




Case Study 2: Deloitte Consulting Regional Police Force Recruitment

MS930: Being an Effective Business Analyst

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EXECUTIVE SUMMARY

The Regional Police Force (RPF) confronts a pressing shortage of personnel, straining current officers and jeopardizing community safety. This report provides a preliminary analysis and problem structuring to define and investigate this issue given the data provided to us by the RPF. The core of the issue lies in officers leaving the force faster than they can be recruited and advanced to vacated positions.

To tackle the issue, this report uses insights from interviews and online research to unpack the problem and define it more clearly. This report takes the data provided by the RPF's HR system, conducting our analysis to provide key insights such as the extent of the shortage and where the shortage exists. This report also provides insights from a parallel investigation into the factors contributing to the shortage such as a lack of pay, bad morale and a lack of training.

The study finds that the RPF struggles most with its retention and career advancement processes. This is likely linked to a further finding that officers largely struggle on issues such as of pay, morale and achieving promotions.

From here we outlined a few potential 'next steps' to move forward. For example, we request historic data to analyse recruitment and retention rates, discover trends and train a forecasting model. We would also like to gain more primary data, in the form of interviews and focus groups, on why past employees dropped out or resigned.

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OVERVIEW

The RPF (Regional Police Force) is experiencing a shortage in police personnel. In particular, the RPF has many vacant positions in the roles of 'P1' and 'Sergeant' across the force. A shortage in personnel at the RPF increases the strain on officers and results in sacrifices being made in police work for the community.

This report provides supplementary analysis and problem structuring for a steering group meeting. Using insights from the data provided and what our team have compiled from external sources, this report aims to deliver the reader with analysis to understand the problems at hand. From here we can begin considering some potential next steps to tackle the problem further.

Problem Unpacking

Our interview provided us with an increased awareness of police hierarchy and the progression of officers up the career ladder. Below you can see a simple 'Career Progression' diagram modelling the stream of officers in RPF's employment.

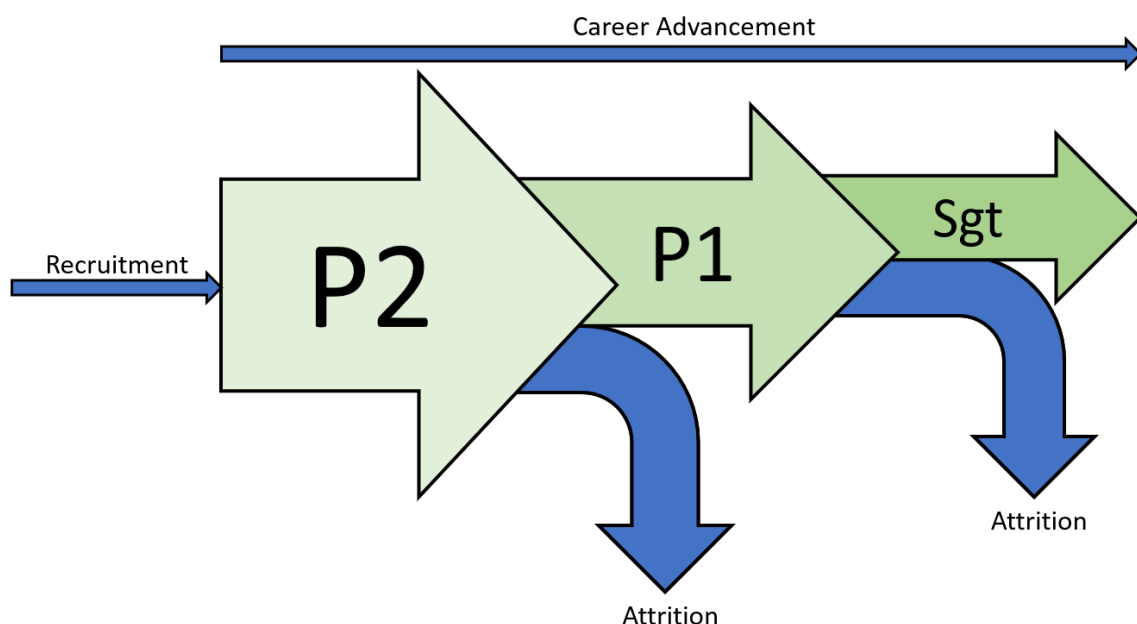


Figure 1: 'Career Progression' Model demonstrating the stream of officers through the police hierarchy system¹.

This model demonstrates how officers progress from a recruit to P2 (lower ranked constable or Police Support Investigator [PSI]), to P1 (higher ranked constable or PSI) and finally to Sgt (Sergeant)². Although this model is very simple, it demonstrates that the flow of people (shown by blue arrows) is carried out through three distinct processes. These are 'recruitment', 'retention' and 'career advancement'. According to this model, given the knowledge that there is a shortage, recruitment and career advancement are insufficient to offset the attrition rate. In this report, this model is used to divide our problem into three sub-problems. That the RPF suffers from (1) an insufficient retention rate, (2) an insufficient recruitment rate and (3) an insufficient career advancement rate.

