necessary to mention da intercity bus companies such as “Saobraćaj D.O.O. Žabalj“, “Lasta AD Beograd“, “Autoprevoz Kikindaa“, “Bečejprevoz DOO“.



**Chart 2.** Departures and arrivals of intercity bus companies through Sirig  
*(www.balkanviator.com; www.jp-vrbas.rs)*

March 2011 due to small number of commuters because some of them chose to use other intercity bus companies. It takes less time to get to Novi Sad by these buses than by public transport of commuters which would first go through Sirig, then Temerin, Bački Jarak to Novi Sad.

The greatest attention is given to the analysis of movement of daily migrants from Temerin and Bački Jarak that use the services of PTC at line 32 because their movement



**Map 2.** Route of line 32 in the proportion 1:360 000  
*(Kalkan, 2014)*



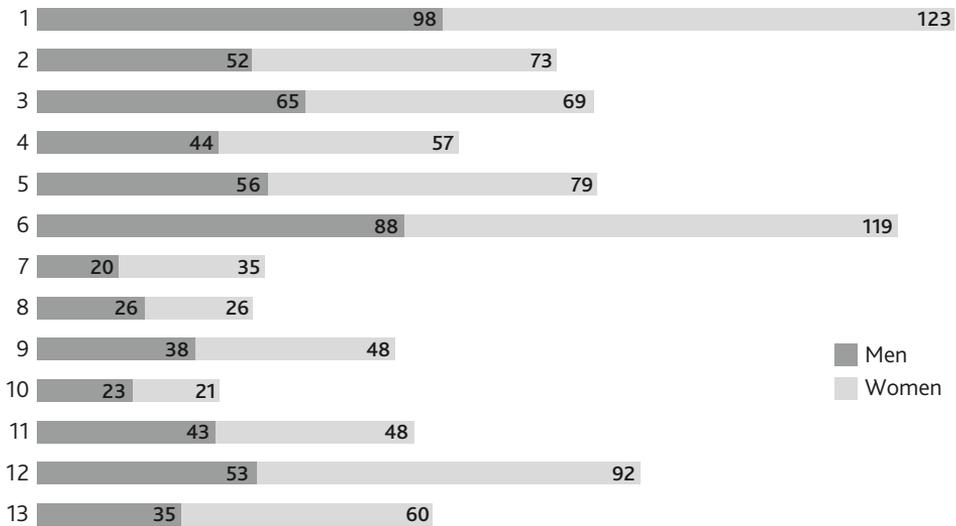
**Map 3.** Spatial distribution of bus stops in the municipality in direction Temerin – Novi Sad  
(Kalkan, 2014)

is the easiest to follow, and they also give significantly larger number of daily migrants comparing to Sirig. Its route is shown at the map.

At Temerin corridor (line 32) there are 26 bus stops in total. 13 are in the urban zone of the municipality of Temerin, which is along the Novosadska Street (Kalkan, 2014). The average distance between bus stops is 0,62 km ([www.geomreze.rgz.gov.rs](http://www.geomreze.rgz.gov.rs)). Map 3 shows space distribution of all bus stops along the Novosadska Street in direction Temerin – Novi Sad.

On the basis of given results from five day surveys, the greatest number of commuters is absorbed at the bus stop at turntable in Temerin's Telep (location 1 – 221 people in total) and bus stop in the center of Temerin (location 5 – 207 people in total). It must be mentioned that the period of surveys was conducted in the last week of school year (otherwise the results would be in benefit of the bus stop in the center of Temerin). The potential reason for the bus stop at the turntable to absorb the largest number of commuters is the more intensive use of public traffic, but also the size of inhabited network that is gravitated can have an important role in that (Novi Telep, Novo Naselje and Stari Telep). Data that were got by the surveys in the period from 9.6.2014 to 13.6.2014 show that the women travel by buses of PTC comparing to men. (Kalkan, 2014).

