



Volunteering valued

Costs and benefits of police volunteers

Commissioned by the Scientific Research and
Data Centre (WODC)

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Abbreviations

ACP	General Christian Police Federation
ANPV	General Dutch Police Association
ATH	Administrative, technical and domestic
BOA	Special investigating officer
DGPenV	Directorate-General of Police and Safety Regions
ESI	Executive with Specific Duty
JenV	Ministry of Justice and Security
LFNP	National Job Classification Dutch Police
LOPV	National Organisation of Police Volunteers
NPB	Dutch Police Federation
PDC	Police Services Centre
PVO	Police Volunteer in Support
PVU	Police Volunteer in Execution
TCP	Teams Coordinating Police Volunteers

Summary

Motive and knowledge needs

The police is experiencing an increasing pressure on capacity. This is expected to continue in the coming years, leading to bottlenecks. Police volunteers support the police in various tasks and have traditionally been a valued addition to police capacity with a diverse contribution.

Several ministers have expressed the ambition to increase the number of police volunteers to 10 per cent of professional staff. This target has not yet been achieved. A work plan has therefore been drawn up that focuses on increasing the intake of the various forms of appointment within the police, which differ in what they require in terms of training and supervision and the work they can do.

The Directorate-General for Police and Security Regions (DGPenV) of the Ministry of Justice and Security (JenV) and the National Police (NP) want to understand the costs and benefits of deploying police volunteers within the police organisation. In addition to the direct costs and benefits for the police, there are expected to be additional societal benefits, such as positive effects for the police volunteers themselves, trust in the government and cohesion among citizens.

This study provides an inventory of the costs and benefits of police volunteers for Dutch society. This includes both financial and non-financial costs and benefits. Where costs and benefits cannot be quantified or valued, they have been included as PM items.

Problem definition and research questions

The problem statement of this study is threefold:

1. How do the investments and returns of employing police volunteers with different forms of appointment compare?
2. What is the distinction between the direct costs and benefits and the social costs and benefits that follow from the different types of appointments?
3. What preconditions apply when increasing the use of police volunteers within the various forms of appointment?

Research methodology

An exploration of the social costs and benefits of police volunteers has not been carried out before. The present study is therefore in a sense pioneering. During this voyage of discovery, we have sailed on the 2013 general SCBA guideline from CPB and PBL and various supplements to it. These documents form the methodological compass of this study. The guidance documents prescribe a number of research steps.

Problem analysis

The crux of the problem is that, if policies remain unchanged, there will be insufficient police volunteers to achieve the policy target of 10% of the operational strength. By the end of 2023, the National Police had a staffing level of over 63 thousand professionals. The actual utilisation of the operational strength is more than eight hundred FTEs less than the formation.

The police have four types of appointments for police volunteers:

1. Executive police volunteers:
 - a. With generic employability (working in a base team);
 - b. With specific employability (abbreviated ESI, e.g. in forensic investigation);
2. Police volunteers with administrative, technical and domestic (ATH) appointments:
 - a. Be able to act as a special investigating officer (ATH-boa);
 - b. Performance of administrative, technical or other tasks for the police.

The 'Police Volunteer Deployment Framework' describes the police volunteer policy in relation to the LFNP. An important principle is to maintain a balance between the efforts of the police organisation and those of police volunteers. A minimum deployment of 240 hours per year is considered desirable to ensure bonding and routine in the work; a maximum deployment of 576 hours per year ensures that police volunteers are not overburdened.

By the end of 2023, there were 2,676 police volunteers, representing 5.8% of the operational strength of about 46 thousand FTEs. As police volunteers work an average of 0.11 FTE, police volunteers currently make up 0.62% of the operational strength in FTEs. Generally executive police volunteers work an average of 0.15 FTE, while ESIs and ATHs work less than half that (well below the desired minimum). The policy target of 10% police volunteers in 2027 means 4,835 police volunteers compared to the estimated operational strength of over 48 thousand FTEs in 2027.

Baseline alternative and policy alternative

The **baseline alternative** gives the most likely development that would occur without new policies ("*business-as-usual*"). This is the expected situation in 2027 as a result of natural attrition compared to the situation at the end of 2023 and in which no training courses are taken by police volunteers at the Police Academy. Only former professionals then enter as generic executive police volunteers or ATHs.

Due to an ageing population, there is a slight downward trend in the number of generically executively deployable police volunteers. In contrast, there is a rising trend in the inflow of ATHs. For the inflow of police volunteers, a distinction is made between police volunteers with and without a previous police career. Former professionals can enter as police volunteers after their employment (after retirement or transfer to another job) without training at the Police Academy.

