



РЕПУБЛИКА СРПСКА
ЈУ ЗАВОД ЗА ЗАПОШЉАВАЊЕ
РЕПУБЛИКЕ СРПСКЕ

Пале



LABOUR MARKET RESEARCH IN REPUBLICA SRPSKA

2021/2022

- THEMATIC REPORT -

OCCUPATIONS IN DEMAND



Funded by
the European Union

IMPROVING LABOUR MARKET RESEARCH



Title of the report: LABOUR MARKET RESEARCH IN REPUBLIKA SRPSKA
2021/2022
THEMATIC REPORT: OCCUPATIONS IN DEMAND

For publisher: Public Institution Employment Service of the Republika
Srpska

Research editor and
coordinator: **Head of Job Brokerage
and Career Planning
Department** Slobodan Mačar

Editorial committee: Jovana Janković
Ivana Njegovanović

Technical support: Ranko Markuš, PhD
Ljiljan Veselinović, PhD

Language editor: Branka Miović

This report was prepared for the purposes of the Public Institution Employment Service of the Republika Srpska with technical support from the „Strengthening the capacity of labour market institutions by improving the labour market research methodology“ project, which is funded by the European Union and implemented by a consortium consisting of NIRAS IC Sp. z o.o., GOPA Worldwide Consultants, GOPA mbH Germany and the Public Employment Service of the Republic of France.

The contents of this publication are the sole responsibility of the Public Institution Employment Service of the Republika Srpska and do not necessarily reflect the views of the European Union.

(C) 2021 European Commission



TABLE OF CONTENTS

INTRODUCTION	5
METHODOLOGY AND SAMPLE	7
THE OBJECTIVE OF THE RESEARCH	7
SAMPLING METHOD	7
DATA COLLECTION PROCESS	7
QUALITY ASSURANCE	8
COMPANY STRUCTURE	8
NEEDS OF EMPLOYERS	12
DIFFICULTIES IN SECURING WORKFORCE	12
OCCUPATIONS FOR WHICH EMPLOYERS HAD DIFFICULTIES FINDING AND HIRING WORKERS IN 2021	15
OVERVIEW OF THE NUMBER OF WANTED WORKERS WHICH EMPLOYERS HAD DIFFICULTIES FINDING AND HIRING, BY LEVEL OF EDUCATION	21
REQUIRED OCCUPATIONS IN 2022	24
CONCLUSIONS AND RECOMMENDATIONS	33
CONCLUSIONS	33
RECOMMENDATIONS	34



INTRODUCTION

A hand is shown inserting a card into a device, possibly a payment terminal or a security scanner. The background is a blurred office setting with a computer monitor. The image is overlaid with a dark blue triangle on the left and a red diagonal line.

INTRODUCTION

Labor market research is conducted in accordance with the Law on Employment Mediation and Rights during Unemployment (“Official Gazette of Republika Srpska”, No. 30/10, 102/12 and 94/19), and the annual work programs of the RS Employment Service.

The labor market research conducted by the Employment Service of Republika Srpska began in November 2021, with the sampling of employers for the survey, testing of the questionnaire, and finally training of regional coordinators and interviewers for the survey. Data were collected from 1 December to 31 December 2022.

A total of 1,100 employers from the Republika

Srpska were surveyed, making the sample representative in relation to the database of employers.

The aim of this customized report is to offer useful information to support the design of labor market policy in the context of employment prospects for individual occupations and the designing of training and re-qualification. This report gives an overview of occupations with which employers had problems in 2021, as well as employment plans for 2022.

METHODOLOGY AND SAMPLE



METHODOLOGY AND SAMPLE

The objective of the research

The objective of this research is to collect data on employment in 2021 and employment needs in 2022, i.e. on the developments on the labor market in Republic of Srpska, and the focus of this particular thematic report is on occupations.

Sampling method

The sampling method used in this study is the stratified approach to sampling, with the key stratification variables being sector (KD2010 classification of activities) and company size. A total of 1,100 employers from the Republika Srpska were surveyed.

Data collection process

The established system for conducting labor market research included a research coordinator, seven regional coordinators and 56 interviewers from the Service. The European Union project “Labor Market Research Improvement” conducted additional training for the needs of the research.

The process of collecting data (i.e. surveying employers) began on December 1, 2021, and ended on December 31, 2021. A total of 56 interviewers were included in the survey process. Interviewers used tablets to conduct the survey.

The survey was conducted using the “CAPI” method (Computer Assisted Personal Interviewing), where questions were asked orally, and the answers were recorded in the data collection software on the tablet.

Quality assurance

During the research, the following data quality assurance instruments were used in the data collection process:

- Training for coordinators and interviewers was organized in November 2021;
- Preparation and distribution of manuals for coordinators, instructions for interviewers for field work and instructions for completing the questionnaire;
- Identification of possible situations that may occur during data collection in the field and how to resolve them;
- Continuous process control throughout the research.

Company structure

Table 1. Number of companies that took part in the research according to branch offices

Branch office	Number of employers surveyed	Percentage
Banja Luka	495	45.0%
Bijeljina	128	11.6%
Doboj	163	14.8%
Istocno Sarajevo	106	9.6%
Prijedor	109	10.0%
Trebinje	67	6.0%
Zvornik	32	3.0%
Total	1100	100%

The companies that are most represented in the survey are limited liability companies (62.1%), followed by sole proprietors (23.9%), while joint stock companies account for 5.1%. The remaining number of survey participants mostly includes public institutions (2.5%). Observed by the form of ownership, the largest percentage of the companies surveyed is privately owned (90.64%), which is in line with expectations, because when selecting the sample, most employers were taken from the business sector, with predominantly private ownership. According to the duration of the companies' existence on the market, most companies surveyed were those that have been operating for over three years, 89% of them. A total of 4.9% of employers did not answer this question, and 6.1% of the total number of respondents have been operating for less than three years.

These 1,100 surveyed employers employ 68,580 workers, of whom 30,876 or 45% are women. Of the mentioned number of employees, 13,791 are younger than 30 (6,186 women or 44.9%), while 3,797 workers are older than 60 (1,134 women or 29.9%).

When looking at the number of persons employed by the surveyed employers by activity, the largest number of workers is employed in the manufacturing industry, 33,566, of which 14,891 are women (44.4%). This is followed by 18,097 service-providing activities (7,352 women or 40.6%) while 14,066 persons (8,215 women or 58.4%) are employed in the trade sector. In the

field of construction, 2,871 employees were registered (418 women or 14.6%).

According to the type of organization, the largest number of surveyed employers are limited liability companies (62.1%), followed by sole proprietors (23.9%), joint stock companies (5.2%), public institutions (2.5%), public companies (1.8%), etc.

Table 2. Structure of employers according to the type of organisation

Type of organisation	Number of employers	Percent
Religious community	2	0.2%
Joint stock company (d.d.) / joint stock company (a.d.)	57	5.2%
Company with unlimited joint and several liability	13	1.2%
Limited liability company (d.o.o.)	683	62.1%
Cooperative	1	0.1%
Public institution - institutes, schools, health centers, centers for social work	27	2.5%
Public enterprise - post offices, electric power companies, utility companies	20	1.8%
Other	11	1.0%
Private health institution	12	1.1%
Self-employed	263	23.9%

Observed by size, out of 1,100 employers covered by the survey, most are small enterprises (84.1%), followed by medium-sized enterprises (8.1%), whereas large employers make up 7.8% of the total number of surveyed employers.