The average number of commuters that commute to Novi Sad in the morning is 298, 2 passengers. The workers and students are relatively equally present, but since the survey was conducted in the summer, it is supposed that more students use the buses of PTC (Kalkan, 2014).



**Chart 3.** Total number of transported commuters towards Novi Sad according to gender structure 2014 per bus stops in the urban zone in Temerin  
(Kalkan, 2014)

## Counting in 2010

Commuters' counting at the suburban lines in Novi Sad was conducted within a large study about the possibility of introducing electric tram in Novi Sad. Commuters' counting was done in October 2010 during one day. Counting was organized in such a way that the commuters were counted in vehicles and at all doors. So, it can be claimed with certainty that the data are more reliable and that the counting went without great irregularity in the work itself and with little deviation (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).

The greatest hours' flow in directions from Temerin appears between 06:00 and 07:00 o'clock when on average 521 commuters are transported. The time between 05:00 and 06:00 o'clock must be taken into account when on average 415 commuters are transported. During these two hours 936 commuters are transported from all 13 departure places. These extremely high requests for the flow are conditioned by morning peak loading (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).

The greatest demand for the flow from Novi Sad is expressed in the peak loading between 2 p.m. and 3 p.m. 541 passengers are transported in this time period. Peak hour is mostly generated by workers and students because they are conditioned by the policy of working in the morning. This extreme loading of system and possibility of system relegation negatively reflects the company's business and losses of the credibility. During the day uneven demands for the commuters' flow appear during the day so it is difficult to coordinate the capacities. Oscillations are big so the demands differentiate by di-

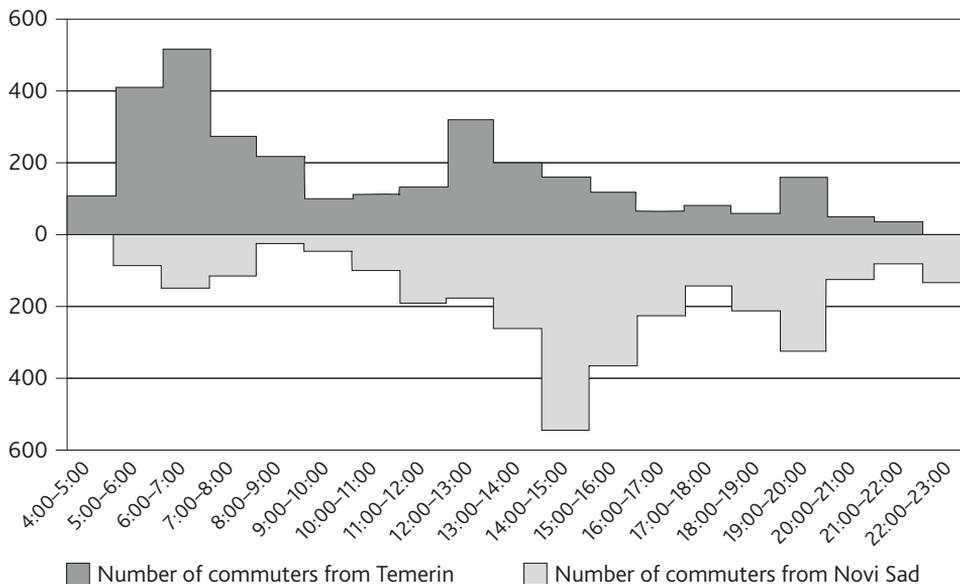
**Table 2.** Number of commuters from directions of Novi Sad and from directions of Temerin in 2010

Hours' scope	Number of commuters from Novi Sad	Number of commuters from Temerin
4:00-5:00	6	113
5:00-6:00	86	415
6:00-7:00	151	521
7:00-8:00	115	279
8:00-9:00	26	222
9:00-10:00	47	105
10:00-11:00	98	113
11:00-12:00	192	141
12:00-13:00	178	325
13:00-14:00	263	206
14:00-15:00	542	162
15:00-16:00	366	122
16:00-17:00	228	68
17:00-18:00	146	91
18:00-19:00	216	64
19:00-20:00	322	163
20:00-21:00	125	57
21:00-22:00	81	39
22:00-23:00	134	0
$\Sigma=$	3.322	3.206
	6.528	

