

ANALIZA EFIKASNOSTI RADA KOMUNALNE POLICIJE PRILIKOM PRUŽANJA ASISTENCIJE: PRIKAZ SLUČAJA GRADA ZAJEČARA

Aleksandar Manić¹, Darjan Karabašević², Srđan Novaković³

doi: 10.5937/Oditor2202001M

*Originalni naučni rad
UDK: 351.745(497.11)*

Rezime

Zadatak komunalne policije se pre svega ogleda u pružanju pomoći i usluga koje imaju svoje specifičnosti. Kada je reč o komunalnoj policiji u Republici Srbiji, u tom slučaju zaduženja se ogledaju u vršenju nadzora i kontrole u skladu sa zakonskim ovlašćenjima gradskim propisima. Shodno tome, komunalna policija vršenjem poslova iz svoje nadležnosti obezbeđuje realizaciju poslova iz nadležnosti Grada Zaječara, u oblastima komunalne delatnosti, zaštite životne sredine, ljudi i dobara, zaštite i održavanja reda u korišćenju zemljišta, prostora, lokalnih puteva, ulica i drugih javnih objekata, kao i nesmetano obavljanje pojedinih poslova iz nadležnosti grada. Imajući u vidu specifičnosti komunalne policije, cilj istraživanja je da se kroz sistematski pristup obrade podataka iz arhivske grade grada, pokaže efikasnost rada Komunalne policije u pružanju asistencija u periodu 2014-2019. godine, u primeru pruženih asistencija gradskom javnom preduzeću JP Parking servis Zaječar.

Ključne reči: Komunalna policija, Asistencija, Materijalna efikasnost, Nematerijalna efikasnost

JEL: A3; D61

¹ Doktorand, Aleksandar Manić, Gradska uprava Grada Zaječara, Odeljenje za inspekcijske poslove i komunalnu policiju, aca.manic.za@gmail.com

² Prof. dr Darjan Karabašević, vanredni profesor, Fakultet za primenjeni menadžment, ekonomiju i finansije Beograd, Univerzitet Privredna akademija u Novom Sadu, darjan.karabasevic@mef.edu.rs

³ Prof. dr Srđan Novaković, redovni profesor, Fakultet za primenjeni menadžment, ekonomiju i finansije Beograd, Univerzitet Privredna akademija u Novom Sadu, srdjan.novakovic@mef.edu.rs

Uvod

Komunalna policija pruža pomoć i usluge (asistencije) koje sa svojim specifičnostima (Janjuš et al., 2017; Stojanović & Kostić, 2013). Jedna od njih se ogleda kroz pružanje usluge građanima i drugim subjektima i one podstiču odgovornost (prema sebi i drugima, prema radnim obavezama, društву u celini, itd.), edukuju građane o njihovim dužnostima i pravima u cilju održivog razvoja društva, kako na lokalnom tako i na globalnom nivou (Crepelle et al., 2022; Manić et al., 2017; Pilipović, 2011).

Osnovna delatnost Odeljenja komunalne policije je pružanje usluga koje su u osnovi nematerijalne. Time se Komunalnoj policiji daje posebno mesto na poslovnoj lestvici samostalnih organizacionih jedinica u okviru Gradske uprave (Kekić & Milenković, 2016; Soltes et al., 2021).

Komunalna policija, kao samostalna organizaciona jedinica u sastavu Gradske uprave (Benito et al., 2021; Allen, 2021; Harmon & Harman-Heath, 2022), osnovana je sa ciljem da se obezbedi puno i nesmetano izvršavanje odluka i drugih pravnih akta iz nadležnosti grada (Sitsma & Laming, 2019; Donnelly, 2013; Julseth et al., 2011). Pored osnovne namene, ima još tri važne uloge koje se odnose na pružanje pomoći gradskim vlastima: preduzimanje hitnih mera i učešće u obavljanju spasilačke funkcije i nesmetano obavljanje određenih poslova iz nadležnosti grada (Kešetović & Milosavljević, 2016; Milisavljević, 2010) i delimična kontrola javne bezbednosti.

Ovaj rad, predstavlja drugačiji pristup i analizu efikasnosti rada (Živković et al., 2014) pri pružanju pomoći (asistencije) komunalne policije u jednom od gradova Republike Srbije. Razlika između ovog istraživačkog rada i prethodnih radova je u pristupu analizi pružene usluge i drugačijoj podeli na osnovu njenih karakteristika, pre svega na primenjene preventivne i represivne mere, koje u osnovi mogu biti materijalne i nematerijalne.

Rezultati prikazani u radu odnose se na organizacionu jedinicu Komunalne policije grada Zaječara, jednog od 23 grada u Republici Srbiji koji u svojim organizacionim jedinicama imaju Komunalnu policiju. Podaci dobijeni ovim istraživanjem biće korišćeni samo u svrhu izrade naučnoistraživačkih radova, predstavljanja i promocije rada Komunalne policije, kao i za unapređenje rada ovog odeljenja.

Zbog specifičnosti podataka i integriteta organizacione jedinice Komunalne policije čiji se postignuti rezultati obrađuju u ovom tekstu, istraživanje je započeto nakon pribavljenе saglasnosti (odobrenja) načelnika Gradske Uprave Zaječara, gospodina Slobodana Videnovića (*Saglasnost načelnika Gradske Uprave grada Zaječara, gospodina Slobodana Videnovića, dobijena je na*

pismeni zahtev autora ovog teksta Aleksandra Manića; njome se daje saglasnost na istraživačku delatnost navedenog autora, dok se tekst i podaci iz Arhive grada Zaječara mogu koristiti samo u naučne i obrazovne svrhe, u cilju unapređenja rada Komunalne policije i drugih službi grada Zaječara).

Pristup obradi dobijenih rezultata istraživanja, sam po sebi, određuje dva vida efikasnosti rada Komunalne policije: efikasnost koja je materijalna i efikasnost koja je nematerijalna.

Konačna, odnosno ukupna efikasnost rada Komunalne policije (Kostić & Milojević, 1996) dobija se sinergijom materijalne i nematerijalne efikasnosti, koje predstavljaju sveobuhvatan rad Komunalne policije, a to može biti:

- *Vidljiva efikasnost rada*, koja predstavlja represivno postupanje Komunalne policije, koje za učinjeni prekršaj ili krivično delo imaju svoju brojčanu i materijalnu vrednost (određenu visinom kazne kao jedinicom mere) i koja se odvija u vreme ili neposredno nakon učinjenog dela
- *Nevidljiva efikasnost rada*, koja predstavlja svaki vid preventivnog delovanja Komunalne policije koje ima svoju brojčanu vrednost, dok se njihova materijalna vrednost kao jedinica mere dobija prelaskom iz preventivnog u represivno delovanje, gde je za učinjen prekršaj ili krivično delo određena visina kaznene mere relevantnim zakonima Republike Srbije i odlukama gradova.

Na osnovu gore navedenog, cilj istraživanja je da se kroz sistematski pristup obrade podataka iz arhivske građe prikaže efikasnost rada Komunalne policije prilikom pružanja asistencije u vremenskom periodu od 2014-2019. godine, na primeru usluge koja se pruža gradu, tj. JP Parking servis Zaječar.

Jedan od vidova pomoći gradskim vlastima je pružanje asistencije javnim preduzećima u gradu (*Zakon o komunalnoj policiji, Službeni glasnik RS, 2019*). Primer pružanja pomoći i rezultati asistencija, obrađeni su u nastavku teksta.

U cilju pružanja usluge - asistencije (*Asistencija komunalne policije, podrazumeva pružanje usluge javnim preduzećima, Inspeksijskim službama, Vatrogasnoj službi i Ministarstvu Unutrašnjih Poslova - Uprava policije*) kada je prilikom sprovođenja zakonskih procedura došlo do ometanja inspeksijskih radnika iz delokruga komunalnih delatnosti ili pri obavljanju poslova javne bezbednosti. Zahtev za asistenciju Javno preduzeće (inspeksijska služba...) podnosi Komunalnoj policiji najmanje 48 sata pre pružanja asistencije. U zahtevu se navodi razlog i cilj, vreme pružanja asistencije i broj potrebanih komunalnih policajaca. U zavisnosti od kapaciteta i raspoloživih sredstava, načelnik Komunalne policije odobrava ili ne odobrava pružanje asistencije.

Metodologija

Do validnih podataka koji govore o rezultatima rada komunalne policije i pruženim asistencijama Javnom Preduzeću parking servisa grada Zaječara, došlo se ličnim prikupljanjem podataka iz arhive grada Zaječara (osnivača Komunalne policije) i arhive Organizacione jedinice Komunalne policije grada Zaječara.