Table 3. Structure of employers by size

Size	Number of employers	Percent
Small	925	84.1%
Medium	89	8.1%
Large	86	7.8%
Total	1100	100.0%



The largest percentage of employers in the sample belongs to G - trade 28.3%, followed by C - manufacturing 28.2%, while employers in area I - catering 9.9% come third. This research finding is in line with the sampling frame, which confirms that this is a representative sample.

Table 4. Structure of employers by activity

Activity KD2010	Number of employers	Percent
B Mining and quarrying	9	0.8%
C Manufacturing industry	310	28.2%
D Production and supply of electricity energy, gas and steam and air conditioning	14	1.3%
E Water supply, sewerage, waste management and remediation	22	2.0%
F Construction	77	7.0%
G Wholesale and retail trade and repair of motor vehicles and motorcycles	311	28.3%
H Traffic and storage	67	6.1%
I Hotel and catering	109	9.9%
J Information and communication	29	2.6%
Financial and insurance activities	17	1.5%
L Real estate activities	5	0.5%
M Professional, scientific and technical activities	65	5.9%
Administrative and support service activities	20	1.8%
R Arts, entertainment and recreation	24	2.2%
S Other service activities	21	1.9%
Total	1,100	100.0%

NEEDS OF EMPLOYERS



NEEDS OF EMPLOYERS

Difficulties in securing workforce

Of the total number of employers who hired new workers in 2021, 41.4% of employers stated that they encountered difficulties in hiring, which is reason for concern because it is a much higher percentage compared to the previous survey, when 25.7% employers stated that they had problems hiring new workers. On the other hand, 58.1% stated that they had no difficulties in hiring workers in the past year, 2021.

Observed by activities, the largest number of problems in employment was observed with employers in construction, where 51.9% of employers stated that they had problems in employment, followed by employers in industry (47.9%), and in services (39, 2%), as well as in trade, where 33.8% of employers reported problems with employment in 2021.

Also, when we look at the problems in hiring workers by company size, we see that 59.3% of large companies reported problems, 48.3% of medium and 39% of small companies. In other words, the problem of finding workers is more pronounced in large companies, compared to medium and small ones.

If we take into account the duration of companies' existence of, as an additional variable of interest, employment problems were more pronounced among newly established employers (46.3% and employers who operate for up to three years), compared to employers who work longer (40.7%). However, such results should be interpreted with caution, given the small percentage of employers operating for a period of up to three years.

Table 5. Percentage of employers who had difficulties finding workers of certain occupations

By category	Number of employers	Percentage of employers who had difficulties hiring in 2021		
		Yes	No	No answer
Total	1,100	41.4%	58.1%	0.5%
By activity				
Construction	77	51.9%	45.5%	2.6%
Industrial activities	355	47.9%	51.5%	0.6%
Trade	311	33.8%	65.9%	0.3%
Service activities	357	39.2%	60.5%	0.3%
By size				
Small	925	39.0%	60.4%	0.5%
Medium	89	48.3%	51.7%	0.0%
Large	86	59.3%	39.5%	1.2%
By duration of existence*				
Up to three years	67	46.3%	52.2%	1.5%
Over three years	979	40.7%	58.9%	0.4%

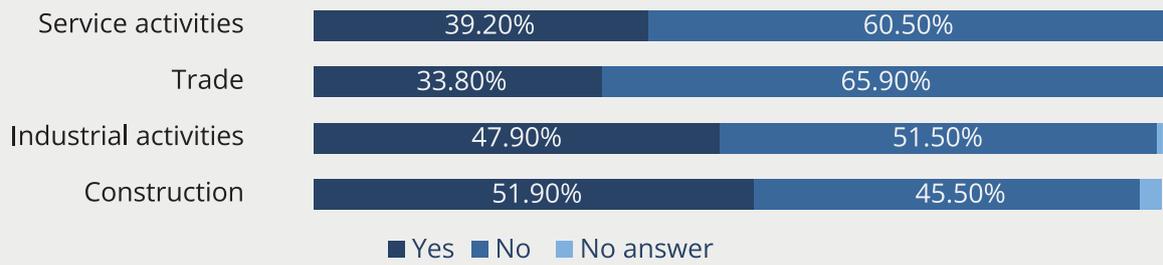
* A total of 54 employers did not respond to the question on the year of foundation

Overview of employers who had problems in employment by activities

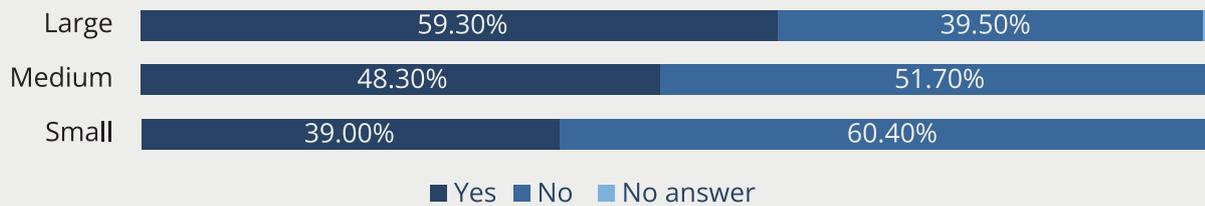
Activity	Problems with employment in 2021			
	Yes		No	
	No of employers	Percent	No of employers	Percent
B	4	44,4%	5	55,6%
C	157	50,6%	151	48,7%
D	2	14,3%	12	85,7%
E	7	31,8%	15	68,2%
F	40	51,9%	35	45,5%
G	105	33,8%	205	65,9%
H	27	40,3%	40	59,7%
I	60	55,0%	49	45,0%
J	12	41,4%	17	58,6%
K	4	23,5%	13	76,5%
L	1	20,0%	4	80,0%
M	19	29,2%	46	70,8%
N	5	25,0%	14	70,0%
R	6	25,0%	18	75,0%
S	6	28,6%	15	71,4%
Total	455	41,4%	639	58,1%

Activity	Problems with employment in 2021			
	Yes		No	
	No of employers	Percent	No of employers	Percent
Construction	40	51,9%	35	45,5%
Industrial activities	170	47,9%	183	51,5%
Trade	105	33,8%	205	65,9%
Services	140	39,2%	216	60,5%
Total	455	41,4%	639	58,1%

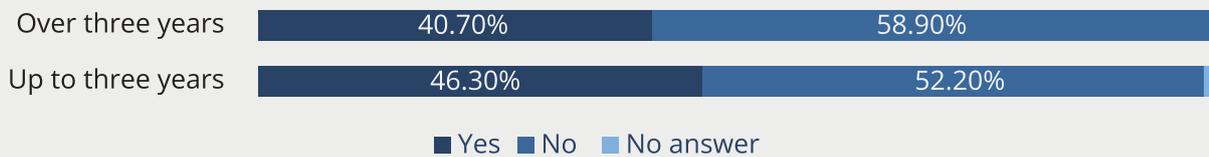
By activity



By size



By duration of existence



Graph 1. Percentage of employers who had difficulties in finding workers of certain occupations