¹ Produced by Group 4

² We have decided to omit Detective Inspector officers from our model and report as these do not appear to be relevant to the shortage problem.

Mind Map

A mind map was created to brainstorm the various factors affecting the ‘shortage of personnel’ (or just ‘shortage’) problem. The three sub-problems defined represent the major branches in this mind map. This mind map was created to identify the lower-level factors contributing to the shortage. For example, an insufficient retention rate is impacted by the factors: lack of pay; poor work-life balance; and monotonous tasks. Much of this report’s research and analysis is focussed on the factors that are shown in this mind map, shown below.

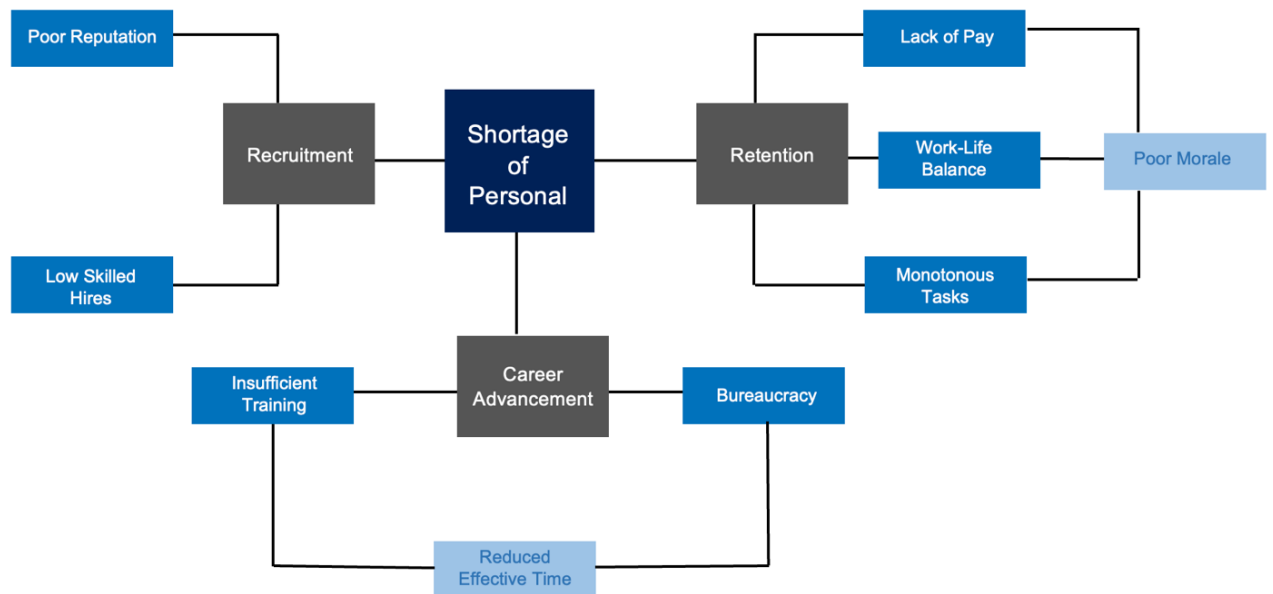


Figure 2: Mind Map breaking down the 'Shortage' problem into sub-problems.

Stakeholder Grid

Provided below is a 'Stakeholder Grid' that maps out key stakeholders' interests and influence. The grid reflects significance with regards to various aspects of police work and careers. We did this as police officers are not directly interested in the shortage problem but are very interested in its impacts and are arguably most affected by any strategy made to address the shortage.