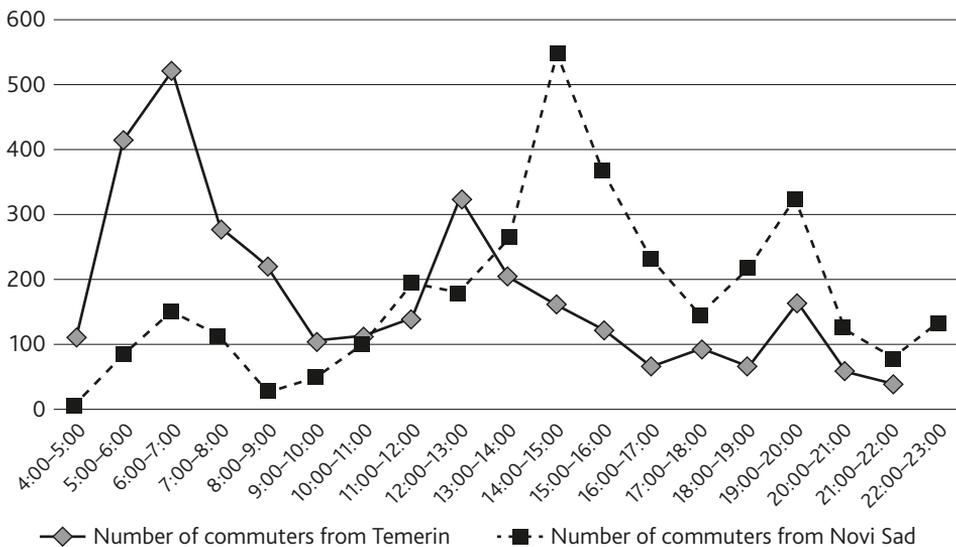
*(Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012)*

rections a few times (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).

During morning hours (from 04:00 and 09:00 o'clock) from Temerin the most demands for the flow appear. Later, it decreases at about only hundred passengers in the period from 09:00 to 10:00 o'clock. In the period from 12:00 to 13:00 o'clock it mildly rises to 300 and then mildly it decreases until the end of the day without big changes. From Novi Sad the greatest demand for the flow is from 2 p.m. to 3 p.m. after that you can notice the tendency of decline, which is about 150 passengers between 5 p.m. and 6 p.m. It can be concluded by the fact that there are only two departures in that hour, so the demand is limited by the capacity of driving units. The period between 7 p.m. and 8 p.m. is also interesting. In that period 322 passengers are transported from 4 departures. This period can be explained by the fact that students come from school so the demands for the flow are bigger (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).



**Chart 4. Hours' flow of buses from Temerin and Novi Sad**  
*(Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012)*