Prikazani rezultati rada su rezultati trinaest (13) pripadnika komunalne policije i odnose se na pružane asistencije (usluge) Javnom Preduzeću parking servisa, u vremenskom periodu od 2014. do 2019. godine (period od šest godina). Osnovni hipotetički problemi u radu komunalne policije proističe iz njihove kompleksnosti, to jest složenosti i raznovrsnosti poslova koje obavljaju.

Teorijski deo istraživanja baziraće se na primeni više analitičkih i sintetičkih osnovnih metoda saznanja sa težistem na induktivno-deduktivnoj metodi, opštoj metodi analize i sinteze, metodama klasifikacije i generalizacije, a od opštenaučnih i metoda za prikupljanje podataka i komparativnoj metodi.

Kod induktivne metode sistematski će se primenjivati induktivni način zaključivanja, što na osnovu analize pojedinačnih činjenica prikupljenih iz pomenute arhive, a stečenih u radu iskustvom komunalnih policajaca, dovodi do opštih zaključaka. Analiza induktivnog metoda obuhvatiće osnovni element svakog induktivnog rasudivanja, a to je odnos specifičnog ka opštem.

U ovom istraživačkom radu primenjivaće se deduktivni metod, kao princip izvođenja zaključaka koji polazi od postavljenog cilja istraživanja i kao osnovu koristi poznatu činjenicu (dokumentaciju o radu Komunalne policije), a nedokazane stavove (nevidljiv - materijalni rad Komunalne policije) u odnosu od opštih ka specifičnim rezultatima rada.

Metodom analize rezultati istraživanja razložiće se na sastavne delove, a pojedinačni rezultati dobijeni empirijskim istraživanjem, metodom sinteze biće grupisani u kompleksnije celine, po principu mogućih međusobnih veza i odnosa.

Deskriptivnom statističkom analizom predstaviće se rezultati koji se koriste u daljoj obradi podataka. Rezultati dobijeni obradom podataka, biće iskazani brojčano i kroz određivanje visine procenta, kao i tabelarno.

Mora se naglasiti da zbog validnosti rezultata do kojih se dolazi obradom podataka iz tabele br. 1. uzete su u obzir razlike u iznosima kaznenih mera za određene vremenske periode koje je donela i usvojila Skupština grada Zaječara. (*Odluka o javnim parkiralištima na teritoriji grada Zaječara,*

2014,2015,2016,2020). Visine novčanih kazni pisanog prekršajnog naloga usvojenih odluka grada, prikazane su i predviđene samo za Fizička lica, i to:

- od 2014. do 2016. godine, visina novčanih kazni pisanog prekršajnog naloga, bila je 5 000 dinara, za uplatu u roku od sedam dana 2 500 dinara;
- od 2017. do 2019. godine, visina novčane kazne pisanog prekršajnog naloga bila je 8 000 dinara, za uplatu u roku od sedam dana 4 000 dinara;

Nadoknada za podizanje i odlaganje vozila na plac JP parking servisa, bila je:

- od 2014. do 2015. godine, naknada za podizanje i prevoz vozila na plac JP Parking servisa bila 4 000 dinara;
- od 2016. do 2017. godine bila 6 000 dinara;
- od 2018. do 2019. godine bila 8000 dinara;

Nadoknada za postavljanje i skidanje blokade na točku vozila, bila je:

- od 2018. do 2019. godine bila je 4 000 dinara;

Pružene asistencije, prikazane u nastavku ovog rada klasifikovane su kao represivno postupanje komunalne policije jer je krajnji rezultat postupanja tj. rada komunalne policije ostvarivanje novčanih materijalnih sredstava – prihoda, koji se ostvaruje na dva načina:

1. Prvi deo postupka i generisanje finansijskih sredstava kroz pomoć koja je materijalno vidljiva i predstavlja rad Komunalne policije, realizuje se na osnovu izdatih prekršajnih naloga, za period od 2014. do 2019. godine, izraženih formulama (*Iskazane formule koje se koriste u računarskim operacijama koje slede, sastoje od skraćenica, znakova, brojeva i simbola i objašnjeno je u „Skraćenice, znakovi, simboli i brojevi“ na kraju rada*).

a) Prihod od izdatih prekršajnih naloga prilikom asistencija

$$PrIzPknAs_{(2014-2019)} = (PrIzPknAsg_4 + PrIzPknAsg_5 + PrIzPknAsg_6 + \\ PrIzPknAsg_7 + PrIzPknAsg_8 + PrIzPknAsg_9)$$

b) Prosečan prihod po izdatom prekršajnom nalogu prilikom asistencija

$$ProsPrIzPknAs_{(2014-2019)} = PrIzPknAs_{(2014-2019)} : IzPknAs_{(2014-2019)}$$

c) Prihod realizovanih prekršajnih naloga prilikom asistencija

$$PrRePknAs_{(2014-2019)} = ProsPknAs_{(2014-2019)} \times RePknAs_{(2014-2019)}$$

d) Efikasnost materijalno vidljivog rada u pruženim asistencijama

$$EfMvidrAs_{(2014-2019)} = (PrRePknAs_{(2014-2019)} : PrIzPknAs_{(2014-2019)}) \times 100\%$$

2. Drugi deo postupanja u ostvarivanju novčanih sredstava putem asistencija koje predstavljaju materijalno nevidljiv rad komunalne policije, realizuju se na osnovu izdatih naloga za podizanje vozila. Realizacija ostvarenih novčanih sredstava u vremenskom periodu od 2014. do 2019. godine, iskazano je putem istih formula u kojima su upotrebljeni skraćeni nazivi i podaci za obradu iz tabele 2:

a) Prihod od izdatih naloga za podizanje vozila prilikom asistencija:

$$PrIznPovAs_{(2014-2019)} = PrIznPovAs_{g4} + PrIznPovAs_{g5} + PrIznPovAs_{g6} + \\ PrIznPovAs_{g7} + PrIznPovAs_{g8} + PrIznPovAs_{g9}$$

b) Prosječan prihod od podignutih vozila prilikom asistencija:

$$ProsPrPovAs_{(2014-2019)} = PrIznPovAs_{(2014-2019)} : IznPovAs_{(2014-2019)}$$

c) Prosječan prihod od podignutih vozila prilikom asistencija:

$$PrRePovAs_{(2014-2019)} = ProsPrPovAs_{(2014-2019)} \times RePovAs_{(2014-2019)}$$

d) Efikasnost materijalno nevidljivog rada prilikom asistencija:

$$EfMnevindrAs_{(2014-2019)} = (PrRePovAs_{(2014-2019)} : PrIznPovAs_{(2014-2019)}) \times 100\%$$

Rezultati rada komunalne policije prikazaće se kroz pružene asistencije – usluge, koje su u tekstu istraživačkog rada predstavljene putem materijalno vidljivog i materijalno nevidljivog rada i kroz Efikasnost materijalnog i nematerijalnog rada komunalne policije, u vremenskom periodu od 2014. do 2019. godine:

Efikasnost rada ($EfAs_{(2014-2019)}$) je predstavljena prosekom matrijalno vidljivog ($EfMvidrAs_{(2014-2019)}$) i materijalno nevidljivog ($EfMnevindrAs_{(2014-2019)}$) rada - pruženih asistencija Javnom Preduzeću parking servisa, grada Zaječara.

$$EfAs_{(2014-2019)} = (EfMvidrAs_{(2014-2019)} + EfMnevindrAs_{(2014-2019)}) : 2$$

Rezultati istraživanja

Pružanje asistencije prikazane u nastavku ovog rada, klasifikovane su kao represivno postupanje komunalne policije. Ovakvim načinom postupanja za krajnji rezultat ima ostvarivanje novčanih materijalnih sredstava – prihoda, koji se ostvaruje na dva načina:

1. Izdavanjem prekršajnog naloga (novac se uplaćujena račun Gradske Uprave grada);
2. Izdavanjem naloga za podizanje vozila (novac se upaćuje na račun JP Parking servisa).

Ovakvim pristupom, predstavlja se deo materijalnog i nematerijalnog rada komunalne policije i prikazaće se matematičkom obradom podataka, za grad koji je tema ovog istraživanje. Treba napomenuti da su pužene asistencije u navedenom primeru deo asistencija koje pruža komunalna policije kao uslugu

gradskim institucijama, a koje mogu biti i preventivnog karaktera, bez ostvarivanja novčanih sredstava.