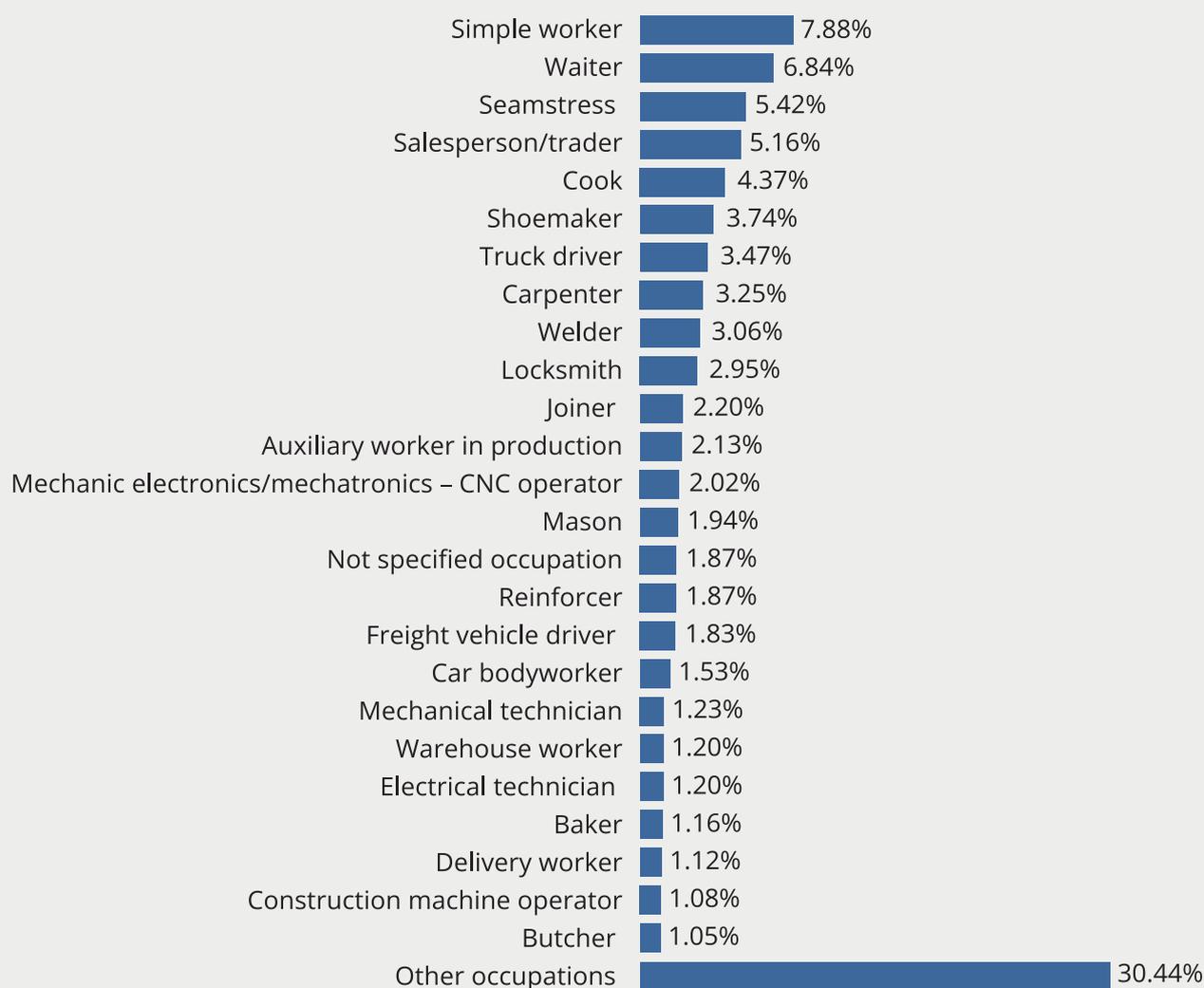
Occupations for which employers had difficulties finding and hiring workers in 2021

According to the surveyed employers, problems were reported during the employment of close to 2,700 workers. Employers most often reported problems with the following occupations: simple worker, waiter, tailor, salesperson, cook, shoemaker, truck driver, carpenter, welder, locksmith, wood worker, auxiliary production worker, CNC operator, builder, reinforcer, freight vehicle driver, Car body worker, mechanical technician and warehouse worker. These 20 occupations make up 64% of occupations that employers had difficulty finding in the labor market. For the sake of comparison, in the survey for 2020, employers most often reported problems with the following occupations: truck driver, auxiliary production worker, salesperson, carpenter, mechanical engineer, wood worker, warehouse worker, reinforcement worker and welder.

Table 6. Occupations for which employers had difficulties finding and hiring workers

Occupation	Number of persons	%
Simple worker	211	7.88%
Waiter	183	6.84%
Tailor	145	5.42%
Salesperson	138	5.16%
Cook	117	4.37%
Shoemaker	100	3.74%
Truck driver	93	3.47%
Carpenter	87	3.25%
Welder	82	3.06%
Locksmith	79	2.95%
Wood worker	59	2.20%
Auxiliary worker in production	57	2.13%
Electronics mechanic - mechatronics engineer - CNC operator	54	2.02%
Builder	52	1.94%
No occupation specified	50	1.87%
Reinforcer	50	1.87%
Freight vehicle driver	49	1.83%
Car body worker	41	1.53%
Mechanical technician	33	1.23%
Warehouse worker	32	1.20%
Electrician	32	1.20%
Baker	31	1.16%
Delivery man	30	1.12%
Construction machinery operator	29	1.08%
Butcher	28	1.05%
Other occupations	815	30.44%
Total	2.677	100.00%

Occupations for which employers had difficulties in finding and employing, % of required persons