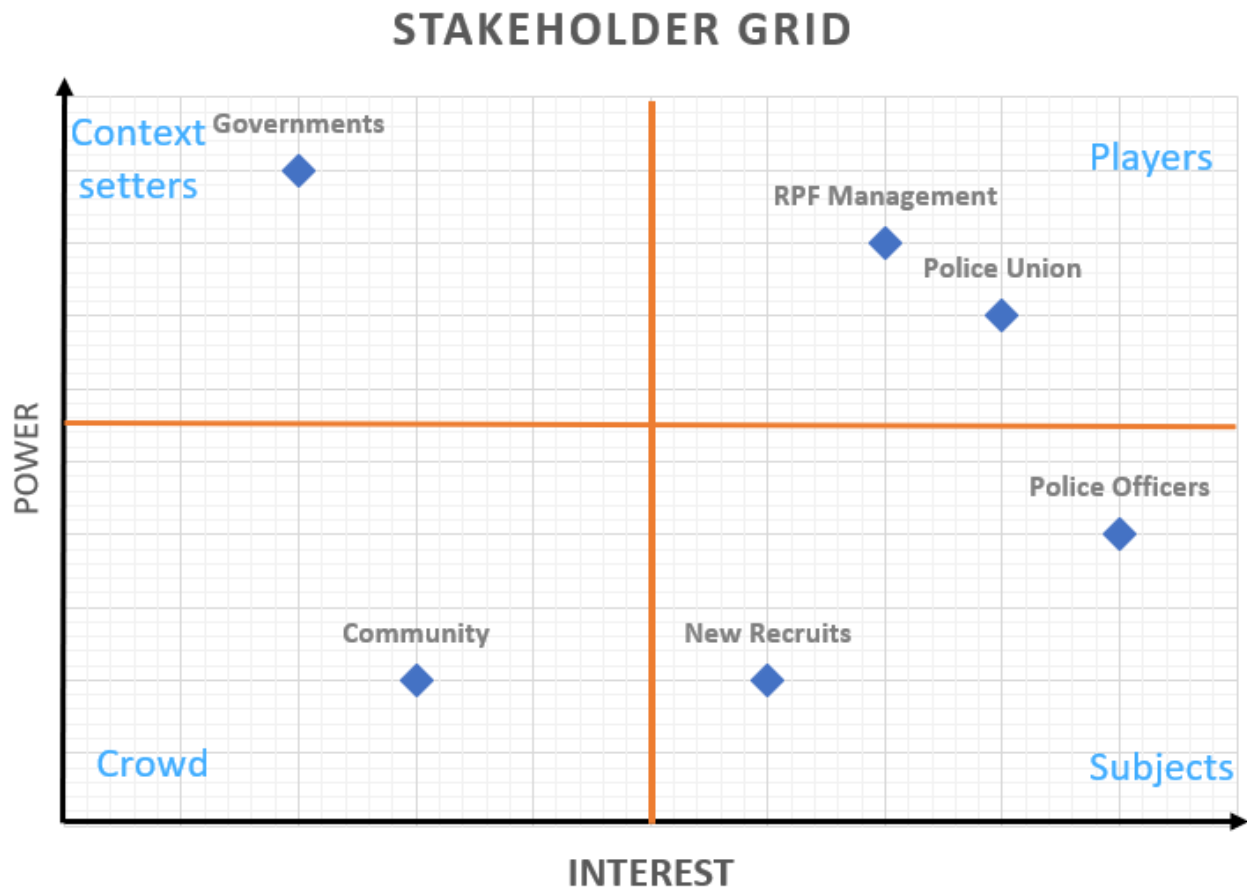


Figure 3: Stakeholder Grid visualising the interests and powers of various key stakeholders.

Using this grid, it was decided that this report should prioritise the concerns of the key 'Players'. We are tackling five key data questions asked by the Police Force Management. To best address police unions, who represents the concerns of officers, this report provides qualitative analysis on the interview and focus group data we have collected from the RPF's Chief Constable and sergeants.

DATA ANALYSIS AND INSIGHTS

Data collection

For this report, quantitative analysis is produced using officer 'HR data' provided by the client. This consisted of three worksheets containing tables showing the Actual vs Planned FTE (full-time equivalent) strength of each team within each of the three regions (Eastern; Northern; Western). Qualitative data was collected using an interview with Chief Constable Mike Michaelson, and a focus group with selected RPF Sergeants.

Data Cleaning and Handling

Data was provided at a relatively organised state. Some calculations had been used to produce statistics to show the extent to which each region, role and rank experienced the shortage. For this report, the following steps were performed to ready data for analysis.

Calculation errors were corrected.

- ☐ Initially, there were several calculation errors in the summary table for each regional force. The FTE raw data for the entire force was combined and calculations were repeated. Results were verified and/or corrected.

Unnecessary data was removed.

- ☐ Rows containing data for DIs (Detective Inspectors) were removed. As they were all adequately filled, DIs are irrelevant to the shortage problem.

Data was manipulated for ease of analysis.

- ☐ This study on quantitative analysis focuses on using Excel as its analytical tool. Datasets were combined into one worksheet, which allows us to make easy comparisons between regions and produce statistics for the entire RPF.
- ☐ Pivot tables were used to manipulate the data as needed.
- ☐ Charts were created to visualise various perspectives on the dataset for a comprehensive overview of the problem.

Quantitative Data Analysis

Our data analysis section comprises of quantitative and qualitative components. Our quantitative component uses HR data to respond to the five key insights requested by the RPF. These are:

1. The total scale of the problem.
2. The regions that have the highest differential (delta) from their planned FTE numbers.
3. The roles that have the highest delta across the regional force.
4. The areas with the highest ratio of Constables to Sergeants.
5. Any further interesting insights that you have pulled from the data.

