

WMP Briefing Paper

Productivity Dashboard

Ethics Committee (04/06/2025)

This project is at the proposal stage and is presented to the committee 'in principle' so that any immediate concerns can be raised.

The finer details of the methodology, exact data to be used and mode of communicating the results will not be determined until after the exploratory data analysis (EDA) phase has been completed.

Once the analyses have been completed the project will be presented to the Committee again so that the data used, methodology, findings, intention for deployment and communication plans can be examined in more detail.

Legal opinion has been sought and the Data Protection Impact Assessment (DPIA) is being reviewed by the Force Data Protection Officer (DPO).

Tasking

The Performance Data Improvement (PDI) Project aims to improve the quality of data available to the workforce, supporting in the effective monitoring and managing of the performance of West Midlands Police. A Performance Dashboard will be designed and created to track the productivity and availability across West Midlands Police teams and individual employees.

Purpose

The Purpose of the Productivity Dashboard is to provide data on the output of WMP officers while also providing important contextual information on their availability and deployability.

The productivity metrics aim to provide information around how people are contributing at work and aims to include response times, incidents attended, visibility, arrests, stop & search, use of force, PIRs submitted, total outcomes and positive outcomes (that is outcomes 1-9 and 22).

The availability metrics aim to provide information on what factors to take into account when assessing productivity and will include attendance, annual leave, other leave, restrictions, length of service, PSD standards, critical training, core skills and vacancy rates.

It is suggested that productivity is shown as a total of each area and availability is calculated as a score based on officer eligibility to be deployed, work availability and suitability for deployment.

To check if an officer is deployable, the officer must be on duty with valid training and if they are a student officer, be assigned to a senior officer. From here, work availability will be calculated based on an officer's expected shift with decrease of planned absence or slight fixed reduction in availability if they

are a supervisor of a student officer due to the additional responsibilities. Shift length will also be considered in this score calculation to ensure a fair score based on shift length.

It is proposed that this availability score is ranked for officers to give an officer a TOPSIS score (Technique for order of preference by similarity to ideal solution) to determine how close they are to the ideal (fully available, fully trained, no supervision) and the worst case deployable officer (off duty, lacks training, supervising a student).

These metrics have been refined through internal stakeholder engagement across a range of ranks and departments, centring around the interactions that are most consistently required across the organisation as a warranted officer.

The Productivity Dashboard will provide insights to help first-line leaders and Command Teams identify areas for improvement, support data-led WMP conversations (part of the annual performance assessment process at WMP) and ensure that officers are supported in their professional development.

The Productivity Dashboard will include the following key features:

- Daily tracking of individual, team, and departmental productivity for police officers (police staff are excluded from productivity metrics at this stage of the project)
- Automated collection and presentation of performance metrics from WMP source systems.
- Visualisations of individual, team, and department level performance
- Feedback mechanisms for continuous improvement

Employees will have access to their own performance data, with transparency regarding how their performance is being measured.

The Productivity Dashboard will be managed via Section Access to provide sensitive information to the relevant individuals only. All 'availability' data will be restricted to the individual, their first line leader and their chain of command.

'Productivity' data will be visible to all individuals across the organisation who have access to the Productivity Dashboard to support bench marking and to create an open performance culture.

At this stage of the project, productivity metrics are only relevant to officers. Police staff will be able to access information on their own availability data and the availability data of their direct reports.

Context¹

The Productivity Dashboard builds on the success of the Investigations Dashboard, released in July 2025, which saw thousands of users across the force interact with performance data at a scale not seen by WMP before.

The Productivity Dashboard will use the same design principles and templates developed to ensure familiarity and ease of use.

To test whether the project has met one of its objectives around providing a better user experience, a survey was offered to users of the Investigations Dashboard in October 2024 which found users perceiving the Investigations Dashboard as having a positive impact on the supervision and daily management of investigations, having a positive impact on efficiency and service to the public. Overall,

¹ See the Medium Term Financial Plan for detailed breakdown: [Agendas, Minutes & Reports - West Midlands Police & Crime Commissioner \(westmidlands-pcc.gov.uk\)](#) (Strategic Police and Crime Board Oct 2022 Agenda Item 6 – Medium Term Financial Plan)

there was an increase from baseline surveys in user satisfaction, including a 31% increase on 'ease of use'.

We asked users whether they thought the Investigation Dashboard would improve things across 4 key areas:

- Supervision of Investigations, where 78% thought the dashboard would have a positive impact
- Efficiency, where 58% thought the dashboard would have a positive impact
- Daily Management of Investigations, 68% thought the dashboard would have a positive impact
- Service to the Public, 60% thought the dashboard would have a positive impact

Feedback from users was positive with many users providing unsolicited feedback during its implementation during the go live and embedding period.

The Productivity Dashboard builds upon the project work already undertaken to provide our people with meaningful information about our goals and our progress towards them, supporting supervisors and leaders across the organisation.

Consultations for dashboard development have taken place with various stakeholders within West Midlands Police including 46 individuals over various police officer ranks and police staff grades culminating in 102 metrics which were further narrowed down to 19 for detailed design which was then briefed to senior leaders.

Consultations also included those from our Diversity and Inclusion department, HR Managers, Professional Standards. User led design workshops and prototype demos took place with SMEs which included the chair of our Neurodiversity network.