**Chart 5. Hours' flow of commuters**  
*(Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012)*

## Counting in 2012

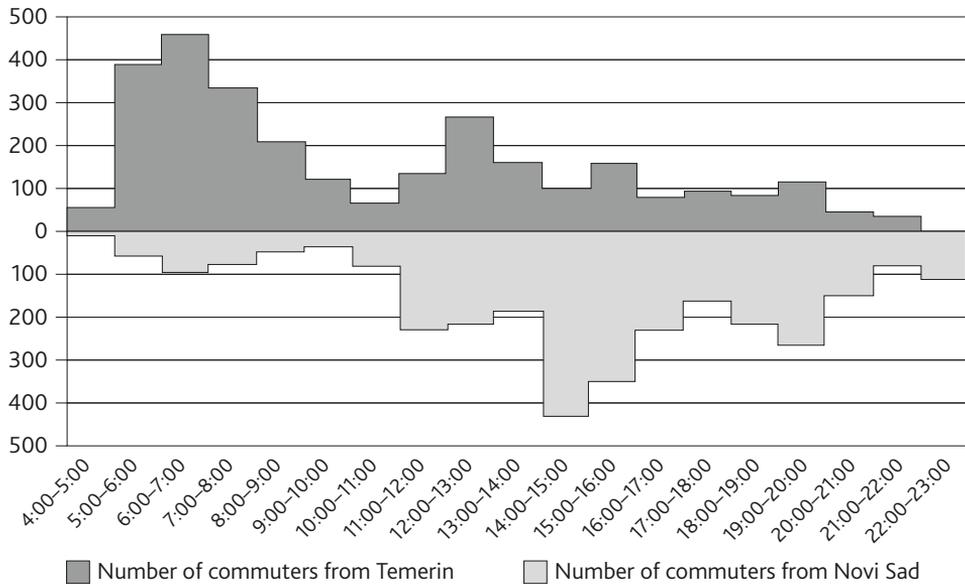
Counting of passengers at the lines of the corridor for Temerin was conducted on 4<sup>th</sup> and 5<sup>th</sup> April, 2012. The morning departures were filmed on different days. The days were relevant for the analysis. The counting was done on Tuesday, Wednesday and Thursday, which are according to professional literatures are the representative days. All departures were followed. One counter was put on each vehicle, while two counters were put on articulated bus so the accuracy of data is at the high level. The total number of the transported commuters is 5960 in both directions, 2952 in direction Novi Sad – Temerin and 3008 in direction Temerin – Novi Sad (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).

**Table 3.** Number of passengers from Temerin and from Novi Sad in 2012

Hours' scope	Number of commuters from Temerin	Number of commuters from Novi Sad
4:00-5:00	59	6
5:00-6:00	393	50
6:00-7:00	461	88
7:00-8:00	338	79
8:00-9:00	210	48
9:00-10:00	127	37
10:00-11:00	75	76
11:00-12:00	141	224
12:00-13:00	268	211
13:00-14:00	166	185
14:00-15:00	108	424
15:00-16:00	164	342
16:00-17:00	89	226
17:00-18:00	100	158
18:00-19:00	92	211
19:00-20:00	122	261
20:00-21:00	51	149
21:00-22:00	44	75
22:00-23:00		102
Σ=	3.008	2.952
	5.960	

*(Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).*

The flow of commuters at this line is typical for classical suburban lines. It did not change much in comparison to research from 2010. The peak hour has stayed the same as in the previous counting, from 06:00 to 07:00 o'clock when 461 commuters are trans-



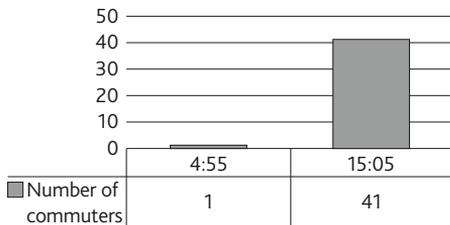
**Chart 6. Hours' flow of buses from Temerin and Novi Sad**  
*(Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012)*

ported to the direction from Temerin. Morning peak period lasts three hours from 05:00 to 08:00 when 1,192 commuters are driven, which represents more than third of transported commuters in the direction to Novi Sad. Afternoon peak period lasts from 2 p.m. to 4 p.m. The afternoon period is milder than morning and has the most expressed two hours while the others are less or more loaded. (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).

## COUNTING OF COMMUTERS' IN SUBURBAN LINES

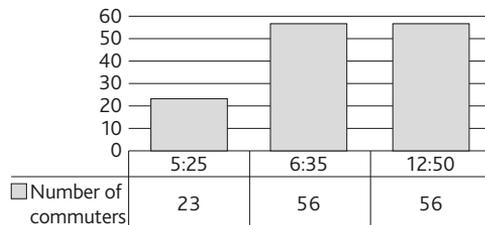
Within this segment the counting was done at three lines: 31, 32 and 33 in direction to Novi Sad and in the opposite direction (from Novi Sad). At line 31 (Novi Sad-Bački Jarak) line five departures were registered, the two from Novi Sad and three from Bački Jarak (Kolinija). This line operates only in peak loading.