In the 'Work Plan Growth Model Police Volunteers', 100 trainee ATH officers and one class of 24 ESIs are scheduled annually. This is our **basic variant** of the **policy alternative**. No generic executive police volunteers are trained in this variant because the training capacity at the Police Academy is fully utilised for training professionals.

In addition to the basic variant, we consider the **plus variant** of the policy alternative in which, on top of the basic variant, there is also one class of 24 police volunteers each year taking the (part-time 4-year) generic executive police volunteer training course. Here, we assume that the training capacity would be expanded for this purpose and thus not at the expense of training professionals. As it concerns about 1% of the total training capacity, we do not consider this an unrealistic variant.

Finally, we consider the **target variant** of the policy alternative in which three classes of 24 police volunteers annually undertake the (part-time 4-year) generic executive police volunteer training, again on top of training professionals. The three classes produce a 6% annual intake of new generic executive police volunteers, comparable to the 5.3% annual intake of trainees to the operational force. As this makes the training effort for generic executive police volunteers proportionally require around 3% of the total training capacity, we do not consider this an unrealistic variant. The number of police volunteers in the two alternatives and three variants is summarised in Table 1 as follows.

Table 1: Numbers of police volunteers in the baseline alternative and the policy alternative

Year	Baseline alternative	Policy alternative		
		Basic variant	Plus variant	Target variant
2023	2.676	2.676	2.676	2.676
2024	2.734	2.894	2.894	2.894
2025	2.800	3.106	3.106	3.106
2026	2.873	3.316	3.316	3.316
2027	2.954	3.524	3.548	3.596

Source: Atlas Research calculations based on Work Plan growth model police volunteers (2023)

Identify and quantify effects and monetise them as costs and benefits

Based on literature review, we made a qualitative analysis and synthesis of previously conducted research on police volunteers, paying particular attention to the pitfalls and uncertainties inherent in social cost-benefit analyses in the social or justice domain.

This qualitative picture was then supplemented through interviews. Various stakeholders around volunteering within the police were spoken to. Besides policymakers, administrators and experts such as DGPenV, National Police, the police unions (ACP, NPB and Equipe), the National Organisation of Police Volunteers (LOPV) and the Police Academy, police volunteers were also interviewed. Experts experienced in providing insight into costs and benefits within other organisations were also interviewed.

Finally, we made a quantitative analysis of financial statements and internal reports with production and cost figures. The data sources on compensation levels and key figures around taxes and premiums are publicly available, as are fringe totals of numbers of police volunteers. The data sources to quantify training costs and numbers of hours worked at a detailed level are available as internal steering information at the police itself. We are grateful to the police for their cooperation and making the said data sources available.

Qualitative inventory

Costs and benefits for the police

A police volunteer performs work that compares well with the work of paid police forces. This work represents a gross social benefit. We equate the social value of this *output* with the opportunity cost of *inputs*: the cost of deploying and bringing in professionals. For the police, the value of employing police volunteers is equal to the notional cost reduction realised by the police compared to a situation where volunteering had been replaced by the deployment and inflow of professional staff.

For the police organisation, we budget this gross benefit based on the wage cost of the most comparable paid police job. We call these *equivalent wage costs*. Some academic literature also uses the term *replacement value*. We stress that this refers to *fictitious* and not actual replacement: there is no implicit suggestion of displacement or substitution of professionals by police volunteers. We therefore use the term equivalent labour costs.

For the police organisation, these benefits are also offset by costs in the form of the volunteer fee. There are also the costs of training, screening and equipment. These costs are incurred before the police volunteer starts work and thus come before the benefits. Importantly, entry-level police volunteers with prior active police careers are not required to undergo training.

A commonly suggested effect is the reputation effect for the police through the fulfilment of an ambassadorial role by police volunteers. We could not quantify this item based on the available literature and data. This remains as a qualitative PM item.

Costs and benefits for the police volunteer

A police volunteer voluntarily chooses to do police work. He or she derives net welfare from that choice. The benefits of volunteering consist first of all of a material, monetary part, namely the volunteer allowance. In addition, there are intangible benefits in the form of the satisfaction the police volunteer derives from the work. The intangible benefits are the balance of all these effects experienced by the volunteer himself.

Against these benefits, police volunteers also incur intangible costs. These are formed by the time he or she puts into the work or training. We refer to these costs as so-called *opportunity costs* and are used to calculate consumer surplus.