1. The total scale of the problem.

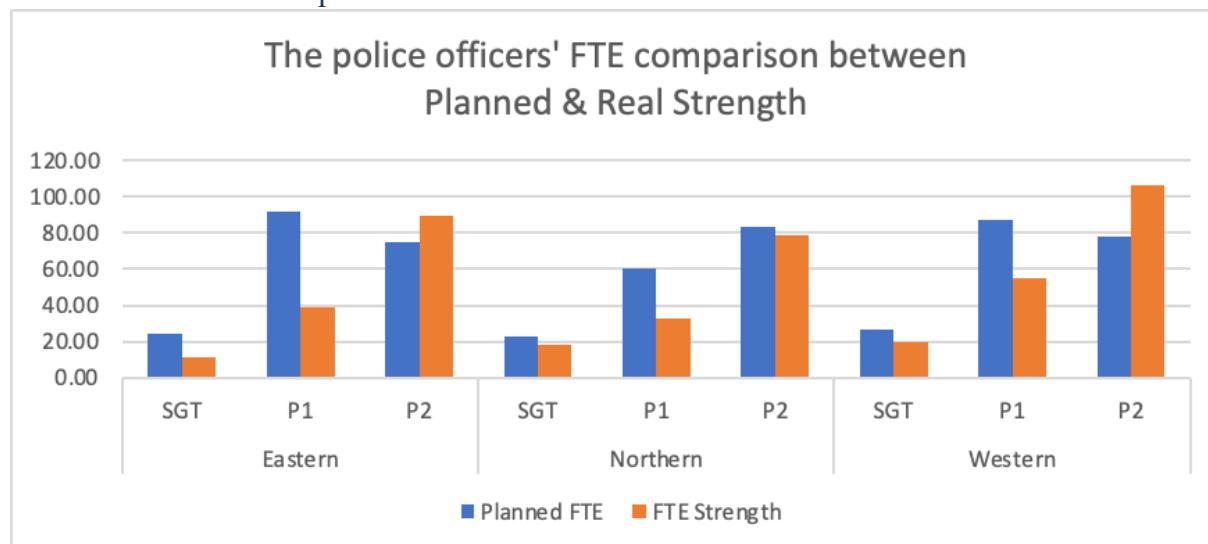


Figure 4: Bar graph comparing the Actual FTE strength and Planned FTE Strengths of each rank in each region.³

When we compare the planned and actual strength levels of each region, it becomes evident that the Eastern and Western regions exceed their planned employment levels in the P2 category (exceeding planned FTE levels by 19% and 36%, respectively). Conversely, the Northern force falls short of its planned strength by 5%. For P1s, all regions demonstrate understaffing. Actual FTE rates, compared to planned rates, fall to 43%, 55%, and 63% for the Eastern, Northern, and Western regions, respectively.

2. The regions that have the highest differential (delta) from their planned FTE numbers.

Force	Level	Role	Difference (%)	Force	Level	Role	Difference (%)	Force	Level	Role	Difference (%)
Eastern	DI	DI	100%	Northern	DI	DI	100%	Western	DI	DI	100%
	P1	DC	46%		P1	DC	69%		P1	DC	63%
		PIP2 PSI	36%			PIP2 PSI	28%			PIP2 PSI	63%
		PC	70%			PC	75%			PC	83%
	P2	PSI	211%		P2	PSI	125%		P2	PSI	292%
		DS	45%			DS	57%			DS	82%
	SGT	PS	58%		SGT	PS	190%		SGT	PS	53%
Total			74%	Total			79%	Total			95%

Figure 5: Table showing the difference between the Actual and Planned FTE strength for each region⁴.

³ *The police levels are ordered based on the client's data: DI, SGT, P1, and P2.

*DI: Detective Inspector, the highest level in each force.

*SGT: Sergeant, the second highest level in each force.

⁴ * The P1 and P2 levels have two different roles: one is constable, and the other is PSI.

*DC: Detective Constable *PSI: Police Support Investigator

After closely examining Figure 5 and Figure 6, we can draw some observations. We've employed a percentage difference calculation to highlight the biggest disparities between planned and actual strength. In this context, 100% serves as the benchmark, representing a perfect match between planned and actual FTE strength – no difference. Any percentage below 100% suggests a shortage in strength, while any percentage above 100% indicates overstaffing.

With this understanding, we can conclude that the Eastern Force experiences the most significant shortage in most categories when compared to other regional forces.