In line 32 (Novi Sad-Temerin) 69 departures were registered at line 32, 33 from Novi Sad and 36 departures from Temerin. This line has the most departures at the corridor. The difference between the number of departure from Novi Sad and from Temerin is the consequence of the fact that about 2 p.m. there are four departures (2 x 2:05, 2:25 and 2:35), tree lines departure from the Industrial zone North and the Industrial zone South. The buses departing from Industrial zones transport the commuters towards Temerin, but from the last bus stop at the turntable they go to Novi Sad without operating (Kalkan, 2014). During the day 4,099 commuters are transported at this line which represents 2/3 of the total number of transported commuters during the day at the whole corridor, so this



**Chart 7.** Departure of the line 31 according to the number of commuters in the direction Bački Jarak – Novi Sad

(Data of surveys about possibility of introducing of modern trams in Novi Sad, 2012, [www.gspns.rs/red-voznje.php](http://www.gspns.rs/red-voznje.php))



**Chart 8.** Departures of the line 31 according to the number of commuters in the direction of Novi Sad – Bački Jarak

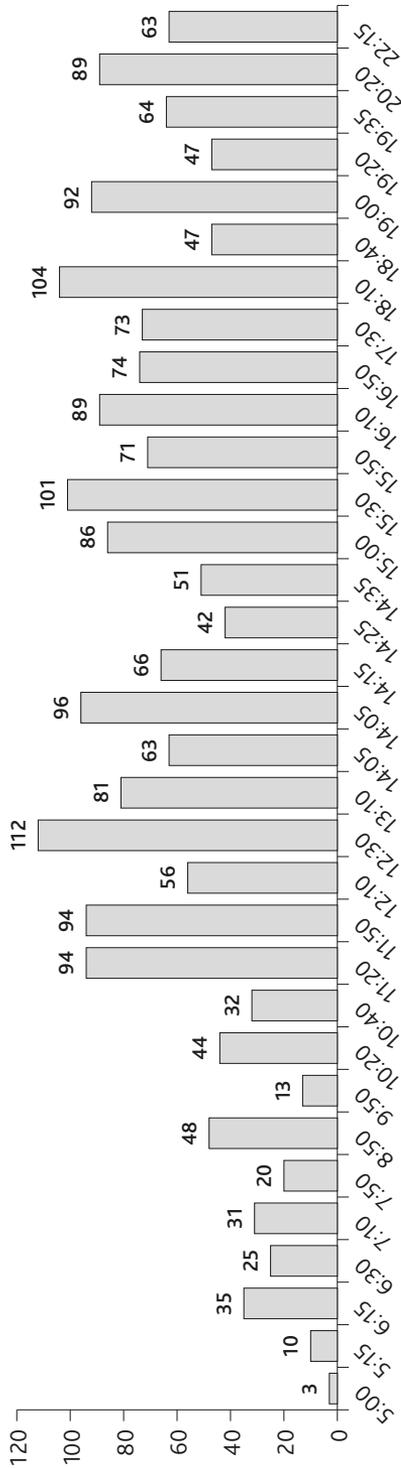
(Data of surveys about possibility of introducing of modern trams in Novi Sad, 2012, )

line must be observed carefully. The average time of turns in both directions is 39 minutes (Data of surveys about possibility of introducing of electric trams in Novi Sad, 2012).