It is possible that police volunteers also experience positive health effects due to the training and active work, and positive social effects as a result of the contacts they have through this work. We could not quantify this item based on the available literature and data. This remains as a qualitative PM item.

Costs and benefits to government and society

The hours incurred during their training and deployment as police volunteers lead to displacement in the alternative voluntary organisations and costs for employers in case they continue to pay for the missed hours, as is the case in the Dutch government.

In addition, there is revenue from the tax paid on fixed and variable allowances for executive police volunteers. There are also missed tax payments from the police volunteers who would otherwise have been doing paid work.

One commonly suggested effect is increased trust between police and citizens as a result of the use of police volunteers. We could not quantify this item based on the available literature and data. This remains as a qualitative PM item.

Additional insights from interviews

In the interviews, both police and police volunteers highlighted the costs and benefits that were also highlighted in the literature. One message in the interviews was "that this appreciation should also be adequately expressed towards police volunteers".

In the interviews with stakeholders, we got the impression that identifying the need for police volunteers and allocating them within the police organisation is not always a smooth process. In practice, it is department-dependent whether the deployment of police volunteers is efficiently integrated into the modus operandi of the organisation.

Non-quantifiable effects

We have identified three (groups of) impacts that we cannot quantify and monetise, but which we include as PM items in further calculations so that they do not disappear from view. These are three unquantified items which all have a positive sign. However, we suspect that these PM items are small.

1. **Reputational effect** for the police through the "ambassadorial role" that police volunteers can play in their own social circles.
2. **Health impacts**, both directly on the police volunteer themselves and indirectly on the police organisation, their employer and the government (through publicly funded healthcare spending).
3. **Trust** between police and citizens.

Quantitative elaboration

The quantitative elaboration and translation into euros of the identified impacts cannot be easily summarised. Below, we present the main ingredients leading to the final results we present in the following conclusion paragraph. We refer the interested reader to Chapter 4 for detailed (intermediate) results.

Cost of inflow of police volunteers

We obtained detailed figures on the cost of training, screening and equipment from the police. Police volunteers with a prior active police career do not need to undergo training and their screening is still valid in half of the cases. Table 2 shows the entry costs of police volunteers by form of appointment.

Table 2: Cost (in euros) to the police per additional police volunteer entering the force, by form of appointment and any previous police career

Key figure	Ex-professional	Generic	ESI	ATH-boa	ATH
Training	-100%	13.250	2.100	900	275
Screening	-50%	910	910	910	910
Equipment	0%	1.000	1.000	150	0
Regular		15.160	4.010	1.960	1.185
Ex-professional		1.455	1.455	605	455

Source: data National Police

Hours worked and numbers of police volunteers

By the end of 2023, there were 2,676 police volunteers, some 5.8% of the operational strength of about 46 thousand FTEs. On an FTE basis, this is currently 0.62% of the operational strength. Generally executive police volunteers work 0.15 FTE on average, while ESIs and ATHs work less than half that. This is shown in table 3.

Table 3: Hours worked and numbers of police volunteers in 2023, by form of appointment

Key figure	Total	Generic	ESI	ATH-boa	ATH
Hours worked	521.998	340.392	25.093	0	156.513
Number of police volunteers	2.676	1.214	178	0	1.284
Hours per police volunteer	195	280	141	0	122
fte	286	187	14	0	86

Source: Atlas Research calculations based on National Police data

Allowances for deployment of police volunteers

Police volunteers receive remuneration for their work, depending on their form of appointment. Executive police volunteers and ATH-boas get a fixed gross compensation per year and a variable gross compensation per hour. There is a net amount per hour for supporting police volunteers. For the period 2024-2027, we use **the allowances as of 27 August 2024**. The summary is shown in table 4.

Table 4: Allowances (in euros) for police volunteers as of 27 August 2024, by form of appointment

Allowance	Generic	ESI	ATH-boa	ATH
Fixed (per year)	219,60	219,60	219,60	0,00
Variable (per hour)	9,16	9,16	9,16	4,00
Form	Gross	Gross	Gross	Net

Source: police volunteer compensation scheme

Equivalent wage costs for deployment of police volunteers

The **equivalent salary cost** corresponds to the salary a police volunteer would have earned if employed as a professional. Using data provided by the National Police on the job scales of professionals on the one hand, and the grades, areas of work and nature of work of police volunteers on the other, we have estimated the equivalent gross hourly wages of police volunteers. For the calculations for the period 2024-2027, we use **the conditions of employment as of 1 January 2025**. The equivalent gross hourly wages per form of appointment are shown in Table 5.