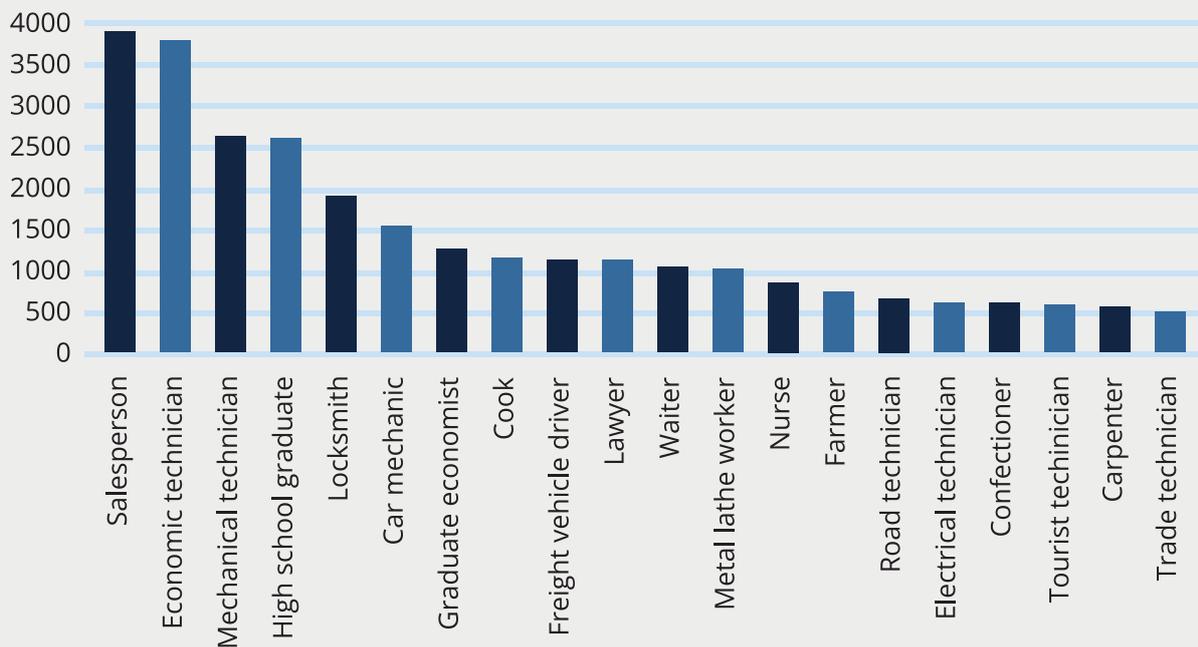


Graph 2. Occupations for which employers had difficulties in finding and employing, % of required persons

If we compare the structure of demand with the situation in the records by occupation, we come to the conclusion that 20 occupations with the largest number of unemployed persons include simple workers and auxiliary workers in production (non-qualified and semi-qualified workers), then waiters, cooks, carpenters, truck drivers, locksmiths and mechanical technicians. These are occupations in which over 30% of employment needs were expressed according to the survey, and which were not met in 2021.

In other words, employers had difficulties in securing workers of that profile. In this case, the reasons for the fact that their needs were not met should be sought in the lack of professional knowledge and skills, lack of experience or insufficiently attractive working conditions, including wages. These reasons could also include “undeclared” work, but in any case this is not a classic deficit of work force of certain occupation, because on the supply side there is a sufficient number of people to meet the needs of employers.

20 occupations with highest number of unemployed according to the records of the Services (situation as on 31 December 2021)



Graph 3. Occupations with highest number of unemployed according to the records of the Services (situation as on 31 December 2021)

Observed by activities, the largest number of reported difficulties in hiring reported by employers was in the field of industry - 1,387 workers (51.8%), then in service activities - 625 workers (23.3), trade - 337 workers (12.6%), as well as the field of construction - 328 workers (12.2%). When it comes to the complexity and type of work, it can be said that there are no significant differences between groups of activities and that there is predominantly a need for workers in less complex jobs such as auxiliary workers in production and craft jobs such as plumbers, seamstresses and the like. Exceptions are trade and service activities, where among the occupations in highest demand include commercialists, pharmacists and developers at the level of higher education, while in the industrial activities, at the level of secondary education, mechatronics can be singled out.

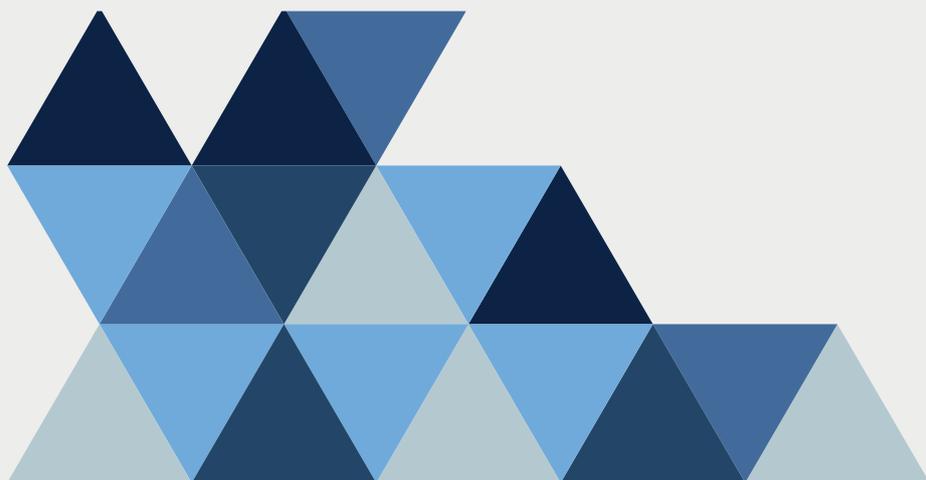


Table 7. Ten occupations for which employers had difficulties in finding and hiring workers, overview by activities

Occupation	Number of persons	%
Construction	328	12.25%
Carpenter	79	24.09%
Builder	47	14.33%
Reinforcer	46	14.02%
Truck driver	23	7.01%
Construction machinery operator	17	5.18%
Ceramist	15	4.57%
Welder	15	4.57%
Simple worker	10	3.05%
Central heating fitter	9	2.74%
Plumber	8	2.44%
Industrial activities	1387	51.81%
Simple worker	165	11.90%
Seamstress	145	10.45%
Shoemaker	100	7.21%
Locksmith	64	4.61%
Welder - Welder	62	4.47%
Auxiliary worker in production	57	4.11%
Carpenter	56	4.04%
Electronics mechanic - mechatronics engineer - CNC operator	52	3.75%
Car body worker	40	2.88%
Salesman-merchant	39	2.81%
Trade	337	12.59%
Salesman-merchant	88	26.11%
Master of pharmacy	21	6.23%
Worker for simple jobs	19	5.64%
Warehouse worker	18	5.34%
Waiter	18	5.34%
Cook	16	4.75%
Butcher	13	3.86%
Truck driver	12	3.56%
Commercialist	11	3.26%
Construction machinery operator	10	2.97%
Service activities	625	23.35%
Waiter	142	22.72%
Cook	88	14.08%
Truck driver	38	6.08%
Delivery person	30	4.80%
Computer operator	25	4.00%
Treasurer	20	3.20%
Security officer	20	3.20%
Simple worker	17	2.72%
Developer	14	2.24%
Bus driver	12	1.92%

Observed by the size of enterprises, small enterprises met with the largest percentage of hiring problems - 1,382 (51.6%), large enterprises - 894 (33.4%), while medium-sized enterprises had difficulties hiring 401 workers (14.9%) . An overview of occupations in which small, medium and large enterprises most often had difficulties hiring is shown in Table 8.

Table 8. Ten occupations for which employers had difficulties in finding and hiring, an overview by company size

Occupation	Number of persons	%
Small companies	1382	51.62%
Waiter	158	11.43%
Salesperson	101	7.31%
Cook	92	6.66%
Simple worker	83	6.01%
Truck driver	63	4.56%
Carpenter	52	3.76%
Locksmith	52	3.76%
Mason	47	3.40%
Tailor	42	3.04%
Carpenter	31	2.24%
Medium companies	401	14.98%
Car body worker	40	9.98%
Carpenter	35	8.73%
Simple worker	28	6.98%
Computer operator	25	6.23%
Reinforcer	25	6.23%
Waiter	20	4.99%
Seamstress	18	4.49%
Cook	15	3.74%
Wood technician	12	2.99%
Shoemaker	10	2.49%
Leather seamstress	10	2.49%
Designer	10	2.49%
Civil Engineer	10	2.49%
Welder - welder	10	2.49%
Tile layer	10	2.49%
Large companies	894	33.40%
Simple worker	100	11.19%
Shoemaker	90	10.07%
Tailor	85	9.51%
Welder	45	5.03%
Electronics mechanic - mechatronics engineer - CNC operator	45	5.03%
Salesperson	33	3.69%
Auxiliary worker in production	30	3.36%
Delivery person	30	3.36%
Truck driver	28	3.13%
Locksmith	25	2.80%

Companies that have been operating for over three years had the most problems finding workers in the following occupations: simple worker, waiter, tailor, salesperson, shoemaker, while companies that have been in operation for up to three years of age had the most problems hiring workers of the following occupations: tinsmith, security officer, waiter, etc.