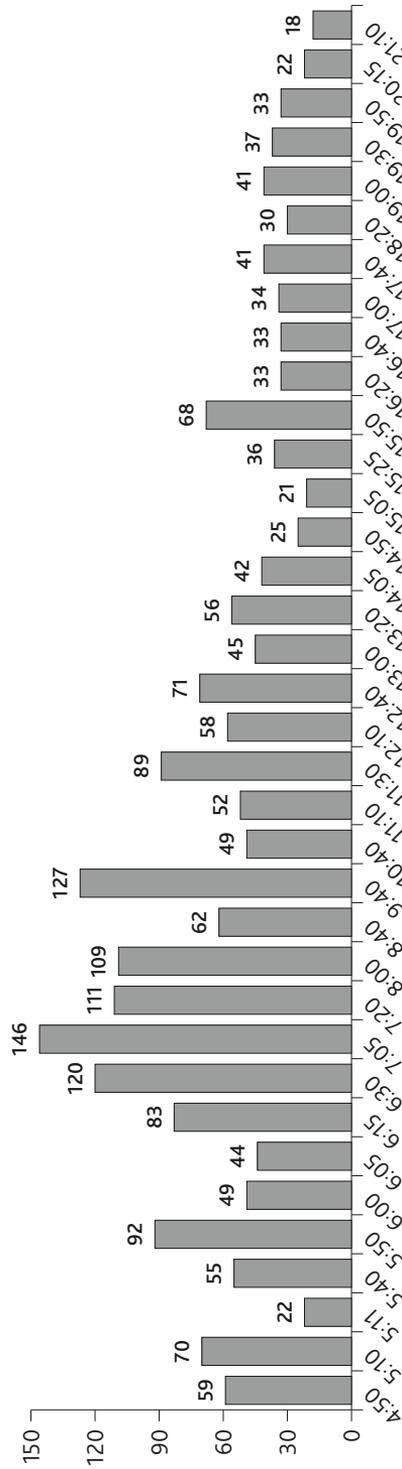
In the analysis of the line 33 (Novi Sad-Godpođinci) of all directions only convergent migration (towards Novi Sad) from the municipality of Temerin were considered. The line 33A (present in small number in the schedule) absorbs the passengers from Temerin's Telep towards Novi Sad. The total average number of daily migrants from the municipality of Temerin that are transported during one route is 35 people. Lines 33 (regular lines for Gospođinci) absorb commuters from the municipality of Temerin at 439 Novosadska Street (the bus stop before the center of Temerin) towards Novi Sad. The average number of daily migrants at this line is 49. These numbers indicate the significant participation of convergent daily migrations from the municipality of Temerin towards Novi Sad (Kalkan, 2014).

In order to find out the approximately exact number of commuters that daily go to Novi Sad to work and to educate themselves by using public transport, the data about the number of monthly bus tickets that were sold per months in 2008 and 2013. However, the problem for suburban zone Temerin – Novi Sad appeared. Namely the on 1<sup>st</sup> July 2013 the lines of 5B zone that made all the lines towards Temerin and Beočin were separated. Now, all the suburban lines to Temerin were in 5B zone. This change was made due to the need for easier monitoring of number of issued monthly bus tickets for Temerin and Bački Jarak. Thanks to special statistical data processing by Jelena Podračanin, the boss of the plan and analysis service and her co-workers from the sector of economic businesses, we got the data for all kinds of tickets for 2008 and 2013.

Data from the table confirm the stated assumption that the students are the most dominant commuters on buses of PTC. They are the only category where the rise of the monthly bus ticket was registered in 2013 comparing to 2008 (1,421 tickets more), while other categories of tickets declined in 2013. This decline is especially manifested in the category of working tickets (decline of 3,566 tickets). This might have happen due to re-orientation to own transport (the number of motor vehicles in the municipality indicates the same), as well as the choice to travel by taxi. When comes to seasons the most tickets are issued during spring and autumn, while their number is smallest in the summer (because of holidays and similar) (Kalkan, 2014).