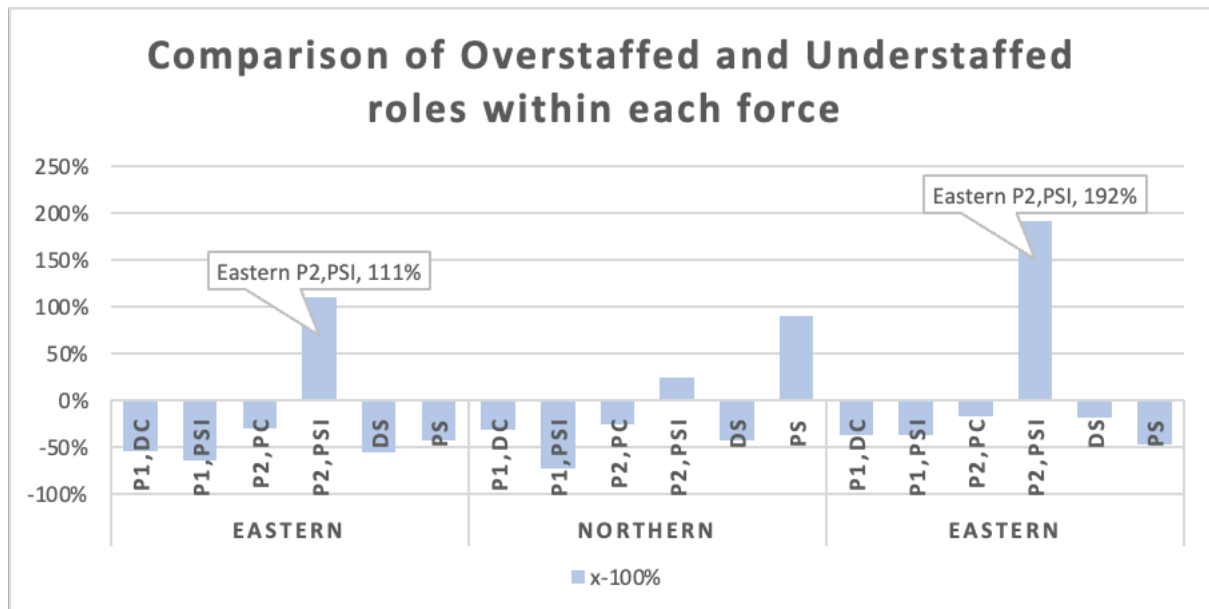


Figure 6: Bar chart of Staffing Levels by Region and Role⁵.

3. The roles that have the highest delta across the regional force.

In Figure 6, we aimed to identify the most substantial disparities between planned and actual employment strength. We accomplished this by calculating the percentage difference, which involves subtracting the difference (x) from 100%. A negative value indicates understaffing, while a positive signifies overstaffing in each role. However, when assessing the most significant differences across the force, we considered the absolute values of staffing percentages.

Our analysis revealed that (P2) Junior PSIs in the Western force exhibit the most substantial deviation from the planned numbers at 192%, signifying substantial overstaffing. This is followed by Junior PSIs in the Eastern force at 111%. This pattern indicates rapid hiring at the P2 level, with employees facing challenges advancing to P1. It might also indicate a retention issue at the P1 level. Furthermore figure 6 illustrates an overstaffing of Police Sergeants in the Northern force. Further investigation might be necessary to understand why this is the case. This resource of excess Police Sergeants should be noted as it might prove useful in deciding how to resolve the shortage in other regions.

*PC: Police Constable *PS: Police Sergeant *DS: Detective Sergeant

⁵ * The P1 and P2 levels have two different roles: one is constable, and the other is PSI.

*DC: Detective Constable *PSI: Police Support Investigator

*PC: Police Constable *PS: Police Sergeant *DS: Detective Sergeant

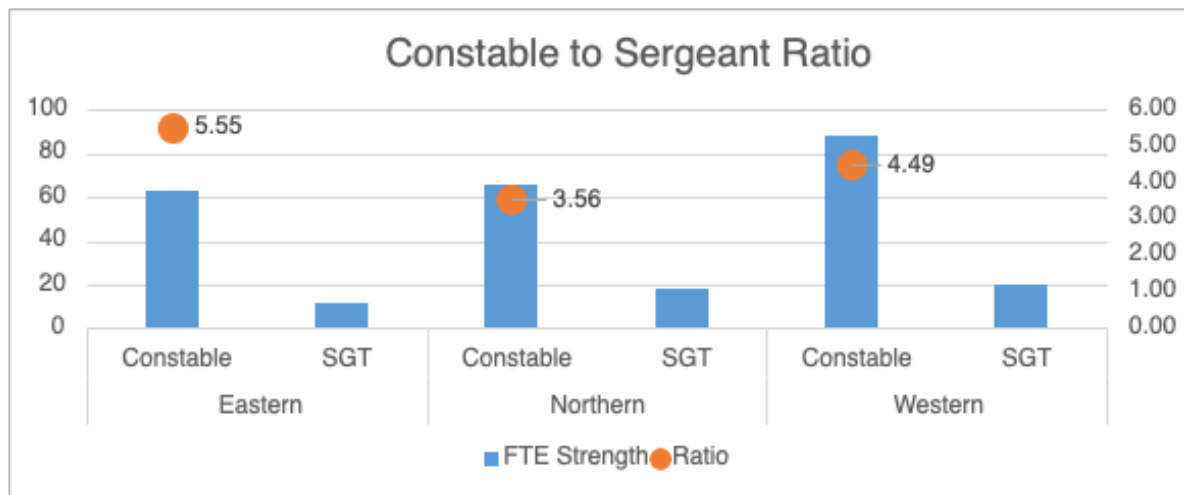


Figure 7: Bar chart showing the ratio between Constable and Sergeant in each Region.

4. The areas with the highest ratio of Constables to Sergeants.

Based on the Figure 9, we can see that in the Eastern force every Sergeant is responsible of taking care of at least 6 constables which is comparatively high. In the Western and Northern forces every Sergeant is responsible for approximately 4 constables, despite the Western force having the highest count of constable.