Table 9. Ten occupations in which employers had difficulties in finding and hiring workers, overview by age of company

Occupation	Number of persons	%
Over three years	2356	88.01%
Worker for simple jobs	185	7.85%
Waiter	149	6.32%
Tailor	143	6.07%
Salesman-merchant	128	5.43%
Shoemaker	100	4.24%
Truck driver	93	3.95%
Cook	89	3.78%
Welder - welder	77	3.27%
Carpenter	67	2.84%
Locksmith	67	2.84%
Up to three years	153	5.72%
Car body worker	40	26.14%
Security Officer	15	9.80%
Waiter	15	9.80%
Carpenter	14	9.15%
Cook	11	7.19%
Salesman-merchant	8	5.23%
Worker for simple jobs	7	4.58%
Baker	4	2.61%
Plumber	3	1.96%
Electrician	3	1.96%
Electrician	3	1.96%
French language teacher	3	1.96%
Master of pharmacy	3	1.96%
Missing data	168	6.28%

Overview of the number of wanted workers which employers had difficulties finding and hiring, by level of education

The occupations in which employers most often had difficulties hiring were mainly related to occupations with a lower level of education: skilled, highly skilled (56.7%) and medium-skilled (23.57%), while a smaller percentage of employers stated that they had problems with semi-skilled workers, etc. The share of workers with higher education is 7.14% and that includes fifth, sixth and seventh level of education.

Table 10. Number of workers which employers had difficulties hiring, by level of education

Education level	Number of persons	%
1. Non-skilled - without education, unfinished primary school	86	3.21%
2. Semi-skilled, basic skills - primary school	191	7.13%
3. Skilled, highly skilled - high school up to 3 years	1519	56.74%
4. Secondary school - high school of 4 or more years	631	23.57%
5. Higher education - 1st degree, professional study and college	20	0.75%
6. Higher education - university graduates, academy	152	5.68%
7. Master's degree	19	0.71%
Not specified	59	2.20%
Total	2,677	100.00%



Graph 4. Percentage of wanted workers for whom employers had difficulties in finding and employment by level of education

Observed by activity and education, employers faced the highest percentage of difficulties in all industries with hiring skilled and highly skilled workers. Employers in the field of construction had the most problems finding skilled workers (86.9%), while 49.38% employers in the field of industry, 62.02% employers in trade and 54.4% employers in the field of services reported difficulties hiring skilled and highly skilled workers.

Table 11. Number of required positions for which employers had difficulties finding and hiring workers, by level of education and activities of the company

Education level	Number of persons	%
Construction	328	12.25%
2. Semi-skilled, basic skills - primary school	19	5.79%
3. Skilled, highly skilled - high school up to 3 years	285	86.89%
4. Secondary school - high school of 4 and more years and grammar school	10	3.05%
6. Higher education - faculty (graduates), academy	12	3.66%
Not specified	2	0.61%
Industrial activities	1,387	51.81%
1. Non-skilled – no education or not completed primary school	73	5.26%
2. Semi-skilled, basic skills - primary school	156	11.25%
3. Skilled, highly skilled - high school up to 3 years	685	49.39%
4. Secondary school - high school of 4 and more years and grammar school	381	27.47%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	6	0.43%
6. Higher education - faculty (graduates), academy	45	3.24%
Not specified	41	2.96%
Trade	337	12.59%
1. Non-skilled – no education or not completed primary school	13	3.86%
2. Semi-skilled, basic skills - primary school	5	1.48%
3. Skilled, highly skilled - high school up to 3 years	209	62.02%
4. Secondary school - high school of 4 and more years and grammar school	58	17.21%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	6	1.78%
6. Higher education - faculty (graduates), academy	19	5.64%
7. Master's degree	19	5.64%
Not specified	8	2.37%
Services	625	23.35%
2. Semi-skilled, basic skills - primary school	11	1.76%
3. Skilled, highly skilled - high school up to 3 years	340	54.40%
4. Secondary school - high school of 4 and more years and grammar school	182	29.12%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	8	1.28%
6. Higher education - faculty (graduates), academy	76	12.16%
Not specified	8	1.28%
Total	2,677	100.00%

According to the size of the company, all companies had the most problems finding skilled workers, but these percentages differ slightly between small, medium and large companies. Small enterprises had the highest percentage of employment problems with skilled workers (65.4%). Large companies reported that they also had problems finding skilled workers (46.7%), followed by the workers with secondary school (30.43%), and medium-sized companies also had most problems finding skilled workers (49.13%), and then workers with secondary school (28.18%).

Table 12. Number of workers which employers had difficulties finding and hiring, by level of education and company size

Education level	Number of persons	%
Small	1,382	51.62%
1. Non-skilled – no education or not completed primary school	41	2.97%
2. Semi-skilled, basic skills - primary school	68	4.92%
3. Skilled, highly skilled - high school up to 3 years	904	65.41%
4. Secondary school - high school of 4 and more years and grammar school	246	17.80%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	13	0.94%
6. Higher education - faculty (graduates), academy	78	5.64%
7. Master's degree	8	0.58%
Not specified	24	1.74%
Medium	401	14.98%
1. Non-skilled – no education or not completed primary school	10	2.49%
2. Semi-skilled, basic skills - primary school	23	5.74%
3. Skilled, highly skilled - high school up to 3 years	197	49.13%
4. Secondary school - high school of 4 and more years and grammar school	113	28.18%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	4	1.00%
6. Higher education - faculty (graduates), academy	38	9.48%
7. Master's degree	6	1.50%
Not specified	10	2.49%
Large	894	33.40%
1. Non-skilled – no education or not completed primary school	35	3.91%
2. Semi-skilled, basic skills - primary school	100	11.19%
3. Skilled, highly skilled - high school up to 3 years	418	46.76%
4. Secondary school - high school of 4 and more years and grammar school	272	30.43%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	3	0.34%
6. Higher education - faculty (graduates), academy	36	4.03%
7. Master's degree	5	0.56%
Not specified	25	2.80%
Total	2,677	100.00%

Companies that have been operating for over three years reported problems with hiring workers in 2021, mostly for skilled education (56.8%), as well as secondary education (23.3%), while companies younger than three years had most problems (46.4%) employing workers with secondary education, as well as skilled workers (41.8%).