1. Prvi deo postupanja koji je materijalno vidljiv, objasniće se postupanjem komunalne policije dolaskom na licu mesta i sproveđenja zakonske procedure. Po dolasku na mesto prekršaja komunalna policija sagledava činjenično stanje i ukoliko je vlasnik vozila prisutan, uručuje mu prekršajni nalog za učinjen prekršaj. Ukoliko vlasnik vozila nije prisutan, a nije ni u blizini vozila koje je u prekršaju, komunalni policajac vrši fotografisanje vozila i piše zapisnik – obaveštenje o zatečenom stanju i ostavlja na vidljivom mestu na vozilu kako bi ga vlasnik vozila po dolasku uočio, a nakon toga piše nalog za stavljanje blokade na točku vozila radnicima JP parking servisa. Radnici JP parking servisa, nakon stavljanja blokade na jednom od točkova, na vratima lepe obaveštenje o prekršaju i broj telefona koji treba vlasnik vozila da pozove. Po pozivu JP parking servisa od strane vlasnika vozila, radnici parking servisa obaveštavaju komunalnu policiju koja piše i uručuje vlasniku vozila prekršajni nalog za učinjen prekršaj. To je vidljivi deo represivnog rada komunalne policije tokom pružanja asistencije i njen materijalni rad tj. materijalno vidljiv rad komunalne policije. Obrada podataka za materijalno vidljiv rad (pružanje asistencije), vršiće se na osnovu podataka o rezultatima rada komunalne policije, predstavljen u tabeli 1.

Tabela 1. Asistencije pružene JP Parking servisu grada Zaječara - Vidljiv materijalni rad za period od 2014 – 2019. godine

Vidljiv materijalni rad	2014	2015	2016	2017	2018	2019	Укупно
Vrednost prekršajnog naloga za fizička lica (u dinarima)	5000	5000	5000	8000	8000	8000	
½	½	½	½	½	½	½	
2500	2500	2500	4000	4000	4000	4000	
Zapisnik-obaveštenje	63	73	78	60	64	82	420
Prekršajni nalog	63	73	78	60	64	82	420
Realizovanih naloga	63	72	77	57	60	80	409
Nerealizovanih naloga	/	1	1	3	4	2	11
Uplaćen Novac u budžet grada (u dinarima)	252000	292000	468000	360000	512000	656000	2540000

Izvor: Obračun autora

Ostvarena novčana sredstava putem asistencija koja su vidljive, a koja su ostvarena na osnovu izdatih prekršajnih naloga za vremenski period od 2014. do 2019. godine, prikazana su putem formula na sledeći način:

a) Prihod od rešenih prekršajnih naloga prilikom asistencija
(PrRePknAs₍₂₀₁₄₋₂₀₁₉₎), u vremenskom periodu od 2014. do 2019. godine:

$$\begin{aligned}
 PrRePknAs_{(2014-2019)} &= (PrRePknAsg_4 + PrRePknAsg_5 + PrRePknAsg_6 + \\
 &\quad PrRePknAsg_7 + PrRePknAsg_8 + PrRePknAsg_9) \\
 PrRePknAs_{(2014-2019)} &= 52000 + 292000 + 468000 + 360000 + 512000 + \\
 &\quad 656000 = 2540000
 \end{aligned}$$

PrRePknAs₍₂₀₁₄₋₂₀₁₉₎ = 2540000 (dinara)

b) Prosečan prihod po rešenom prekršajnom nalogu prilikom asistencija
 (ProsPrRePknAs₍₂₀₁₄₋₂₀₁₉₎), u vremenskom periodu od 2014. do 2019. godine:

$$ProsPrRePknAs_{(2014-2019)} = PrRePknAs_{(2014-2019)} : RePknAs_{(2014-2019)}$$

$$ProsPrRePknAs_{(2014-2019)} = 2540000 : 409 = 6210.26$$

$$ProsPrRePknAs_{(2014-2019)} = 6210 \text{ (dinara – zaokruženo bez decimala)}$$

c) Očekivan prihod od izdatih prekršajnih naloga prilikom asistencija
 (OPrIzPknAs₍₂₀₁₄₋₂₀₁₉₎), u vremenskom periodu od 2014. do 2019. godine:

$$OPrIzPknAs_{(2014-2019)} = ProsPrRePknAs_{(2014-2019)} \times IzPknAs_{(2014-2019)}$$

$$OPrIzPknAs_{(2014-2019)} = 6210 \times 420 = 2608200$$

$$OPrIzPknAs_{(2014-2019)} = 2608200 \text{ (dinara)}$$

d) Efikasnost materijalno vidljivog rada prilikom asistencija

(EfMvidrAs₍₂₀₁₄₋₂₀₁₉₎), u vremenskom periodu od 2014. do 2019. godine:

$$\begin{aligned}
 EfMvidrAs_{(2014-2019)} &= (PrRePknAs_{(2014-2019)} : OPrIzPknAs_{(2014-2019)}) \times \\
 &100\%
 \end{aligned}$$

$$EfMvidrAs_{(2014-2019)} = (2540000 : 2608200) \times 100\%$$

$$EfMvidrAs_{(2014-2019)} = 0.9738 \times 100\% = 97.38\%$$

$$EfMvidrAs_{(2014-2019)} = 97.38\% – (\text{zaokruženo bez decimala})$$

2. Drugi deo postupanja koji je materijalno nevidljiv rad komunalne policije, realizuje se nakon pisanja zapisnika i izdavanja naloga JP parking servisu za podizanje i premeštanje vozila na prostor predviđen za odlaganje podignutih vozila, ili stavljanja blokade na točak vozila.

U prvom slučaju, vozilo se po nalogu komunalne policije podiže i premešta na plac istoimenog servisa posebnim specijalizovanim vozilom za te namene. Po dolasku vlasnika vozila na plac preduzeća (kako bi preuzeo vozilo), radnici JP parking servisa zovukomunalnu policiju kako bi uručila vlasniku prekršajni nalog za učinjen prekršaj, dok oni naplaćuju svoju uslugu podizanja i premeštanja vozila, kao i ležarinu. Ova novčana sredstva, lice koje je bilo u prekršaju uplaćuje na račun JP parking servisa.

U drugom slučaju (deo postupka objašnjen je tekstu prvog dela postupanja – u rezultatima istraživanja), radnici JP naplaćuju novčanu kaznu za postavljanje i skidanje blokade na točku vozila. Novčana sredstva za ovaj rad se uplaćuju na račun JP parkin servisa. Ovaj rad komunalne policije nije materijalno vidljiv za Gradsku upravu i Organizaciju komunalne policije (osim izdatih naloga komunalnih policajaca), zato što se novčana materijalna sredstva ne uplaćuju

na račun Gradske Uprave. Obrada podataka za ovako materijalno nevidljiv rad komunalne policije, vršiće se na osnovu podataka o rezultatima rada komunalne policije koji su predstavljeni u tabeli 2.

Tabela 2. Asistencije pružene JP Parking servisu grada Zaječara - nevidljiv materijalni rad za period od 2014 – 2019. godine

NeVidljiv materijalni rad	2014	2015	2016	2017	2018	2019	Укупно
Vrednost usluge JP za podizanje, nošenje i ležarine vozila na plac (u dinarima)	4 000	4 000	6 000	6 000	8000	8000	
	½ 2000	½ 2000	½ 3000	½ 3000	½ 4000	½ 4000	
Nalog za podizanje vozila	63	73	78	60	64	82	420
Realizovani nalozi za podizanje vozila	63	73	78	60	64	82	420
Prihod od podignutih vozila	252000	292000	468000	360000	512000	656000	2540000
Visina usluge JP za postavljanje i skidanje blokade na točku (u dinarima)	0	0	0	0	4000	4000	0
Postavljene blokade na točku vozila	0	0	0	0	14	29	43
Prihod od postavljenih blokada	0	0	0	0	56000	116000	172000
Ukupam Prihod uplaćenih novčana sredstva JP Parking Servisu (u dinarima)	252000	292000	468000	360000	568000	772000	2712000

Izvor: Obračun autora

Obrada podataka u izračunavanju materijalno nevidljivog rada, je u potpunosti ista kao u izračunavanju materijalno vidljivog rada, stim da je broj izdatih naloga za podizanje vozila i broja rešenih podignutih vozila isti (*Svaki izdati nalog za podizanje vozila od strane komunalne policije, naplaćuje se od strane radnika JP parking servisa kao započeta radnja transporta, kao što se naplaćuje novčana nadoknada za vozila donesena na plac JP.*), to znači da je očekivani prihod isti kao i prihod od realizovanih podignutih vozila i izdatih naloga za podizanje vozila:

$$IznPovAs_{(2014-2019)} = 420 \text{ vozila (Izdat nalog za podizanje vozila)}$$

$$RePovAs_{(2014-2019)} = 420 \text{ vozила (realizovana podignuta vozila)}$$

$$IznPovAs_{(2014-2019)} = RepovAs_{(2014-2019)}$$

Ostvarena novčana sredstava putem asistencija koje su materijalno nevidljiva, a ostvarena na osnovu naloga za podizanje vozila (1.), za vremenski period od 2014. do 2019. godine, prikazana su na sledeći način:

1. Prihod od podignutih vozila prilikom pružanja asistencija

($PrRePovAs_{(2014-2019)}$), u vremenskom periodu od 2014. do 2019. godine:

$$PrRePovAs_{(2014-2019)} = PrRePovAs_{g4} + PrRePovAs_{g5} + PrRePovAs_{g6} +$$

$$PrRePovAs_{g7} + PrRePovAs_{g8} + PrRePovAs_{g9}$$

$$PrRePovAs_{(2014-2019)} = 252000 + 292000 + 468000 + 360000 + 512000 + \\ 656000 = 2540000$$

$$PrRePovAs_{(2014-2019)} = \mathbf{2540000 \text{ dinara}}$$

Ostvarena novčana sredstava putem asistencija koje su materijalno nevidljiva, a ^{ostvarena} na osnovu naloga za postavljanje blokade na točku vozila (2.), za vremenski period od 2018. do 2019. godine, prikazana su na sledeći način:

2. Prihod od postavljenih blokada na točku vozila prilikom asistencija

($PrBloAs_{(2018-2019)}$), u vremenskom periodu od 2014. do 2019. godine:

$$PrBloAs_{(2018-2019)} = PrBloAs_{g8} + PrBloAs_{g9}$$

$$PrBloAs_{(2018-2019)} = 56000 + 116000 = 172000$$

$$PrBloAs_{(2018-2019)} = \mathbf{172000 \text{ (dinara)}}$$

a) **Ukupan Prihod od pruženih asistencija - od podignutih vozila i postavljenih blokada na točku vozila ($UkPrAs_{(2014-2019)}$), u vremenskom periodu od 2014. do 2019. godine:**

$$UkPrAs_{(2014-2019)} = PrRePovAs_{(2014-2019)} + PrBloAs_{(2018-2019)}$$

$$UkPrAs_{(2014-2019)} = 2540000 + 172000 = 2712000$$

$$UkPrAs_{(2014-2019)} = \mathbf{2712000 \text{ (dinara)}}$$

b) **Prosečan prihod po podignutom vozilu prilikom asistencija**

($ProsPrPovAs_{(2014-2019)}$, u vremenskom periodu od 2014. do 2019. godine:

$$ProsPrPovAs_{(2014-2019)} = PrRePovAs_{(2014-2019)} : RePovAs_{(2014-2019)}$$

$$ProsPrPovAs_{(2014-2019)} = 2540000 : 420 = 6047.61$$

$$ProsPrPovAs_{(2014-2019)} = \mathbf{6048 \text{ (dinara, zaokruženo bez decimala)}}$$

c) **Očekivan prihod od izdatih naloga za podizanje vozila prilikom asistencija ($OPrIznPovAs_{(2014-2019)}$), u vremenskom periodu od 2014. do 2019. godine, isti je kao i ostvaren prihod rešenih podignutih vozila ($PrRePovAs_{(2014-2019)}$):**

$$OPrIznPovAs_{(2014-2019)} = PrRePovAs_{(2014-2019)}$$

$$2540000 = 2540000 \text{ (dinara)}$$

d) **Efikasnost materijalno nevidljivog rada prilikom pasistencija**

($EfMnevidrAs$), u vremenskom periodu od 2014. do 2019. godine:

$$EfMnevidrAs_{(2014-2019)} = (RePovAs_{(2014-2019)} : IznPovAs_{(2014-2019)}) \times 100\%$$

$$EfMnevidrAs_{(2014-2019)} = (420 : 420) \times 100$$

$$EfMnevidrAs_{(2014-2019)} = 1 \times 100 = 100$$

EfMnevidrAs₍₂₀₁₄₋₂₀₁₉₎ = 100%

Efikasnost materijalno nevidljivog rada je stoprocentna (100%), što dokazuje potpunu efikasnost pri pružanju asistencije koju pruža komunalna policija, što se može podvesti pod represivne radnje Komunalne policije.

Ukupan prihod prikazanih rezultata rada komunalne policije, koji je prikazan kroz pružanje usluge (asistencije) predstavljene u tekstu istraživačkog rada, dobiće se sinergijom ostvarenih rezultata rada (prihoda), vidljivih materijalnih i nevidljivih materijalnih novčanih sredstava, tabela 3.

Tabela 3. Ukupan prihod od pruženih asistencija JP Parking servisu

Uplaćen novčana sredstva u budžet grada (u dinarima)	2540000
Vidljiva Materijalana sredstva (u dinarima)	
Uplaćeno novčana sredstva JP Parking Servisu (u dinarima)	2712000
Nevidljiva Materijalana sredstva (u dinarima)	
UKUPNI PRIHODI ostvareni od pružene pomoći PC Parking servisu za period 2014 - 2019. (u dinarima)	5252000

Izvor: Obračun autora

U Tabeli 3., prikazan je Ukupani prihod ostvaren prilikom pružanja asistencija i iznosio je 5252000 dinara, u vremenskom periodu od 2014. do 2019. godine.

Efikasnost pruženih asistencija (EfAs₍₂₀₁₄₋₂₀₁₉₎) JP parking servisu, u vremenskom periodu od 2014. do 2019. godine, predstavljeno je prosekom materijalno vidljive i materijalno nevidljive vrednosti rada:

$$EfAs_{(2014-2019)} = (EfMvidrAs_{(2014-2019)} + EfMnevidrAs_{(2014-2019)}): 2$$

$$EfAs_{(2014-2019)} = (97.38\% + 100\%): 2$$

$$EfAs_{(2014-2019)} = 197.38\%: 2 = 98.69\%$$

$$\boxed{EfAs_{(2014-2019)} = 98.69\%}$$

Iz priloženih rezultata dobija se Efikasnost pruženih asistencija u visini od 98,69%, što predstavlja izuzetno efikasan rad komunalne policije u pružanju asistencije (pomoći) Javnom Preduzeću Parking servisa u Zaječaru, Republika Srbija.

Diskusija i zaključak

Dobijeni rezultati sprovedenog istraživanja u navedenom prikazu slučaja, u periodu od 2014. do 2019. godine, ističu 2014. godinu kao najefikasniju godinu po rešenim prekršajnim nalozima (materijalno vidljiv rad), sa 100% efikasnim radom. Efikasnost u 2015. godini iznosila je 98,63%, u 2016. godini 98,71%, u 2017. godini 95%, u 2018. godini 93,75%, dok je u 2019. godini

iznosila 97,56%. Prosečna efikasnost za period od 2014. do 2019. godine iznosila je 98,69% uz prihod od 5252000 dinara.

Rezultati pokazuju da je najefikasnija godina po ostvarenim finansijskim sredstvima bila 2019. godina, kada je ostvaren prihod od 772.000 dinara. Na ovako visoku efikasnost materijalno vidljivog rada (ostvarena finansijska sredstva) u 2019. godini najviše je uticala visina kazni za isti učinjeni prekršaj, kao i smanjen broj komunalnih policajaca, tako da je prosečno ostvaren prihod po jednom komunalnom policajcu za 2019. godinu iznosio oko 96500 dinara dok je u 2014. godini iznosio samo 19385 dinara. Ovako mali prihod u 2014. godini pripisuje se učestalijem preventivnom delovanju na terenu i ranom razvoju

Ovako postavljena metodološka metoda istraživanja Komunalne policije grada Zaječara može se primeniti na iste ili slične organizacione strukture koje imaju radnike sa statusom službenog lica i policijskih ovlašćenja, ili deo policijskih ovlašćenja.

Sagledavanje efikasnosti kao materijalno vidljivog rada i materijalno nevidljivog rada, način je i metod detaljnog i preciznog utvrđivanja efikasnosti rada komunalnih policajaca, kroz sveobuhvatnu analizu i sagledavanje svih postignutih rezultata i radnji tokom rada komunalnih službi. Policija.

Literatura

1. Allen, A. (2021). Are campus police ‘real’police? Students’ perceptions of campus versus municipal police. *The Police Journal*, 94(2), 102-121.
2. Benito, B., Martínez-Córdoba, P. J., & Guillamón, M. D. (2021). Measurement and determinants of efficiency in the municipal police service. *Evaluation and Program Planning*, 85, 101904.
3. Crepelle, A., Fegley, T., Murtazashvili, I., & Murtazashvili, J. B. (2022). Community policing on American Indian reservations: a preliminary investigation. *Journal of Institutional Economics*, 1-18.
4. Decision on Communal Order on the territory of the city of Zajecar, Official Gazette of the City of Zajecar, No. 52/20.
5. Decision on Public Parking, “Official Gazette of the city of Zajecar”, No. 15/14, 23/14 and 23/14 - other decision, 38/14, 30/15, 1/16 and 21/16.
6. Decision on Public Parking, Official Gazette of the city of Zajecar, No. 7/17.
7. Donnelly, D. (2013). Municipal policing in the European Union: Comparative perspectives. Palgrave Macmillan.

