Revitalising West Midlands Town Centres and High Streets:

A Comprehensive Assessment of Footfall Data Collection

January 2025

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Executive summary

This report assesses the current state of data collection for town centres and high streets within the West Midlands Combined Authority (WMCA) area, with a particular focus on footfall data. It emphasises the significance of this evidence as a foundation for strategic planning and service delivery for revitalising our town centres and high streets. The report identifies the diverse methods used for footfall counting, ranging from manual clicker counts to advanced mobile app data, and discusses their respective advantages and limitations. It highlights the inconsistency in data collection and usage in the West Midlands, which leads to a poor understanding of its high streets. By establishing a peer network of high streets officers to understand the needs of local authorities and Business Improvement Districts (BIDs), and exploring the option of pooling budgets, there is an opportunity to develop a more unified approach. This approach would enable the West Midlands city-region to procure a region-wide footfall counting solution, providing a comprehensive understanding of its town centres and high streets.

Purpose

This report sets out the current evidence base around data collection for town centres and high streets in the West Midlands Combined Authority area (i.e., the West Midlands metropolitan area) with a focus on footfall data. It also sets out the recommendations for transforming and improving the evidence base as a foundation for strategic planning and service delivery for revitalising our town centres and high streets.

Background

Town centre and high street data is used to inform activities including strategy development, service design, funding proposals, and monitoring and evaluation across a range of service areas including transport, regeneration, business support, Culture, Night-Time and visitor economy. It is seen as an important – though not panacean – performance indicator with a broad set of applications.

Methodology

This report is informed by a workshop held by the West Midlands Combined Authority and Office for National Statistics (ONS) Local on 18 October 2024 with local authority and partner organisation stakeholders on town centre and high street footfall data with support from the Local Policy Innovation Partnership Hub at University of Birmingham. A full set of attendees is listed in Appendix 1 – Workshop attendees and contributors on page 14. A further workshop was held on 29 November with officers representing the region's Business Improvement Districts (BIDs) to determine how their high street and footfall data needs may be best met.

Footfall counting methods

Various manual and digital methods are used to produce footfall data, at different levels of sophistication, reliability, and cost. The main methods are sensor-derived footfall counts (e.g., infrared, laser, optical cameras) and samples based on mobile phone data (e.g., cell tower triangulation via network operators, or assisted-GPS data collected through mobile apps). Costs vary significantly between different options, with costs of around £8k-£10k to cover a single area, although there can often be significant economies of scale using mobile-based data. The table below sets out a comparison of the main footfall counting methods.

Method	Description	Advantages	Disadvantages
Manual clicker	Manual 'clicker' counts of people entering or leaving an area.	High degree of accuracy.	Labour intensive, cannot scale; cannot provide details of where people have travelled from, demographics data, and importantly, rarely provides dwell time.
Survey-based	Survey-based travel and visitor surveys.	Can gather further important data on socio-demographic characteristics and spend.	Potentially labour intensive and/or subject to response rate limitations.
Sensor – infrared or laser or optical	Infrared, laser, or optical cameras counting visitors crossing a pre-defined line, in each direction; or car parking counts.	High degree of accuracy.	High capital infrastructure costs – set-up and ongoing maintenance; difficult to scale to multiple locations; rarely provides dwell time.

Method	Description	Advantages	Disadvantages
Sensor – optical image recognition	AI-based optical image recognition on traffic or CCTV cameras to count people.	Lower capital costs as builds on existing infrastructure.	Footfall counting requires cameras to remain static, which often contradicts CCTV usage which require pan/tilt/zoom functionality. Poor accuracy when there are too many people for optical capture.
Mobile cell towers	Using cell tower triangulation data from mobile phone companies.	No capital outlay – relies on existing infrastructure; reduces double-counting of individuals; potential to establish dwell times and customer profiling.	Low level of accuracy at hyperlocal geographies (e.g. street level) or when mobile networks are saturated (e.g. major events).
Mobile apps	Data collected from data aggregators repurposing data collected through mobile apps installed on smart phones.	No capital outlay – relies on existing infrastructure; reduces double-counting of individuals; potential to establish dwell times and customer profiling.	Low level of accuracy at hyperlocal geographies (e.g. street level) or when mobile networks are saturated (e.g. major events). Data is often modelled. Privacy concerns – reliant on often unclear mobile app licensing terms and conditions.