Table 13. Number of workers which employers had difficulties finding and hiring, by level of education and age of company

Education level	Number of persons	%
Up to three years	153	5.72%
1. Non-skilled – no education or not completed primary school	2	1.31%
2. Semi-skilled, basic skills - primary school	7	4.58%
3. Skilled, highly skilled - high school up to 3 years	64	41.83%
4. Secondary school - high school of 4 and more years and grammar school	71	46.41%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	2	1.31%
6. Higher education - faculty (graduates), academy	4	2.61%
7. Master's degree	3	1.96%
Over three years	2,356	88.01%
1. Non-skilled – no education or not completed primary school	75	3.18%
2. Semi-skilled, basic skills - primary school	164	6.96%
3. Skilled, highly skilled - high school up to 3 years	1339	56.83%
4. Secondary school - high school of 4 and more years and grammar school	548	23.26%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	18	0.76%
6. Higher education - faculty (graduates), academy	143	6.07%
7. Master's degree	16	0.68%
Not specified	53	2.25%
Data missing	168	6.28%
Total	2,677	100.00%

Required occupations in 2022

Of the total number of employers who participated in the survey (1,100), 676 plan to hire new workers in 2022 (61.5%). Observed by branches, the lowest percentage of employers planning new employment is in Trebinje (53.6%), and the highest in Bijeljina (69.5%). In the survey for 2020, out of the total number of surveyed employers, 478 planned to hire new workers in 2021 (48.9%), which can be related to the COVID-19 crisis.

The number of employers in the sample who expressed the need for new employment in 2022 is 676, with the number of workers needed at the sample level estimated at 5,767 (new employees and vacant positions).

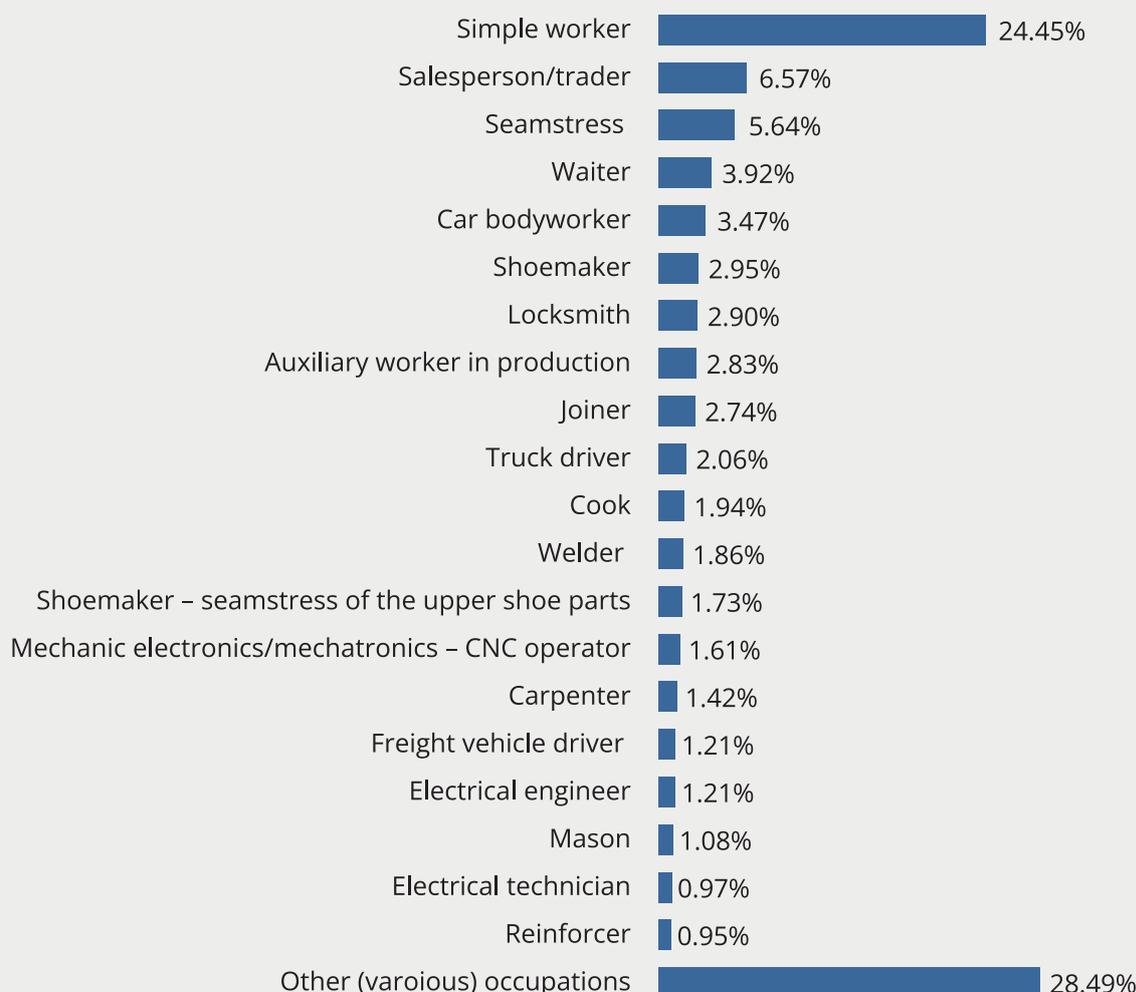
The following 20 occupations represent 71.5% of the total employment plans for workers in 2022: Simple worker, salesperson, seamstress, waiter, car body repair worker, shoemaker, locksmith, auxiliary production worker, carpenter, truck driver, cook, welder, footwear worker, mechanic - CNC operator, woodworker, freight vehicle driver, electrical engineer, bricklayer,

electrician and reinforcement worker. Compared to the survey in 2020, the following 17 occupations represented 51.1% of the total employment plans for 2021: salesperson, auxiliary worker in production, simple worker, seamstress, bricklayer, carpenter, truck driver, freight vehicle driver, locksmith, woodworker, passenger vehicle driver, commercialist, welder, waiter, seamstress, economist and mechanical engineer.

So, it is the structure of demand is similar to that in 2021, with a dominant share of jobs that require lower qualifications than the level of secondary education or, most often, the level of three-year secondary education ,when it comes to craft occupations. As a rule, these are less productive and lower paid jobs. However, unlike 2021, at the level of higher education there is a growing demand for electrical engineers, developers, software development or testing professionals and other ICT occupations. This leads to the conclusion that there are positive trends in the labor market in terms of needs for highly complex and productive jobs, which are usually accompanied by higher wages, precisely in those areas where there is a high rate of labor migration.