8. Harmon, R., & Harman-Heath, S. (2022). The Future of Police Reform. In *Handbook of Issues in Criminal Justice Reform in the United States* (pp. 97-110). Springer, Cham.
9. Janjuš, Z., Pavlović, S., & Jeličić, I. (2017). Doprinos komunalne policije zaštiti životne sredine. *Zbornik Međunarodnog kongresa o procesnoj industriji–Procesing*, 30(1), 245-250.
10. Julseth, J., Ruiz, J., & Hummer, D. (2011). Municipal police officer job satisfaction in Pennsylvania: a study of organisational development in small police departments. *International Journal of Police Science & Management*, 13(3), 243-254.
11. Kešetović, Ž., & Milosavljević, B. (2016). Municipal police in the republic of Serbia. *Criminal Justice and Security in Central and Eastern Europe*, 351(352), 50.
12. Kostic, Z., & Milojevic, M. (1996). Company Economics. Institute of Economics and Finance, Belgrade.
13. Law on Communal Police, Official Gazette of RS, No. 49/2019-23.
14. Manić, A., Trandafilović, I., & Radonjić, A. (2017). Research of the attitudes of service users about Communal Police and the paradigm of its economic profitability. *Energy, economics, ecology – Journal of the Association of Power Engineers*, 3-4, 60-67.
15. Milosavljevic, B. (2010). Manual for professional training and exams of Communal Police Officers. Ministry of Public Administration and Local Self-Government, Belgrade, 13-14.
16. Pilipović, V. (2011). Uloga policije i komunalne policije u ostvarivanju lokalne bezbednosti u Srbiji. *Civitas*, 1(01), 180-190.
17. Soltes, V., Kubas, J., Velas, A., & Michalík, D. (2021). Occupational Safety of Municipal Police Officers: Assessing the Vulnerability and Riskiness of Police Officers' Work. *International journal of environmental research and public health*, 18(11), 5605.
18. Stojanović, B., & Kostić, M. (2013). Competition policy and the impact of market structure on companies' profitability. *Ekonomika preduzeća*, 61(5-6), 325-338.
19. Sytsma, V. A., & Laming, E. (2019). Exploring barriers to researching the economics of municipal policing. *Canadian Journal of Criminology and Criminal Justice*, 61(1), 15-40.
20. Zivkovic, M., Ilić, S., & Bevanda, V. (2014). Business Economics, seventh amended edition, Megatrend University, Belgrade, 2014, pp. 235-240.
21. Kekić, D., Milenković, M. (2016). Raznolikosti i asimetrije komunalne policije u Republici Srbiji. Conference European integration: justice, freedom and security, 181-182.

Skraćenice, simboli, znakovi i brojevi

As – asistencija; Blo – blokada; Ef – efikasnost; Iz – izdato; Izn - izdat nalog;
Uk – ukupno; JP - javno preduzeće; M – materijalno; vidr - vidljiv rad; nevidr
- nevidljiv rad; O – očekivano; Pr – prihod; Pkn - prekršajni nalog; Pov -
podignuto vozilo; Pros - prosek; Re - realizovano; g₄ - predstavlja 2014.
godinu; g₅ - predstavlja 2015. godinu; g₆ - predstavlja 2016. godinu; g₇ -
predstavlja 2017. godinu; g₈ - redstavlja 2018. godinu; g₉ - predstavlja 2019.
godinu; (2014-2019) - period od 2014. do 2019. godine.

Datum prijema (Date received): 08.02.2022.

Izvršena prva korekcija (The first correction was made): 15.04.2022.

Izvršena druga korekcija (Second correction made): 28.04.2022.

Datum prihvatanja (Date accepted): 05.05.2022.

ANALYSIS OF THE EFFICIENCY OF WORK OF COMMUNAL POLICE WHEN PROVIDING ASSISTANCE: CASE REPORT OF THE CITY OF ZAJECAR

Aleksandar Manić⁴, Darjan Karabašević⁵, Srđan Novaković⁶

Original scientific paper

Abstract

The task of the communal police is primarily reflected in the provision of assistance and services that have their own specifics. When it comes to the communal police in the Republic of Serbia, in that case the duties are reflected in the performance of supervision and control in accordance with the legal authorizations of the city regulations. Accordingly, the communal police, by performing tasks within their jurisdiction, ensures the performance of tasks within the jurisdiction of the City of Zajecar, in the areas of communal activities, environmental protection, people and goods, protection and maintenance of order in the use of land, space, local roads, streets and other public facilities, as well as the unhindered performance of certain tasks within the jurisdiction of the city, and so forth. Having in mind the specifics of the communal police, the aim of the research is to show the efficiency of the work of the Communal Police when providing assistance (2014-2019) through a systematic approach to the processing of data from archival materials, on the example of the service provided to the city authorities, which refers to providing assistance to PC Parking Service Zajecar.

Key words: Communal police, Assistance, Service, Materijal efficiency, immaterial efficiency

JEL: A3; D61

⁴ PhD candidate, Aleksandar Manić, City Administration of the City of Zajecar, Department for Communal Police and Inspection Affairs, aca.manic.za@gmail.com

⁵ Associate Professor, Darjan Karabašević, PhD, Faculty of Applied Management, Economics and Finance, University Business Academy in Novi Sad, darjan.karabasevic@mef.edu.rs

⁶ Professor, Srđan Novaković, PhD, Faculty of Applied Management, Economics and Finance, University Business Academy in Novi Sad, srdjan.novakovic@mef.edu.rs

Introduction

Communal Police provides assistance and services that have their own specificities (Janjuš et al., 2017; Stojanović & Kostić, 2013). They are viewed as services provided to citizens and other entities that encourage responsibility (to ourselves and others, to work obligations, to society as a whole, etc.), educate citizens about their duties and rights in order to sustainably develop society, both locally and globally (Crepelle et al., 2022; Manić et al., 2017; Pilipović, 2011).

The main activity of the Communal Police department is to provide services that are basically immaterial. This gives a special place to the Communal Police on the business ladder of an independent organizational unit within the City Administration (Kekić & Milenković, 2016; Soltes et al, 2021).

Communal Police, as an independent organizational unit within the City Administration (the founder) (Benito et al., 2021; Allen, 2021; Harmon & Harman-Heath, 2022), was established with the purpose of ensuring full and unhindered execution of decisions and other acts within the competences of the city (Sytsma & Laming, 2019; Donnelly, 2013; Julseth et al., 2011). In addition to its basic purpose, it has three other important roles related to providing assistance to the city authorities, taking emergency measures and participating in performing the rescue function and unhindered performance of certain tasks within the city's competences (Kešetović & Milosavljević, 2016; Milisavljevic, 2010) and public safety.

This paper presents a different approach and analysis of work efficiency (Zivkovic et al., 2014) when providing assistance by Communal Police in one of the cities of the Republic of Serbia. The difference between this research work and previous works is in the approach to the analysis of provided assistance and a different division based on the characteristics of provided services, primarily preventive and repressive services provided (preventive and repressive measures).

The results presented in the paper refer to the organizational unit of the Communal Police of the city of Zajecar, one of the 23 cities in the Republic of Serbia that have Communal Police in their organizational units. The data obtained by this research will be used only for the purpose of making scientific research papers, presenting and promoting the work of the Communal Police, as well as to improve the work of this department.

Due to the specificity of the data and the integrity of the organizational unit of the Communal Police whose achieved results are processed in this text, the research was initiated after obtaining the consent (approval) by the Head of the

*City Administration of Zajecar, Mr. Slobodan Videnovic (*The consent of the Head of the City Administration of the City of Zajecar, Mr. Slobodan Videnovic, was obtained upon the written request of the author of this text, Aleksandar Manic; it approves the research activities of the above stated author of the text and the data from the Archives of the city of Zajecar can be used for scientific and educational purposes aimed at improvement of work of Communal Police and other services of the city of Zajecar*).*

The approach to processing of the obtained research results, in itself, determines two types of efficiency of Communal Police work: efficiency which is material and efficiency which is immaterial.

The final or overall efficiency of the work of the Communal Police (Kostic & Milojevic, 1996) is obtained by the synergy of material and immaterial efficiency, which represent the comprehensive work of the Communal Police, which can be:

- *Visible efficiency of work*, which represents the repressive actions of the Communal Police and which, for the committed offence or criminal offence, have their numerical and material value (determined by the amount of penalty as a unit of measurement) and which takes place at the time of the committed offence or immediately after the committed offence.
- *Invisible efficiency of work*, which represents every type of preventive action of Communal Police that have their numerical value, while their material value as a unit of measurement is obtained during the transformation from preventive to repressive action, for which certain penalty measures (shown in dinars) for offence or criminal offence are determined by relevant Laws of the Republic of Serbia and Decisions of cities.