Current context in the West Midlands

All seven constituent local authorities of the WMCA use footfall data. It is also an essential evidence base for the private sector, in particular, Business Improvement Districts (BIDs). However, there is no consistency in how footfall data is collected, analysed, used, or shared.

Financial constraints prevent the optimal use of footfall and related data (e.g. transport, consumer spending) in organisational decision making. Both the cost of producing or procuring data and of resourcing sufficient analytical capacity are seen as impediments despite the recognised utility of footfall data across multiple service areas. Procurement decisions are often driven by cost only, rather than value for money. For budgetary reasons, no local authority is planning to renew their existing footfall data contract, nor replace the current solution with an alternative.

Footfall data sharing is not currently standard practice across organisations. Exchanging information was seen as an opportunity to add value – through contextualising local data and facilitating benchmarking – and to potentially save cost. The lack of a common methodology though led to concerns that incompatible methods would lead to incomparable results, undermining the potential value of data sharing. There was also concern around securing permissions from data providers.

Apart from footfall data, BIDs held varying degrees of local data including parking utilisation, social media engagement metrics, levy payer surveys, vacancy rates, retail mix, and warden-collected anti-social behaviour data. The exact data mix varied significantly depending on the size of and funding available to each BID. Further details are set out in Appendix 2 – Current access to and use of footfall data on page 15.

Future of footfall counting

Local authority representatives proposed the opportunity for a peer / user network was proposed to support cross-organisational sharing of market research, practices, systems, and data, and to advocate for the use of and access to both footfall data and wider town centre and high street data such as vacancy rates, air quality, and retail and hospitality employment. Cross-organisational working was seen as a long time coming and an opportunity to both recognise common challenges and to progress project-based work to resolve them.

Workshop participants considered what the minimum acceptable, intermediate, and maximum envisaged scope for footfall counting could look like in the West Midlands. As a minimum, there should be reliable, sharable daily unique visitor counts suitable for trend analysis covering at least one large area per constituent authority and dating back three to five years; reported as a document, spreadsheet, or dashboard; with access to technical / analytical support from the supplier. This would ideally be available in line with the first multi-year integrated settlement (from April 2026), through a joint procurement by bringing funding together.

The maximum envisaged scope, in contrast, will include unique visitor counts with further attributes including visit time, duration and purpose; transactions by vendor; and visitor origin, movement pattern, travel mode, and socioeconomic / demographic characteristics covering every identified centre in the region, precise to the level of an individual property, dating back 15 years; reported at one minute intervals via a live API feed into in-house analytical platforms, with results benchmarked against socioeconomically and geographically comparable locations both regionally and nationally. As with the minimum acceptable product, there will be a need for joint technical / analytical support. A full discussion of all three options is set out in Appendix 3 – Defining options for the future on page 20.

Alongside footfall data, BIDs sought other auxiliary high street data including spend, crime rates, council-owned parking, property ownership, business mix and profitability, transport, hotel occupancy rates; non-domestic rate-payer, rateable value, retail/commercial lettings, and home working/office working data – ideally presented as comparative reports (monthly or quarterly) with access to dashboards; alongside better notifications for planning and licensing applications and roadworks.

Options for consideration

The following sets out various options for the future of footfall counting in the West Midlands:

Option	Description	Advantages and Opportunities	Disadvantages and Risks
Do nothing			No economies of scale nor alignment – meaning that the region will have no consistent or comparable understanding of its high streets. Continued budgetary pressures will mean that existing data will become more and more limited.
Peer network / officers' group	Convene a peer-to-peer network or group of high streets officers to explore the most pressing research questions needed by our high streets, explore joint procurement, and pilot potential data solutions.	Explore joined-up solutions meeting the needs of local authorities and BIDs.	