Table 5: Equivalent gross hourly wages of police volunteers, by form of appointment

Wage concept	Generic	ESI	ATH-boa	ATH
Gross hourly wage	32,89	33,90	29,11	31,83

Source: Atlas Research calculation based on National Police data

The expected tenure of police volunteers

We calculate the costs and benefits per additional police volunteer over his or her expected tenure, which we assume to be equal to the inverse of the historical intake rates by tenure type. This is shown in table 6.

Table 6: Expected tenure (in years) of police volunteers, by form of appointment

Key figure	Generic	ESI	ATH-boa	ATH
Appointment time	10	10	10	8,3

Source: Atlas Research calculations on Work Plan growth model police volunteers (2023)

Summary of costs and benefits and calculation of policy alternatives

We calculate the summary and balance of costs and benefits per police volunteer over his or her expected tenure as follows. From the numbers of hours worked per year and the allowances and equivalent gross hourly wages, the annual costs and benefits follow. We calculate the net present value of these annual costs and benefits over the expected

duration of employment using the discount rate prescribed for SCBAs of 2.25%. We then plot these costs and benefits over the expected tenure against the entry costs of the additional trained police volunteers.

We then calculate the differences in trained and deployed police volunteers in the policy alternative compared to the null alternative. This gives the balance of costs and benefits for each policy alternative, as well as the distribution of costs and benefits broken down by different actors (police, police volunteers and government and society).

Sensitivity analysis of parameter values

We performed a sensitivity analysis on the outcomes of the policy variants. We did this for four parameter values used in the calculations: annual hours, expected hiring duration, discount rate and wage elasticity. In doing so, we analyse a value ("high") that is above the chosen value, and a value ("low") that is below the chosen value. We call the chosen value "middle".

The sensitivity analysis shows that the police can leverage encouraging police volunteers to work more hours to generate more social value. If every police volunteer worked the maximum number of hours, the overall balance would roughly triple. In addition, the uncertainty surrounding wage elasticity has a considerable impact, as does the expected tenure. In contrast, the discount rate has relatively little impact on the size of the balance of costs and benefits.

Conclusions and recommendations

Investment and returns from deployment of police volunteers

The identified effects for the four different appointment forms of police volunteers are summarised below in Table 7.

Table 7 Costs and benefits (x €1,000) per additional police volunteer to be trained, by form of appointment

Impact	Generic	ESI	ATH-boa	ATH
Police				
Monetised costs & benefits	56,5	35,4	53,5	35,0
PM: reputation effect	+?	+?	+?	+?
Police volunteer				
Monetised costs & benefits	90,7	30,8	40,3	19,5
PM: health effects	+?	+?	+?	+?
Government and society				
Monetised costs & benefits	-51,4	-15,4	-21,9	-20,8
PM: trust between police and citizens	+?	+?	+?	+?
Balance of monetised costs & benefits	95,8	50,8	71,9	33,7
PM: reputation, health, trust	+?	+?	+?	+?

Source: Atlas Research calculation based on National Police data. See table 4.17 of this report for a further breakdown of effects.

Table 7 shows that the balance of costs and benefits over the entire expected appointment period (of around 10 years) of an additional police volunteer - with no prior police career - is broadly positive for each of the four appointment types. The balance ranges from over 33 thousand euros for each additional ATH volunteer to over 95 thousand euros for each additional generic executive police volunteer. In doing so, we were unable to quantify a number of positive (side) effects: the balance would be even more favourable if these effects could be quantified in the future.

The conclusion that it pays socially to deploy additional police volunteers applies *a fortiori* to police volunteers with prior police careers, particularly as there are no training costs. This overview is summarised in Table 8.

Table 8 Costs and benefits (x €1,000) per additional former professional police volunteer, by form of appointment

Impact	Generic	ESI	ATH-boa	ATH
Police				
Monetised costs & benefits	70,2	37,9	54,9	35,7
PM: reputation effect	+?	+?	+?	+?
Police volunteer				
Monetised costs & benefits	58,2	26,8	39,2	18,8
PM: health effects	+?	+?	+?	+?
Government and society				
Monetised costs & benefits	-25,7	-12,3	-21,1	-20,2
PM: trust between police and citizens	+?	+?	+?	+?
Balance of monetised costs & benefits	102,7	52,3	73,0	34,3
PM: reputation, health, trust	+?	+?	+?	+?