5. Any further interesting insights that you have pulled from the data.

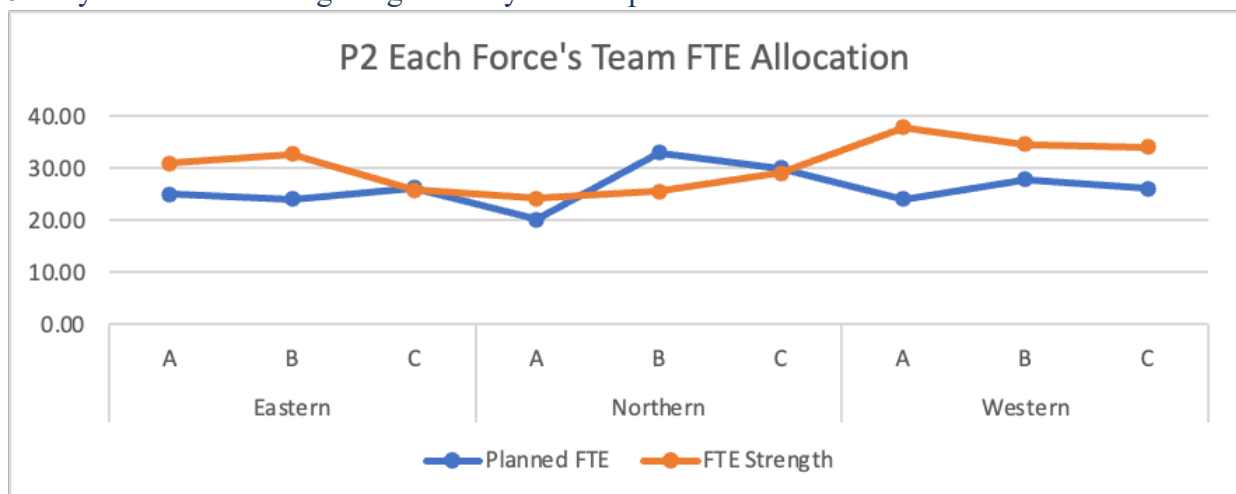


Figure 8: Line chart comparing Planned and Actual FTE strength by Team and Region.

On further analysis every region typically has sufficient officers at the P2 level. However, a difference in allocation rates between teams still exists. Both the Eastern Force's and the Northern Force's C teams have a slight understaffing issue, with the employment rates of just 98% and 97% respectively. Whereas the allocation for the Northern Force's B team is a lot lower at 77%.

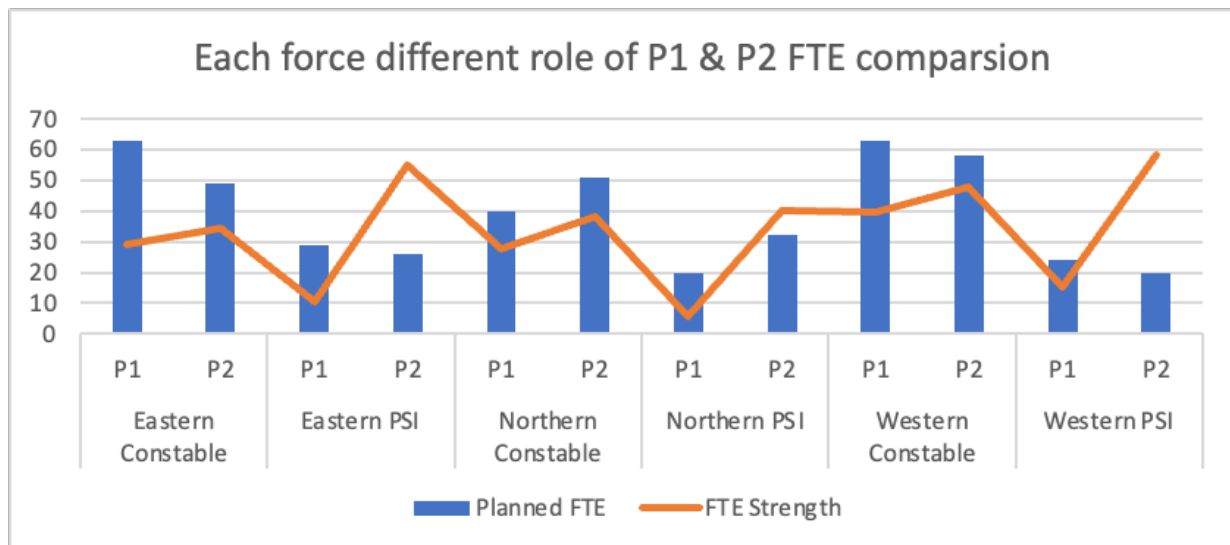


Figure 9: Bar and Line chart comparing Actual and Planned FTE strength by Rank and Region.