Table 14. Required occupations in 2022 (plan)

Occupation	Number of workers	%
Simple worker	1,410	24.45%
Salesperson	379	6.57%
Seamstress	325	5.64%
Waiter	226	3.92%
Car body worker	200	3.47%
Shoemaker	170	2.95%
Locksmith	167	2.90%
Auxiliary worker in production	163	2.83%
Carpenter	158	2.74%
Truck driver	119	2.06%
Cook	112	1.94%
Welder	107	1.86%
Footwear worker	100	1.73%
Electronics mechanic - mechatronics engineer - CNC operator	93	1.61%
Woodworker	82	1.42%
Freight vehicle driver	70	1.21%
Electrical engineer	70	1.21%
Builder	62	1.08%
Electrician	56	0.97%
Reinforcer	55	0.95%
Other (various) occupations	1,643	28.49%
Total	5,767	100.00%

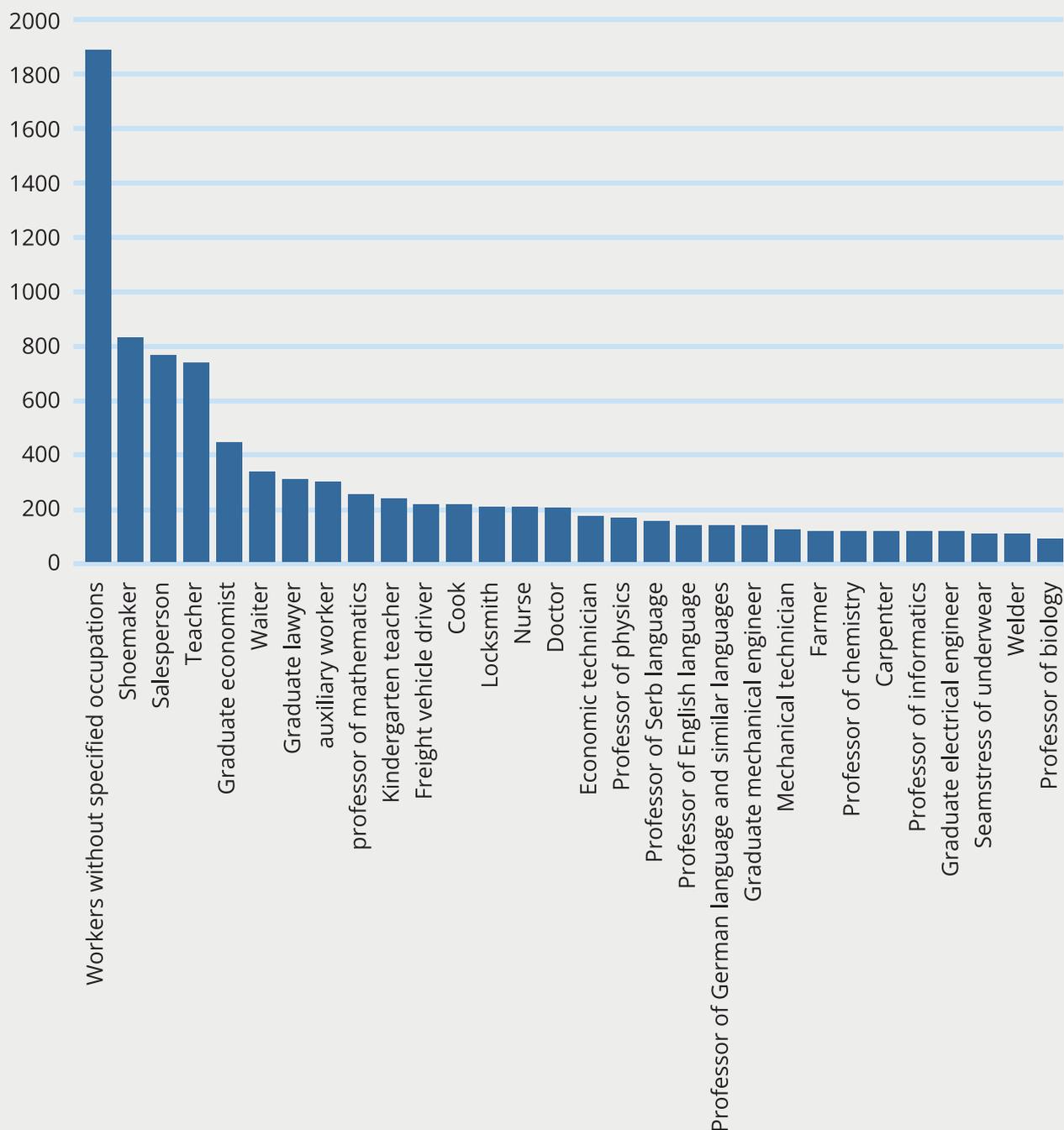


Graph 5. Required occupations in 2022 (plan)

The structure of expressed needs is identical to the employment needs reported by employers to the Employment Service in 2021 (15,134 persons). At the same time, it should be borne in mind that employers are not obliged to report employment needs to the Service, they only do so if they seek mediation services.

According to administrative data sources, the demand in 2021 increased by 14.7% compared to the previous year, primarily for simple workers, shoemakers, salespersons, primary school teachers, waiters, auxiliary workers and truck drivers. Also, unlike 2020, there was an increase in demand for welders. There was a significant reduction in demand among nurses, economic technicians and carpenters. Among the most sought-after occupations in 2021, there are no builders and reinforcement workers, for whom the demand was significant in the previous year, while the opposite is the case with welders. The difference in the structure of demand between the survey and administrative sources when it comes to teachers or medical staff should be sought primarily in the fact that the research sample was not planned to cover public institutions such as schools or health care institutions.

30 most sought-after occupations according to the records of the Services (2021)



Graph 6. Most sought-after occupations according to the records of the Services (2021)

When we talk about 10 most needed occupations in 2022 by activities, industrial activities mostly require simple workers (65.4%), trade is in demand for salespersons (45.8%), services require waiters (16.3%), while employers in the construction industry expressed a need for carpenters (19.6%). An overview of other occupations by activities is given in Table 15.

Table 15. Ten most sought-after occupations in 2022 (plan), by activities

Occupation by activities	Number of workers	%
Construction	376	6.52%
Carpenter	74	19.68%
Reinforcer	53	14.10%
Builder	52	13.83%
Simple worker	26	6.91%
Construction machinery operator	24	6.38%
Truck driver	15	3.99%
Locksmith	13	3.46%
Passenger vehicle driver	10	2.66%
Welder	10	2.66%
Construction technician	9	2.39%
Electrician	9	2.39%
Industrial activities	3,774	65.44%
Simple worker	1,327	35.16%
Seamstress	321	8.51%
Car body worker	200	5.30%
Shoemaker	170	4.50%
Auxiliary worker in production	154	4.08%
Carpenter	153	4.05%
Locksmith	144	3.82%
Footwear worker	100	2.65%
Welder	90	2.38%
Electronics mechanic - mechatronics engineer - CNC operator	89	2.36%
Trade	697	12.09%
Salesperson	319	45.77%
Waiter	53	7.60%
Warehouse worker	31	4.45%
Truck driver	25	3.59%
Commercialist	24	3.44%
Master of pharmacy	23	3.30%
Pharmaceutical technician	18	2.58%
Economist	17	2.44%
Simple worker	14	2.01%
Car mechanic	12	1.72%
Services	920	15.95%
Waiter	150	16.30%
Cook	93	10.11%
Electrical engineer	60	6.52%
Truck driver	52	5.65%
Simple worker	43	4.67%
Delivery person	32	3.48%
IT developer	30	3.26%
Economist	26	2.83%
Developer	19	2.07%
Cleaner	16	1.74%

Observed by size, demand for workers is predominantly present in large companies, and it refers to occupations required for simple jobs (40.1%), followed by tailors, salespersons, shoemakers, while in small companies the greatest demand refers to salespersons, waiters and also simple workers, as well as locksmiths; in medium-sized companies, the greatest demand in 2022 is for car body repair workers, salespersons and carpenters.