Therefore, the aim of the research is to show the efficiency of the work of the Communal Police when providing assistance (2014-2019) through a systematic approach to the processing of data from archival materials, on the example of the service provided to the city authorities, which refers to providing assistance to PC Parking Service Zajecar.

One of the types of assistance to the city authorities is the provision of assistance to public companies in the city (*Law on Communal Police, Official Gazette of RS*, 2019). Example of providing assistance and their work results are processed below.

In order to provide assistance – service (*Assistance provided by the Communal Police means assistance and services provided to public companies, Inspection Departments, the Fire Department and the Ministry of the Interior (Police Administration); the assistance is provided through joint actions and*

situations when more officials with police powers are needed to perform the Public Safety task) of the Communal Police, it is necessary to follow the legal procedure and have a written request submitted by the Public Company to the Communal Police, stating the reason and objective, time of assistance and the required number of communal police officers for the requested assistance. Depending on the capacities and available resources, the Head of the Communal Police approves or disapproves to provide the service - assistance and states the reason for the decision.

Methodology

Valid data on the results of the work of the Communal Police and the assistance provided to the Public Company of Parking Service was obtained by personal data collection from the Archives of the city of Zajecar (founder of the Communal Police), as well as from the archives of the Organizational Unit of the Communal Police of Zajecar.

The presented results of the work are the results of thirteen (13) members of the Communal Police and refer to the provided assistance (services) to the Public Company of Parking Service, in the period from 2014 to 2019 (six-year period). The basic hypothetical problems in the work of the Communal Police stem from their complexity, i.e. the complexity and diversity of the work they perform.

The theoretical part of the research will be based on the application of several analytical and synthetic basic methods of knowledge with a focus on the inductive-deductive method, general method of analysis and synthesis, methods of classification and generalization, general scientific and data collection methods and comparative method.

With the inductive method, the inductive way of reasoning will be systematically applied, which, based on the analysis of individual facts collected from the mentioned archives, and gained in the work by the experience of communal police officers, leads to general conclusions. The analysis of the inductive method will include the basic element of any inductive reasoning, and that is the relation from the specific to the general.

In this research work, the deductive method will be applied, as a principle of drawing conclusions that starts from the set goal of the research and uses as a basis a known fact (documentation on the work of Communal Police), but unproven attitudes (invisible material work of Communal Police) in relation from general to specific.

By the method of analysis, the subject of research will be broken down into its constituent parts. The individual results obtained by empirical research, by the method of synthesis will be grouped into more complex wholes, according to the principle of possible mutual connections and relations.

The descriptive statistical analysis will present the results obtained by collecting data from the city archives and the archives of the organizational unit of the Communal Police of the city of Zajecar, which are used in further data processing. The results obtained by processing the data will be expressed numerically and by determining the amount of percentage, as well as through tables.

It must be emphasized that due to the validity of the results that should be obtained by processing the data from table no. 2., the differences in the amounts of penalty measures for certain time periods were taken into account, which were passed and adopted by the Assembly of the City of Zajecar (*Decision on Public Parking lots on the territory of the City of Zajecar, 2014,2015,2016,2020*). The amounts of fines of the written offence order of the adopted decisions of the city are shown and envisaged only for physical entities, as follows:

- from 2014 to 2016, the amount of fines of the written offence order was 5,000 dinars, for payment within seven days 2,500 dinars;
- from 2017 to 2019, the amount of fines of the written offence order was 8,000 dinars, for payment within seven days 4,000 dinars;

The fee for towing and storing the vehicle in the PC Parking Service area was:

1. from 2014 to 2015 the fee for lifting and transporting the vehicle to the PC Parking Service area was 4,000 dinars;

- from 2016 to 2017 it was 6,000 dinars;
- from 2018 to 2019 it was 8,000 dinars;

The fee for setting and removing the lock on the vehicle wheel, was:

- from 2018 to 2019 it was 4,000 dinars;

The provided assistance, presented below, is classified as repressive actions of the Communal Police because the end result of the actions, i.e. work of the Communal Police, is generation of financial material resources - revenue, which is generated in two ways:

1. The first part of the procedure and the generation of financial resource through assistance which is **materially visible work** of the Communal Police, is realized on the basis of issued offence orders, for the period from 2014 to 2019, expressed through formulas (*The stated formulas used in the computer operations that follow, consist of abbreviations, characters, numbers and*

symbols and are explained in “Abbreviations, Characters, Symbols and Numbers” at the end of the paper.):

a) Revenue from issued offence orders when providing assistance

$$\begin{aligned} & PrIzPknAs_{(2014-2019)} \\ & = (PrIzPknAsg_4 + PrIzPknAsg_5 + PrIzPknAsg_6 + PrIzPknAsg_7 + \\ & PrIzPknAsg_8 + PrIzPknAsg_9) \end{aligned}$$

b) Average revenue per issued offence order when providing assistance

$$ProsPrIzPknAs_{(2014-2019)} = PrIzPknAs_{(2014-2019)} : I_zPknAs_{(2014-2019)}$$

c) Revenue from realized offence orders when providing assistance

$$PrRePknAs_{(2014-2019)} = ProsPknAs_{(2014-2019)} \times RePknAs_{(2014-2019)}$$

d) Efficiency of materially visible work in provided assistance

$$EfMvidrAs_{(2014-2019)} = (PrRePknAs_{(2014-2019)} : PrIzPknAs_{(2014-2019)}) \times 100\%$$

2. The second part of the procedure in generating financial resources through assistance, which represents the materially invisible work of the Communal Police, is realized on the basis of issued orders for towing vehicles. The realization of generated financial resources in the period from 2014 to 2019 is expressed through the same formulas in which the abbreviated names and data for processing from Table 2 were used:

a) Revenue from towed vehicles when providing assistance:

$$\begin{aligned} & PrIznPovAs_{(2014-2019)} = \\ & PrIznPovAs_g_4 + PrIznPovAs_g_5 + PrIznPovAs_g_6 + PrIznPovAs_g_7 + \\ & PrIznPovAs_g_8 + PrIznPovAs_g_9 \end{aligned}$$

b) Average revenue from towed vehicles when providing assistance:

$$ProsPrPovAs_{(2014-2019)} = PrIznPovAs_{(2014-2019)} : IznPovAs_{(2014-2019)}$$

c) Revenue from realized towed vehicles when providing assistance

$$PrRePovAs_{(2014-2019)} = ProsPrPovAs_{(2014-2019)} \times RePovAs_{(2014-2019)}$$

d) Efficiency of materially invisible work when providing assistance:

$$EfMnevidrAs_{(2014-2019)} = (PrRePovAs_{(2014-2019)} : PrIznPovAs_{(2014-2019)}) \times 100\%$$

The results of the work of the Communal Police will be presented through the provided assistance - services, which are presented in the text of the research through materially visible and materially invisible work and through the

Efficiency of material and immaterial work of the Communal Police, in the period from 2014 to 2019.

Work efficiency ($EfAs_{(2014-2019)}$) is represented by the average of materially visible ($EfMvidrAs_{(2014-2019)}$) and materially invisible ($EfMnevidrAs_{(2014-2019)}$) work - assistance provided to the Public Company of Parking Service, City of Zajecar

$$EfAs_{(2014-2019)} = (EfMvidrAs_{(2014-2019)} + EfMnevidrAs_{(2014-2019)}) : 2$$

Research Results

The assistance provided in this paper is classified as repressive acting of the Communal Police. This way of acting has as its end result generation of monetary material resources - revenue, which is realized in two ways:

1. By issuing an offence order (money is paid to the account of the City Administration);
2. By issuing an order to tow the vehicle (money is paid to the account of PC Parking Service).

With this approach, it represents a part of the material and immaterial work of the Communal Police and it will be presented by mathematical data processing, for the city which is the subject of this research. It should be noted that the assistance provided in this example is part of the assistance provided by the Communal Police as a service to city institutions, which can also be of a preventive nature, without the generation of financial resources.

1. The first part of the procedure, which is materially visible, will be explained by the actions of the Communal Police by coming on the spot and implementing the legal procedure. Upon arrival on the spot of the offence, the Communal Police reviews the factual situation and if the owner of the vehicle is present, hands him an offence order for the offence committed. If the owner of the vehicle is not present, and is not near the vehicle that is in offence, the Communal Police officer writes a report - notification of the current condition and leaves it in a visible place on the vehicle so that the vehicle owner can see it upon arrival and writes an order to block the vehicle wheel. Workers of the PC Parking Service, after placing a lock on one of the wheels, put a notice of the offence on the door and the phone number that the vehicle owner should call. Upon the call of the PC Parking Service by the owner of the vehicle, the workers of the Parking Service inform the Communal Police, who writes and hands over an offence order for the committed offence to the owner of the vehicle. This is a visible part of the repressive work of the Communal Police during the provision of assistance and its material work, i.e. materially visible

work of the Communal Police. Data processing for materially visible work (provision of assistance) will be performed on the basis of data on the results of the work of the Communal Police, presented in Table 1.