**Chart 9.** Departures of line 32 according to the number of commuters in direction Novi Sad – Temerin  
*(Data of surveys about possibility of introducing of modern trams in Novi Sad, 2012)*



**Chart 10.** Departures of the line 32 according to number of commuters in direction Temerin – Novi Sad  
*(Data of surveys about possibility of introducing of modern trams in Novi Sad, 2012)*

**Table 4.** Issued monthly tickets per months and kinds in 5B zone in 2008 and 2013.

Month	Working		Student		Pensioner		Civil	
	2008.	2013.	2008.	2013.	2008.	2013.	2008.	2013.
1.	662	403	331	654	18	20	36	45
2.	694	394	544	672	24	22	49	48
3.	707	393	581	755	19	21	51	47
4.	706	392	566	698	21	20	58	45
5.	700	391	581	729	23	26	60	41
6.	701	396	532	517	27	25	56	45
7.	584	317	37	61	22	15	47	31
8.	605	329	22	42	11	19	28	30
9.	686	365	447	393	22	14	74	28
10.	708	399	550	730	57	21	50	41
11.	707	407	620	784	24	21	64	43
12.	697	405	560	757	23	21	55	42
Σ	8.157	4.591	5.371	6.792	291	245	628	486

(Podrašćanin, 2014.)

## TAXI DRIVERS AS THE FORM OF DAILY MIGRATIONS

Until a few years ago a number of line taxis was negligible and a small number of commuters from the municipality of Temerin used them. Nowadays it is very common. There are two main taxi zones in Temerin: at turntable in Telep and in the center of Temerin and one in the center of Bački Jarak.

The most commuters that use taxis does not have any kind of tickets for traveling by PTC buses, so they are the most common users of the line taxi services. Surveys show that the main reason for using the line taxi is the shorter period that is needed for arriving to the destination. The other reason is the prize that is the same as the bus ticket. Due to different factors, it is difficult to determine frequency and intensity of taxi lines (Kalkan, 2014). Statistical data processing provided the assumption that about 600 commuters uses line taxi daily (Falusi, Krevešić, 2012). However, the issue of safety of taxi traffic is imposed as one of the biggest problems for its users since the notion “line taxi” does not exist in the law of the Republic of Serbia. Taxis imply occasional transport of commuters. In order to do line transport of commuters has to meet certain requirements (set time and place of departure/arrival that meet the requirements for commuters terminal and taking them to destination, the existence of standards for line transport of commuters and other conditions and commuters’ insurance)



**Map 4.** Main taxi stands in the urban zone of Temerin and Bački Jarak  
(Kalkan, 2014)

## CONCLUSION

The research of daily migrations at the example of Temerin's municipality resulted with several conclusions: Gender structure of daily migrants of the municipality of Temerin is characterized by greater participation of males in comparison with female population, but women are numerous commuters on the buses of PTC in comparison with male population. The possible reason might be that the women unlike men choose jobs at shorter distances from the place of living because of bigger responsibility to children and household. The part of PTC buses in the transport of commuters is the biggest of all kinds of traffic means. The biggest hours' flow of commuters from Temerin to Novi Sad appears between 06:00 and 07:00 o'clock, between 05:00 to 10:00 o'clock, that is (so called "morning peak"). The biggest demand for flow from Novi Sad is in the peak loading between 2 p.m. and 3 p.m., from 2 p.m. to 4 p.m. that is. In the last few years, the big participation in the commuters' transport has been achieved by taxis that have started to operate more intensively at the territory of the municipality of Temerin (which supports the theory about the greater functional municipal dependence from the city). Due to further tendency of rise of number of population in the municipality and greater municipal dependence from Novi Sad, daily migrations put on problems in connection with normal functioning of traffic, because the majority of traffic in the municipality is done along one road (R-120). There is a need form building a detour as the best solution for trucks and agricultural vehicles. The time for commuting would be shorter than today. Everyday commuting negatively influences daily migrants because it influences the productivity and intensity of work, physical endurance, health condition of workers, and free time and family life as well. Due to everything that has been stated, it is important to follow the changes in demographic and functional development of the settlement

continuously in order to direct their economic development in the best possible way. Lately, the other characteristic of the closeness of the city has also been noticed. Namely, more and more people from Novi Sad come to live in Temerin and Bački Jarak because they give them a number of privileges that they did not have in the city. Also, the same people keep their work places in the city so they become daily migrants. On the basis of all that has been mentioned, Bački Jarak might connect to Novi Sad in future, as it has happened to certain places from the surrounding of the city.

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