In every force, the P2 PSI is overstaffed with an employment rate of 211%, 125%, and 292% in the Eastern, Northern, and Western regions respectively. Conversely P1 PSIs are consistently understaffed, with employment rates of 36%, 28%, and 63% respectively. However, both constable roles have lower strength than planned, with the lowest employment rate at only 46% for Eastern P1 constables. The average constable employment rate is only 58%.

Qualitative Data Analysis

To supplement our quantitative analysis, this report provides some insights from qualitative data. Here we have compiled the results of our interview, focus groups, and online research. To organise our collected qualitative data, we extracted useful quotes and added our interpretation of them as they relate to the shortage problem. The result of this is the 'Interview Analysis' table (found in Appendix B).

In this section, we have investigated each of the key issues raised in this table through research and analysis into wider literature. Particularly useful was the 2022 'Pay and Morale' (P&M)⁶ survey conducted by the Police Federation which will be used as a secondary data source throughout this section. The issues to be discussed are broken down by the three key processes mentioned earlier (recruitment, retention, and career advancement).

Recruitment

Rapid Hiring of Unskilled Officers

The recruitment issues this report underscores is that of 'rapid hiring'. In our quantitative analysis, this report demonstrates that the RPF comprises of an excessive count of P2s. As the number of officers in the UK has been quickly increasing since 2019⁷, we have interpreted that this abundance of P2s is partially due to this rapid hiring.

Rapid hiring is the strategy of quickly onboarding employees to meet immediate staffing needs. While this offers benefits, it's not without cost. One concern, brought up by the Commissioner of the Metropolitan Police Mark Rowley, is that candidate quality is lowered⁸. Favouring speed involves reducing the effectiveness with which recruiters conduct thorough background checks, skills assessments, or cultural fit evaluations. For example, rapid hiring induces an added risk of hiring racist

⁶ (Police Federation of England and Wales, 2022) – Pg.4-6

⁷ (Clark, 2023) - Number of police officers in the United Kingdom from 2003 to 2022 (in 1,000s)

⁸ (BBC, 2022) - Metropolitan Police chief has concerns over rapid hiring of officers

or misogynist officers⁹. Furthermore, more hires would compromise the Police's ability to support and train all recruits to a high standard. This would result in suboptimal hires that do not contribute to long-term success.

Retention

The issue of low retention within the police force, as highlighted, is a growing concern¹⁰. The P&M survey reported of a further 18% of officers' intent to leave the force. This report explains the poor retention problem in terms of two key aspects.

Morale

In 2022, 56% of officers reported a low or very low level of morale⁶. This may be attributed to aspects such as:

1. Treatment of the Police - 95% and 81% of officers indicated that their morale was worsened due to their treatment by the government and public respectively⁶.
2. Higher workload - High attrition leads to changing workplace demands and constraints. This results in more work, long hours, and cancellation of leave/rest days.
3. Mental Wellbeing - 82%⁶ of participants experienced issues such as stress, low mood, or anxiety. 92%⁶ of these officers reported that their work exacerbated these issues. When asked to identify work-related factors contributing worsening their mental wellbeing, 60% stated it was due to the higher workload (see Appendix A).

A lack of morale typically involves officers being less productive. This creates 'quiet quitters'¹¹, who engage in the job to the bare minimum. Although this is not reflected directly in the retention rate, this lack of productivity increases the existing strain on officers. Furthermore, as officers seek greater workplace fulfilment elsewhere, retention rates would directly be reduced.

Pay

Many officers reported their dissatisfaction with their pay, given the challenges of their work. This reduces the retention rate as officers leave the force for more lucrative professions. From 2000-2022, officers experienced real terms pay decrease of 17%¹². Even with a recent 7% raise¹³, careers in the police are far less financially rewarding than 20 years ago. Despite this the recruitment rate is still high, suggesting that the starting salary is competitive. The problem mostly affects the retention rate, creating a shortage in higher ranks (P1s and Sergeants). This suggests a lack of pay to motivate officers to remain in the force and pursue promotions.

The problem of uncompetitive pay is likely not tractable. Police salaries are set by governmental authorities. However, this report includes pay to acknowledge its impacts on retention and the shortage problem. In future steps, the extent of the lack of pay may be analysed to determine how it might be offset by other factors.

⁹ (Syal, 2022) - Rush to recruit police officers' risks hiring racists and criminals, warns watchdog

¹⁰ (Bateman, 2023) - One in eight officers plan to leave South Yorkshire Police within two years

¹¹ (Gallup, 2023) – Defining 'quiet quitting'

¹² (Webber, 2023)

¹³ (National Police Chiefs Council, 2023)

Training

Cognitive Map

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graph TD; A[Achieve a Full Roster of Officers] --> B[Fill Vacant Positions]; A --> C[Maintain Existing Officers]; B --> D[Increase the Number of New-Hires]; B --> E[Advance more candidates to higher Ranks]; C --> F[Increase Productivity]; C --> G[Reduce Attrition]; D --> H[Increase the Recruitment Rate]; D --> E; E --> F; E --> G; E --> I[Reduce Strain on Officers]; F --> I; F --> J[Reduce Tedious Tasks]; G --> I; G --> K[Improve Pastoral Support]; H --> I; I --> L[Conduct More Training]; I --> M[Update Antiquated Processes/Technology]; J --> M; K --> L; L --> N[Improve Officers' Digital Skill]; M --> N; M --> O[Increase Officer Salaries]; O --> H; O --> I; P[Improve Police Force Reputation] --> H;
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Although this report is not attempting to solve the problem, this diagram may be useful to the reader to think of the problem in a new perspective. The map connects each constituent facets of the problem to one another to visualise its interconnections.