Table 1. Assistance provided to PC PARKING SERVICE of the city of Zajecar Visible material work for the period 2014 - 2019

Visible material work	2014	2015	2016	2017	2018	2019	Total
Value of offence order for physical entities (in dinars)	5000 $\frac{1}{2}$ 2500	5000 $\frac{1}{2}$ 2500	5000 $\frac{1}{2}$ 2500	8000 $\frac{1}{2}$ 4000	8000 $\frac{1}{2}$ 4000	8000 $\frac{1}{2}$ 4000	
Records - Notification	63	73	78	60	64	82	420
Offence order	63	73	78	60	64	82	420
Realized order	63	72	77	57	60	80	409
Non-realized order	/	1	1	3	4	2	11
Money paid into the city budget (in dinars)	252000	292000	468000	360000	512000	656000	2540000

Source: Authors

Generated financial resources through visible assistance, which were realized on the basis of issued offence orders for the period from 2014 to 2019, are presented through formulas as follows:

a) Revenue from resolved offence orders when providing assistance
($PrRePknAs_{(2014-2019)}$), in the period from 2014 to 2019:

$$\begin{aligned} PrRePknAs_{(2014-2019)} &= (PrRePknAsg_4 + PrRePknAsg_5 + PrRePknAsg_6 + PrRePknAsg_7 + \\ &\quad PrRePknAsg_8 + PrRePknAsg_9) \end{aligned}$$

$$\begin{aligned} PrRePknAs_{(2014-2019)} &= \\ (252000 + 292000 + 468000 + 360000 + 512000 + 656000) &= 2540000 \\ PrRePknAs_{(2014-2019)} &= 2540000 \text{ (dinars)} \end{aligned}$$

b) Average revenue per resolved offence order when providing assistance
($ProsPrRePknAs_{(2014-2019)}$), in the period from 2014 to 2019:

$$ProsPrRePknAs_{(2014-2019)} = PrRePknAs_{(2014-2019)} : RePknAs_{(2014-2019)}$$

$$ProsPrRePknAs_{(2014-2019)} = 2540000 : 409 = 6210.26$$

$ProsPrRePknAs_{(2014-2019)} = 6210$ dinars - rounded without decimals

c) Expected revenue from issued offence orders when providing assistance
($OPrIzPknAs_{(2014-2019)}$), in the period from 2014 to 2019:

$$OPrIzPknAs_{(2014-2019)} = ProsPrRePknAs_{(2014-2019)} \times IzPknAs_{(2014-2019)}$$

$$OPrIzPknAs_{(2014-2019)} = 6210 \times 420 = 2608200$$

$$OPrIzPknAs_{(2014-2019)} = 2608200 \text{ dinars}$$

d) Efficiency of materially visible work when providing assistance

($EfMvidrAs_{(2014-2019)}$), in the period from 2014 to 2019:

$$EfMvidrAs_{(2014-2019)} = (PrRePknAs_{(2014-2019)}: OPrIzPknAs_{(2014-2019)}) \times 100\%$$

$$EfMvidrAs_{(2014-2019)} = (2540000: 2608200) \times 100\%$$

$$EfMvidrAs_{(2014-2019)} = 0.9738 \times 100\% = 97.38\%$$

$EfMvidrAs_{(2014-2019)} = 97.38\% - \text{rounded without decimals}$

2. The second part of the procedure, which is the materially invisible work of the Communal Police, is realized after writing the records and issuing orders to the PC Parking Service for lifting and moving vehicles to the space provided for disposing of towed vehicles, or putting a block on the vehicle wheel.

In the first case, the vehicle is, by the order of the Communal Police, lifted and moved to the site of the Parking Service by a special specialized vehicle for those purposes. Upon the arrival of the owner of the vehicle on the site of the company (in order to take over the vehicle), the workers of the PC Parking Service charge for the service of lifting and moving the vehicle, as well as the storage fee. This fee is paid to the account of the PC Parking Service by the person who made the offence.

In the second case (part of the procedure is explained in the text of the first part of the procedure - in the results of the research), the workers of the PC charge a fine for setting and removing the lock at the vehicle wheel. Funds for this work are paid into the account of JP Parking Service. This work of the Communal Police is not materially visible for the City Administration and the Organization of the Communal Police (except for the issued orders of the Communal Police Officers), because the material financial resources are not paid to the account of the City Administration. Data processing for such materially invisible work of the Communal Police will be performed on the basis of data on the results of the work of the Communal Police which are presented in Table 2.

Table 2. Assistance provided to PC PARKING SERVICE of the city of Zajecar Invisible material work for the period 2014 - 2019

Invisible material work	2014	2015	2016	2017	2018	2019	Total
Value of the PC service for lifting, moving and storage of vehicles on the site (in dinars)	4 000	4 000	6 000	6 000	8000	8000	
	½ 2000	½ 2000	½ 3000	½ 3000	½ 4000	½ 4000	
Vehicle lifting order	63	73	78	60	64	82	420
Realized vehicle lifting orders	63	73	78	60	64	82	420
Revenue from the lifted vehicles	252000	292000	468000	360000	512000	656000	2540000
Value of PC service for setting and removing the lock on the wheel (in dinars)	0	0	0	0	4000	4000	0
Setting the lock on the vehicle wheel	0	0	0	0	14	29	43
Revenue from the set locks	0	0	0	0	56000	116000	172000
Total revenue of funds paid to PC Parking Service (in dinars)	252000	292000	468000	360000	568000	772000	2712000

Source: Authors

Data processing in the calculation of materially invisible work is completely the same as in the calculation of materially visible work, with the number of issued orders for lifting vehicles and the number of resolved lifted vehicles is the same (*Each order issued for the lifting of vehicles by the Communal Police is charged by the employees of the PC Parking Service as the started transport operation, the same as a fee is charged for the vehicles brought to the site of the PC.*), which means that the expected revenue is the same as revenue from realized lifted vehicles and issued vehicle lifting orders:

$$IznPovAs_{(2014-2019)} = 420 \text{ vehicles (issued vehicle lifting orders)}$$

$$RePovAs_{(2014-2019)} = 420 \text{ vehicles (realized lifted vehicles)}$$

$$IznPovAs_{(2014-2019)} = RePovAs_{(2014-2019)}$$

Generated financial resources through assistance that are materially invisible, and generated on the basis of the vehicle lifting order (1), for the period from 2014 to 2019, are presented as follows:

1. Revenue from lifted vehicles when providing assistance

(*PrRePovAs₍₂₀₁₄₋₂₀₁₉₎*), in the period from 2014 to 2019:

$$PrRePovAs_{(2014-2019)} =$$

$$PrRePovAs_4 + PrRePovAs_5 + PrRePovAs_6 + PrRePovAs_7 +$$

$$PrRePovAs_8 + PrRePovAs_9)$$

$$PrRePovAs_{(2014-2019)} = 252000 + 292000 + 468000 + 360000 + 512000 + 656000 = 2540000$$

$$PrRePovAs_{(2014-2019)} = 2540000 \text{ (dinars)}$$

Generated financial resources through assistance that are materially invisible, and generated on the basis of the order to set a lock on the vehicle wheel (2), for the period from 2018 to 2019 (*The vehicle lock was introduced by the City Decision in 2018, so there was assistance only in 2018 and 2019*), are presented as follows:

2. Revenue from locks set on the vehicle wheel when providing assistance

($PrBloAs_{(2018-2019)}$), in the period from 2014 to 2019:

$$PrBloAs_{(2018-2019)} = PrBloAs_{g8} + PrBloAs_{g9}$$

$$PrBloAs_{(2018-2019)} = 56000 + 116000 = 172000$$

$$PrBloAs_{(2018-2019)} = 172000 \text{ (dinars)}$$

a) Total Revenue from assistance provided - from lifted vehicles and vehicle wheel locks