Source: Atlas Research calculation based on National Police data. See table 4.18 of this report for a further breakdown of effects.

For generic executive police volunteers, the balance for ex-professionals is almost 7 thousand euros higher than for regular entering police volunteers. For the other categories, the differences are smaller. In the distribution of effects, the police (by saving training costs) and the government and society (less displacement of alternative volunteering) benefit most from ex-professionals compared to newly trained police volunteers. The police volunteers themselves, on the other hand, therefore do not receive the consumer surplus while undergoing their training.

The costs and benefits of three policy alternatives

The baseline alternative has been delineated in this study as the "business-as-usual" scenario in which no additional police volunteers are trained over the period 2024-2027, and all inflow is through ex-professionals. Subsequently, the policy alternative is defined as the scenario in which 72 additional ESIs and 100 additional ATH officers are trained annually over the period 2024-2027 compared to the baseline alternative.

For the training of generic executive police volunteers, we analysed three variants that differ in the number of additional generic executives with zero, one or three classes of 24 generic executive police volunteers each year, respectively. Table 9 summarises the costs and benefits by actor and policy variant.

Table 9 Total costs and benefits (in €m), by actor and policy variant

Impact	Policy variant		
	Basic	Plus	Target
Police			
Monetised costs & benefits	29,9	35,0	45,3
PM: reputation effect	+?	+?	+?
Police volunteer			
Monetised costs & benefits	23,6	31,9	48,4
PM: health effects	+?	+?	+?
Government and society			
Monetised costs & benefits	-12,5	-17,1	-26,5
PM: trust between police and citizens	+?	+?	+?
Balance of monetised costs & benefits	41,1	49,8	67,2
PM: reputation, health, trust	+?	+?	+?

Source: Atlas Research calculation based on National Police data. See table 425 of this report for a further breakdown of effects.

Table 9 shows that the balance of costs and benefits is higher in all policy variants as more generic executive police volunteers are trained. The added value of the plus variant compared to the basic variant consists of one extra class of 24 generic executive police volunteers every year. Over their expected tenure, this yields a net total of almost €9 million. Compared to the basic variant, the target variant yields triple (over €26 million) in additional social benefits.

Preconditions for increased use of police volunteers

The overall picture from the interviews is that the police organisation has made efforts and created a comprehensive policy on the recruitment and deployment of police volunteers. Not all policies are translated equally well into practice, noting that the existing policy on police volunteers is currently being reviewed by the police.

The available training capacity of the generic executive police volunteers is currently the biggest stumbling block in deploying more police volunteers, partly due to the catching-up of the current (under)staffing levels to the desired formation of the professionals. As a result, the (recently expanded) training capacity at the Police Academy has been maximised for professionals in the coming years. Therefore, the policy variants have been chosen such that in the plus and target variants, an annual intake of one and three classes of generic executive police volunteers respectively have been calculated.

Based on this study, we cannot conclude that the police are struggling with a structural under-supply of police volunteers. This is particularly reflected in the net growth in the number of ATHs. If training restrictions were reduced, there is no reason to suspect that growth could not be realised here either.

In the interviews with stakeholders, we got the impression that identifying the need for police volunteers and allocating them within the police organisation is not always a smooth process. In practice, it is department-dependent whether the deployment of police volunteers is efficiently integrated into the modus operandi of the organisation.

Natural attrition among police volunteers is historically high, with an annual outflow of 10% of generic executive police volunteers and 12% for ATH volunteers. The reason is that many of these police volunteers are retired former professionals.

Perspectives for policy actions

Based on the large, positive balance of deployment and inflow of new police volunteers calculated in this study, further commitment to increasing both training capacity at the Police Academy and mentoring capacity of field supervisors appears to be the primarily appropriate effort. The costs of recruiting new teachers and practice supervisors to train and supervise additional police volunteers are far outweighed by the benefits, and increasing training capacity ultimately yields a net positive balance of societal costs and benefits.

Nevertheless, it is understandable that when the permanent force is understaffed, the training of executive professionals takes precedence over that of police volunteers, as they work significantly more hours relative to the cost of training. Nevertheless, from a social welfare perspective, it would be advisable to create the capacity to train one or even three classes of generic executive police volunteers annually, partly to ensure the diversity of police volunteers and to turn negative net growth into a healthy positive net inflow.

Finally, better internal needs assessment could potentially contribute to a deployment of police volunteers in places and targets where they are needed most. It emerged in several interviews that not all relevant stakeholders are always involved, and relevant information is sometimes missing from decision-making on this.