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ASSUMPTIONS

To conduct this investigation, the listed assumptions were decided on to make the problem more tractable.

- Officer ranks above P2 cannot be hired. As a lot of the UK police is suffering from a lack of personnel, we assumed that hiring P1s from outside the force is not possible.
- The HR data provided is representative of typical HR statistics. As only 1 set of data is provided, this study assumes that the data is not anomalous.
- For ease of research and consistency, RPF is assumed to be based in England or Wales.
- This report assumes there is no additional context behind vacant positions in the force. These positions being empty may be due to a leave of absence, illness, etc.
- As no performance metrics were provided for individual officers, the quality or work capacity of officers is assumed uniform within their ranks.

NEXT STEPS

Given a limited access to data pertinent to the issue, this initial investigation is very limited. To develop our investigation, we have outlined a few requests for data below that are relevant to this analysis.

1. Requesting **historic HR data for officers.** This would allow the team to assess trends (e.g., if the situation is worsening) and measure the retention and recruitment rates. This would also allow the team to train a forecasting model to make predictions for future strategies.
2. To help further analysis, the team requests **insight into the hiring and training process.** This would allow the team to identify areas of friction that are inhibiting the ideal career advancement of officers. Furthermore, this would improve the accuracy of the model by adding additional constraints.
3. Requesting **comparative data from similar police forces.** Given enough samples, we could develop a hypothesis test to test whether the RPF is representative of the UK police force population.
4. **Geographical data of officers** would also be valuable in assessing how officers might be reallocated within the force with minimal disruption to their travel time.
5. To conduct an optimisation for variables such as salaries, our team needs to discuss the **constraints to the problem** (e.g., financial, labour supply, government regulation) that the RPF faces.
6. Requesting **performance metrics and police statistics** (such as crime rates) for the region, we might be able to conduct a further optimisation on the ideal number of police officers for the RPF.
7. Finally, further data should be collected to understand **why officers are choosing to leave** the force and where they are choosing to work instead.

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Appendix A: Table of Workplace Factors Straining Officers' Mental Wellbeing

Reasons for stress, low mood, anxiety, and other difficulties	Proportion of respondents identifying this as a factor negatively impacting mental health and wellbeing
My workload was too high	60%
I had a poor work/life balance	49%
I was working shifts	38%
I could not take leave when I wanted/needed to	36%
There was too much change in our team unit	28%
Uncertainty regarding my future role or career	27%
Attending traumatic and/or distressing incidents	26%
My rest days kept being cancelled	20%
I had a poor relationship with my line manager	16%
I was single crewed too often	14%
My colleagues were unsupportive	7%
I was being discriminated against	6%
I was being bullied/harassed	5%
I was going through disciplinary procedures	3%
I was under investigation by the IOPC	2%
I was placed on UPP (Unsatisfactory Performance and Attendance Procedures)	1%

Figure 11: Table showing the Proportion of Survey Respondents identifying various factors as impacting their Mental Wellbeing.

Appendix B: Interview Analysis Table

Interview quotes	Interpretation
Many jobs may and should be automated to save time and prioritize important duties.	Based on the insights generated from the data analysis, the quote shows that automation can be a valuable tool for addressing workforce imbalances, enhancing efficiency, decreasing expenses, and facilitating training and retention activities. It promotes the use of technology to streamline and optimize personnel management to ensure that resources are deployed where they are most required.
Lack of coaching is given to P2s due to heavy workload	The forces are rapidly hiring at the P2 level, but these individuals are not progressing to the P1 level, and there is understaffing at the P1 level, implying a problem with maintaining experienced troops. This may have an impact on the quality of mentorship and assistance available in the organization, potentially compromising the overall performance of forces.
Need more right hires, not P2s	The data supports the notion that there is a personnel imbalance, with an overemphasis on P2 responsibilities, which should be corrected by employing workers at the right grade levels, such as P1s, where there is a clear shortage.
Involving personnel in the entire recruitment process, beginning with defining the skills needed for the future of policing.	The recruitment procedure should engage many people to select qualified specialist officers based on different people's perspectives. This approach is used in the Western Force, which may also be contributing to its relative improvement.
Lack of technological advancement reduces our efficiency in various aspects	This quote indicates that there is a lack of efficiency implications such as inaccurate forecasting, manual data processing, and inefficient resource allocation, and lack of decision-making requires a technological solution to address these challenges.