($UkPrAs_{(2014-2019)}$), in the period from 2014 to 2019:

$$UkPrAs_{(2014-2019)} = PrRePovAs_{(2014-2019)} + PrBloAs_{(2018-2019)}$$

$$UkPrAs_{(2014-2019)} = 2540000 + 172000 = 2712000$$

$$UkPrAs_{(2014-2019)} = 2712000 \text{ (dinars)}$$

b) Average revenue per lifted vehicle when providing assistance

($ProsPrPovAs_{(2014-2019)}$, in the period from 2014 to 2019:

$$ProsPrPovAs_{(2014-2019)} = PrRePovAs_{(2014-2019)} : RePovAs_{(2014-2019)}$$

$$ProsPrPovAs_{(2014-2019)} = 2540000 : 420 = 6047.61$$

$$ProsPrPovAs_{(2014-2019)} = 6048 \text{ (dinars), rounded without decimals}$$

c) Expected revenue from issued vehicle lifting orders when providing assistance

($OPrIznPovAs_{(2014-2019)}$), in the period from 2014 to 2019: it is the same as the generated revenue of the resolved lifted vehicles ($PrRePovAs_{(2014-2019)}$):

$$OPrIznPovAs_{(2014-2019)} = PrRePovAs_{(2014-2019)}$$

$$2540000 = 2540000 \text{ (dinars)}$$

d) Efficiency of materially invisible work when providing assistance

($EfMnevindrAs$), in the period from 2014 to 2019:

$$EfMnevindrAs_{(2014-2019)} = (RePovAs_{(2014-2019)} : IznPovAs_{(2014-2019)}) \times 100\%$$

$$EfMnevindrAs_{(2014-2019)} = (420 : 420) \times 100$$

$$EfMnevindrAs_{(2014-2019)} = 1 \times 100 = 100$$

$$EfMnevindrAs_{(2014-2019)} = 100\%$$

The efficiency of materially invisible work is one hundred percent (100%), which proves complete efficiency in providing assistance, which can be classified as repressive actions of the Communal Police.

The total revenue of the presented results of the work of the Communal Police, which is presented through the provision of services (assistance) presented in the text of the research, will be obtained by synergy of the achieved results of work (revenue), visible material and invisible material financial resources, table 3.

Table 3. Total revenues from assistance provided to PC PARKING SERVICE

Financial resources paid into the city budget (in dinars)	
Visible material resources (shown in dinars)	2540000
Financial resources paid to PC Parking Service (in dinars)	
Invisible material resources (shown in dinars)	2712000
TOTAL REVENUES generated from assistance provided to PC Parking Service for the period 2014 - 2019	5252000

Source: Authors

Table 3 shows the total revenues generated during the provision of assistance and amounted to 5252000 dinars, in the period from 2014 to 2019.

The efficiency of the provided assistance ($EfAs_{(2014-2019)}$) to the PC Parking Service, in the period from 2014 to 2019, is presented by the average of the materially visible and materially invisible value of work:

$$EfAs_{(2014-2019)} = (EfMvidrAs_{(2014-2019)} + EfMnevridrAs_{(2014-2019)}) : 2$$

$$EfAs_{(2014-2019)} = (97.38\% + 100\%) : 2$$

$$EfAs_{(2014-2019)} = 197.38\% : 2 = 98.69\%$$

$$\boxed{EfAs_{(2014-2019)} = 98.69\%}$$

From the presented results, the efficiency of the provided assistance in the amount of 98.69% was obtained, which is an extremely efficient work of the Communal Police in providing assistance to the Public Company Parking Service in Zajecar, Republic of Serbia.

Discussion and Conclusion

The obtained results of the conducted research in the above case report, in the period from 2014 to 2019, highlight 2014 as the most efficient year according to resolved offence orders (materially visible work), with 100% efficient work. The efficiency in 2015 was 98.63% and in 2016, it was 98.71%, in 2017 it was 95%, in 2018 it was 93.75%, while in 2019 it was 97.56%. The average

efficiency for the period from 2014 to 2019 was 98.69% with a revenue of 5252000 dinars.

The results show that the most efficient year based on the generated financial resources was 2019, when the revenue in the amount of 772,000 dinars was generated. Such a high efficiency of materially visible work (generated financial resources) in 2019 was mostly influenced by the level of penalties for the same committed offence, as well as the reduced number of Communal Police Officers, so that the average generated financial resources per one Communal Police Officer for 2019 year was about 96500 dinars while in 2014 it was only 19385 dinars (*Such a small revenue in 2014 is attributed to more frequent preventive action in the field and the early development of Communal Police Department*).

The methodological method of research of the Communal Police of the city of Zajecar set in this way can be applied to the same or similar organizational structures that have workers with the status of an official and police powers, or a part of the police powers.

The view of efficiency as materially visible work and materially invisible work, is a way and method of detailed and precise determination of the efficiency of work of Communal Police Officers, through an overall analysis and consideration of all achieved results and actions during the work of Communal Police.

References

1. Allen, A. (2021). Are campus police ‘real’police? Students’ perceptions of campus versus municipal police. *The Police Journal*, 94(2), 102-121.
2. Benito, B., Martínez-Córdoba, P. J., & Guillamón, M. D. (2021). Measurement and determinants of efficiency in the municipal police service. *Evaluation and Program Planning*, 85, 101904.
3. Crepelle, A., Fegley, T., Murtazashvili, I., & Murtazashvili, J. B. (2022). Community policing on American Indian reservations: a preliminary investigation. *Journal of Institutional Economics*, 1-18.
4. Decision on Communal Order on the territory of the city of Zajecar, Official Gazette of the City of Zajecar, No. 52/20.
5. Decision on Public Parking, “Official Gazette of the city of Zajecar”, No. 15/14, 23/14 and 23/14 - other decision, 38/14, 30/15, 1/16 and 21/16.
6. Decision on Public Parking, Official Gazette of the city of Zajecar, No. 7/17.
7. Donnelly, D. (2013). Municipal policing in the European Union: Comparative perspectives. Palgrave Macmillan.

8. Harmon, R., & Harman-Heath, S. (2022). The Future of Police Reform. In *Handbook of Issues in Criminal Justice Reform in the United States* (pp. 97-110). Springer, Cham.
9. Janjuš, Z., Pavlović, S., & Jeličić, I. (2017). Doprinos komunalne policije zaštiti životne sredine. *Zbornik Međunarodnog kongresa o procesnoj industriji–Procesing*, 30(1), 245-250.
10. Julseth, J., Ruiz, J., & Hummer, D. (2011). Municipal police officer job satisfaction in Pennsylvania: a study of organisational development in small police departments. *International Journal of Police Science & Management*, 13(3), 243-254.
11. Kešetović, Ž., & Milosavljević, B. (2016). Municipal police in the republic of Serbia. *Criminal Justice and Security in Central and Eastern Europe*, 351(352), 50.
12. Kostic, Z., & Milojevic, M. (1996). *Company Economics*. Institute of Economics and Finance, Belgrade.
13. Law on Communal Police, Official Gazette of RS, No. 49/2019-23.
14. Manić, A., Trandafilović, I., & Radonjić, A. (2017). Research of the attitudes of service users about Communal Police and the paradigm of its economic profitability. *Energy, economics, ecology – Journal of the Association of Power Engineers*, 3-4, 60-67.
15. Milosavljevic, B. (2010). Manual for professional training and exams of Communal Police Officers. Ministry of Public Administration and Local Self-Government, Belgrade, 13-14.
16. Pilipović, V. (2011). Uloga policije i komunalne policije u ostvarivanju lokalne bezbednosti u Srbiji. *Civitas*, 1(01), 180-190.
17. Soltes, V., Kubas, J., Velas, A., & Michalík, D. (2021). Occupational Safety of Municipal Police Officers: Assessing the Vulnerability and Riskiness of Police Officers' Work. *International journal of environmental research and public health*, 18(11), 5605.
18. Stojanović, B., & Kostić, M. (2013). Competition policy and the impact of market structure on companies' profitability. *Ekonomika preduzeća*, 61(5-6), 325-338.
19. Sytsma, V. A., & Laming, E. (2019). Exploring barriers to researching the economics of municipal policing. *Canadian Journal of Criminology and Criminal Justice*, 61(1), 15-40.
20. Zivkovic, M., Ilić, S., & Bevanda, V. (2014). *Business Economics*, seventh amended edition, Megatrend University, Belgrade, 2014, pp. 235-240.
21. Kekić, D., Milenković, M. (2016). Raznolikosti i asimetrije komunalne policije u Republici Srbiji. Conference European integration: justice, freedom and security, 181-182.

Abbreviations, Characters, Signs and Numbers

As - assistance; **Blo** - lock; **Ef** - efficiency; **Iz** - issued; **Izn** - issued order; **Uk** - total; **JP** - public company; **M** - material; **vidr** - visible work; **nevidr** - invisible work; **O** - expected; **Pr** - revenue; **Pkn** - offence order; **Pov** - lifted vehicle; **Pros** - average; **Re** - generated/implemented/realized; **g₄** - stands for 2014; **g₅** - stands for 2015; **g₆** - stands for 2016; **g₇** - stands for 2017; **g₈** - stands for 2018; **g₉** - stands for 2019; **(2014-2019)** - period from 2014 to 2019.