Table 16. Ten most sought-after occupations in 2022 (plan), by size of company

Occupation by company size	Number of workers	%
Small companies	2035	35,29%
Salespersin	157	7,71%
Waiter	154	7,57%
Simple worker	132	6,49%
Locksmith	104	5,11%
Cook	96	4,72%
Truck driver	65	3,19%
Auxiliary worker in production	64	3,14%
Seamstress	56	2,75%
Carpenter	53	2,60%
Builder	52	2,56%
Medium companies	616	10,68%
Car body worker	100	16,23%
Salesperson	45	7,31%
Carpenter	35	5,68%
Waiter	32	5,19%
Reinforcer	30	4,87%
Shoemaker	30	4,87%
Simple worker	28	4,55%
Woodworker	21	3,41%
Welder	17	2,76%
Seamstress	15	2,44%
Computer operator	15	2,44%
Large companies	3,116	54,03%
Simple worker	1,250	40,12%
Seamstress	255	8,18%
Salesperson	177	5,68%
Shoemaker	160	5,13%
Car body worker	100	3,21%
Auxiliary worker in production	90	2,89%
Carpenter	84	2,70%
Footwear worker	70	2,25%
Electronics mechanic - mechatronics engineer - CNC operator	66	2,12%
Locksmith	58	1,86%

Table 17. Ten most sought-after occupations in 2022 (plan), by age of company

Occupation by activities	No. of workers	%
Up to three years	308	5.34%
Car body worker	100	32.47%
Simple worker	29	9.42%
Salesperson	25	8.12%
Waiter	13	4.22%
Cook	10	3.25%
Carpenter	9	2.92%
Locksmith	7	2.27%
Economic technician	7	2.27%
Metal grinder	6	1.95%
Developer	5	1.62%
Auxiliary worker in production	5	1.62%
Computer scientist	5	1.62%
Truck driver	5	1.62%
Quality manager	5	1.62%
Over three years	5,235	90.78%
Simple worker	1,355	25.88%
Seamstress	323	6.17%
Salesperson	319	6.09%
Waiter	200	3.82%
Shoemaker	170	3.25%
Auxiliary worker in production	158	3.02%
Carpenter	147	2.81%
Locksmith	138	2.64%
Truck driver	114	2.18%
Car body worker	100	1.91%
Footwear worker	100	1.91%
Data missing	224	3.88%

Observed by level of education, the research indicates that the most sought-after occupations in 2022 are those with secondary school up to three years (skilled and highly skilled workers), 48.45% of total needs, followed by basic qualifications (19.33%) and secondary school (16.39%).

Table 18. Employment plans, by education level

Education level	No. of workers	%
1. Non-skilled – no education or not completed primary school	1,115	19.33%
2. Semi-skilled, basic skills - primary school	217	3.76%
3. Skilled, highly skilled - high school up to 3 years	2794	48.45%
4. Secondary school - high school of 4 and more years and grammar school	945	16.39%
5. Post-secondary education – 1st degree of faculty, professional study, post-secondary school two-year study	30	0.52%
6. Higher education - faculty (graduates), academy	381	6.61%
7. Master's degree	22	0.38%
Not specified	263	4.56%
Total	5,767	100.00%



Graph 7. Employment plans by level of education



CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- Out of the total number of employers who hired new workers in 2021, about 42% had difficulty finding workforce. Employers in the field of construction had the most difficulties in securing workers (over 50%), and those in the field of trade had the least difficulties (about 30%). In terms of company size, the problem was most pronounced in large companies;
- When it comes to the complexity and type of work, it can be said that there are no significant differences between groups of activities when it comes to difficulties in finding work force and that less complex jobs are predominant when it comes to that, such as auxiliary production workers and craftsmen such as plumbers, seamstress and the like. Exceptions are trade and service activities, where the most frequent hard-to-find occupations include commercialists, pharmacists and developers at the level of higher education, while, in the industrial activities, , mechatronics can be singled out at the level of secondary education.
- If we compare the structure of demand with the situation in the records by occupations, we come to the conclusion that 20 occupations with the largest number of unemployed persons include occupations in which over 30% of employment needs are stated, which were not met in 2021. More precisely, employers had difficulties securing workers of that profile. In this case, the reasons for the fact that the needs were not met should be sought in the lack of professional knowledge and skills, lack of experience or insufficiently attractive working conditions, including wages.
- Of the total number of employers who participated in the survey, over 60% plan to hire new workers in 2022. Observed by branches, the lowest percentage of employers planning new employment are from Trebinje (53.6%), and the highest from Bijeljina (69.5%).
- The structure of demand is similar to the one in 2021, with a dominant share of jobs that require lower qualifications than the level of secondary education or most often the level of three-year secondary education when it comes to the group of craft occupations. As a rule, these are less productive and lower paid jobs. However, unlike 2021, at the level of higher education there is a growing demand for electrical engineers, developers, software development or testing professionals and other ICT occupations. This points to the conclusion that there are positive trends in the labor market in terms of generating needs for highly complex and productive jobs, which are usually accompanied by higher wages. And this is precisely in those areas where there is a high rate of labor migration.
- The decision of the RS Government from December 31, 2021, which defines deficit occupations that will be introduced in high schools, as well as those that will be accompanied by scholarships, largely articulates the needs of employers expressed in this research. The list of deficient occupations includes, among others: drywall fitter, painter and facade fitter, mechatronics mechanic, tire and hydraulics mechanic, footwear

maker, locksmith-welder, toolmaker, electrician, butcher, cook, baker, confectioner, metal cutter, operator of construction machines and cranes and driver of motor vehicles. This activity is one of the steps towards balancing supply and demand in the labor market, and last year's survey cycle was definitely a valid source of information on occupational shortages.

RECOMMENDATIONS

The recommendations are related to three key areas: 1) improving the services of the Employment Service; 2) adjusting active labor market policy to the needs of employers and 3) developing partnerships.

- Analyze what knowledge and skills or experience are lacking when it comes to unemployed persons in occupations in which employers had most difficulties in hiring workforce, in order to organize trainings and re-qualifications, as well as whether it is necessary to improve working conditions with employers.
- For the purpose of preparing the 2022 training catalogue, compare the required occupations with the occupations on the records, and organize trainings for the needs of the labor market or identified employers.
- Based on the needs expressed by employers in this research (both from the aspect of demand for workers of certain occupations and from the aspect of required knowledge and skills), initiate more intense contacts with employers in order to promote and effectively mediate in the employment of workers of required occupations. In line with the identified needs, adjust the measures of active employment policy, especially the measure focused on on-the-job training in situations when there are no workers with the required occupation in the register of unemployed persons.
- Encourage the creation of evidence-based policies, through the promotion of Labor Market Research results.
- With the next survey of employers, cover the issues related to the key needs of employers in relation to the necessary knowledge and skills of workers, and use all available sources of information from other institutions.
- Submit the results of the research to the competent ministry and the RS Government, as well as relevant institutions and other partners in the labor market.
- In accordance with the findings of the research on labor demand by occupation and difficulties in securing work force, supplement or amend the Decision of the Government of the Republika Srpska on deficit occupations.