An Equality Assessment has been conducted on this project and anywhere any negative impact has been identified, mitigation has been proposed and implemented where possible.

Intended activity resulting from the project

This project supports the Force priorities of providing a service that works for local people and becoming an employer of choice through delivering timely responses and through prioritising investment in our officers and staff.

The desired output is a Business Insight (Qlik) dashboard to assist in the monitoring of productivity and accessibility of our officers.

The Productivity Dashboard aims to enable our leaders to make data led decisions to improve performance and responses to incidents and ultimately to actively help the public.

The measures in the Productivity Dashboard will be reviewed as part of our corporate performance monitoring process. The project closure report will also recommend that the Data Lab conducts a review of the Productivity Dashboard 12 months following implementation.

Ethical considerations

N/A

Data

Data to be used:

Any other Force systems which give information about either demand or WMP resources – likely to include:

- MyTime
- Fusion
- Connect
- Control Works
- Centurion

Level of analysis:

☒ Individual

Individuals aggregated?

☒ Yes

☐ No

☐ Specific Area:

☐ Output Areas

☐ Super Output Areas - Lower

☐ Super Output Areas - Mid

☐ Wards

☐ Districts

☐ West Midlands

☐ Other (type of crime)

Reliability of data:

An extensive exploratory data analysis (EDA) phase will be undertaken to examine the extent of any data quality issues. The data comes from standard WMP data sources which are routinely used in DAL projects and known data quality issues are accounted for.

Sample or entirety:

If sample:

Method of sampling: N/A

Method of choosing sample size: N/A

Sample size: N/A

Type of analysis:

☐ Exploratory

☐ Explanatory

☐ Predictive

☐ Optimisation

☒ Dashboard

Proposed methodology:

1. Data identification and use in key performance indicators (to be developed as part of the project)

Will the project eventually be automated:

☒ Yes

☐ No

Means of evaluation:

ALGO-CARE considerations

As this project is at the proposal stage and is presented to the committee 'in principle' in order that any immediate concerns can be raised, the finer details of the methodology will not be determined until after the EDA. Once the analyses have been completed the projects will be presented to the Committee again so that findings and methodology can be examined in more detail.

Advisory	
If applicable, are the outputs from the algorithm to be used in an advisory capacity?	The output would be advisory. The intention is to view productivity and availability of officers.
Does a human officer retain decision-making discretion?	Yes, information would be considered in conjunction with other information.
What is the policing purpose justifying the use of the algorithm (means and ends)?	n/a
Is the potential interference with the privacy of individuals necessary and proportionate for legitimate policing purposes?	n/a
In what way will the tool improve the current system and is this demonstrable?	n/a
Are the data processed by the algorithm lawfully obtained, processed and retained, according to a genuine necessity with a rational connection to a policing aim?	Whilst not an algorithm per se the data are to come from systems that are used on a day-to-day basis by WMP.

Is the operation of the tool compliant with national guidance?	n/a
Does the algorithm make suggestions at a sufficient level of detail given its purpose and the nature of the data processed?	n/a
Are data categorised to avoid broad-brush grouping and results and therefore issues of potential bias?	n/a
Do the potential benefits outweigh any data quality uncertainties or gaps?	n/a
Is the provenance and quality of the data sufficiently sound?	n/a
If applicable, how often are the data to be refreshed?	n/a
If the tool takes a precautionary approach in setting trade-offs, what are the justifications for the approach taken?	n/a
Ownership	
Who owns the algorithm and the data analysed?	West Midlands Police
Does WMP need rights to access, use and amend the source code and data?	No
Are there any contractual or other restrictions which might limit accountability or evaluation?	No

How is the operation of the algorithm kept secure?	The data and any analyses are contained wholly within WMP system and security measures employed therein.
What are the post-implementation oversight and audit mechanisms, e.g. to identify any bias?	n/a
If the algorithm is to inform criminal justice disposals, how are individuals notified of its use?	n/a
Accuracy	
Does the specification of the algorithm match the policing aim and decision policy?	n/a
Can the accuracy of the algorithm be validated periodically?	n/a
Can the percentage of false positives / negatives be justified?	n/a
How was the method chosen as opposed to other available methods?	n/a
What are the (potential) consequences of inaccurate forecasts?	n/a
Does this represent an acceptable risk?	n/a
How are the results checked for accuracy and how is historic accuracy fed back into the algorithm for the future?	n/a

How would inaccurate or out-of-date data affect the result?	n/a
Responsible	
Would the operation of the algorithm be considered fair?	n/a
Is the use of the algorithm transparent (taking account of the context of its use), accountable and placed under review?	n/a
Would it be considered to be used in the public interest and to be ethical?	n/a
Is information available about the algorithm / decision-making rules and the impact of each feature?	n/a

Appendix 1: Glossary of Terms

WMP / Law Enforcement Terminology	
DAL	Data Analytics Lab
HR	Human Resources
WMP	West Midlands Police

Data Science Terminology	
ALGO-CARE	All projects have used the ALGO-CARE to consider ethical implications: Advisory, Lawful, Granularity, Ownership, Challenge, Accuracy, Responsible, Explainable
EDA	Exploratory Data Analysis