Option	Description	Advantages and Opportunities	Disadvantages and Risks
Engagement with ONS Local and Mayoral Data Council	Continuing to engage with ONS Local to ensure the region can make best use of existing ONS resources and is able to advocate for local needs to be catered for in future ONS analytical activity; engage with emerging Mayoral Data Council to bring national attention to the evidence required for high streets and town centres.	Helps the region better articulate its data needs at a national level.	The WMCA already engages significantly with ONS Local, and this does not significantly move us from the current as-is position.
Repurposing of mobile phone data	Exploring the extent to which existing WMCA-held and ONS-held mobile phone data can be repurposed for 'hyperlocal' town centres and high streets footfall monitoring.	Repurpose existing data at minimal costs to meet the needs of local authorities and BIDs.	The mobile phone data currently available to stakeholders is minimal and covers short time periods, rather than the more significant data available to mobile phone companies and other data brokers – meaning that this is unlikely to meet the needs of the WMCA area for dwell-time and other data.

Option	Description	Advantages and Opportunities	Disadvantages and Risks
Pool budgets	Pool all footfall counting budgets across the West Midlands combined authority area. This could be used to procure a single solution that meets the needs of the region, or to develop a team capable of meeting the high streets evidence requirements for the region.	Economies of scale, alignment, opportunity to develop a comprehensive, consistent, and comparable understanding of the region's high streets.	Reducing budgets create a threat to the sustainability of this model without additional, sustained future funding; risk of incomplete picture if there is partial buy-in – compounded by the significant differences in size and scale of each BID.

Recommendations

Doing nothing is not an option – budgetary pressures mean that the region's current, incomplete and inconsistent picture of its high streets and town centres can only worsen. This means that not only will the West Midlands continue to have no consistent or comparable understanding of its high streets, but it will only get worse.

The solution is for there to be sufficient resources to invest in a unified approach whereby the region can procure a region-wide footfall counting solution providing a comprehensive understanding of the region's town centres and high streets; or to develop a team capable of meeting the evidence requirements for the region's town centre and high streets. This will require sufficient buy-in from stakeholders, in particular, all the region's local authorities and business improvement districts. There are risks in this long-term solution given the budgetary challenges, potential risk of only partial buy-in, and continued underinvestment in this area.

The interim solution, therefore, is to establishing a peer network where the needs of local authorities and business improvement districts in the region are better understood; and where the needs of the sector can be better articulated, whether it is in the repurposing of existing data at a regional level such as mobile phone data, or engagement with ONS Local and the Mayoral Data Council, or in the exploration of more comprehensive approaches such as pooling budgets.

Next steps

The WMCA will be establishing an external High Streets Officer Group which will consider this and other data collection as part of its wider strategic remit. The group will be tasked with working up the options for consideration into a costed paper / resource ask so that these options can be more fully articulated.

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Appendicies

Appendix 1 – Workshop attendees and contributors

18 October workshop with local authorities

The town centres and high streets footfall data workshop was attended by policy and analysis colleagues from across the region. A wide range of services were represented including tourism, regeneration, economic growth, placemaking, transport, and night-time economy. We are grateful for the generous contribution of time and knowledge that each participant made.

Organisation	Representative
Birmingham City Council	
City-REDI, University of Birmingham	Anne Green, Maryna Ramcharan
Colmore Business District	Jonathan Bryce
Coventry City Council	Thomas Evans
Dudley Council	Zoe Gmaj, Jacki Lakin
The Economic Intelligence Unit	Christopher Styche, Megan Boerm
Sandwell Council	Chad Smallman, Rina Rahim, Emma Parkes
Solihull Council	Sarah Ashford, Lauren Amery
Transport for West Midlands	Kiran Bal
Walsall Council	Valdheer Rajania
City of Wolverhampton Council	Raeesa Mohammed
West Midlands Combined Authority	Christian Sayer
West Midlands Growth Company	Shannon Chu

29 November workshop with business improvement districts

- Christian Sayer (WMCA)
- Tom Burton (WMCA)
- Si Chun Lam (WMCA)
- Philip Nelson (WMCA)
- Lisa Hill (West Brom BID)
- Jonathan Bryce (Colmore BID)
- Julia Robinson (Southside BID)
- Matthew Powell (Kings Heath BID)
- Marcia Greenwood (Northfield BID)
- Rakesh Soni (Soho Road BID)
- Cherry Shine (Wolves BID)
- Luke Crane (JQ BID)
- Kim Hulse (Visit Knowle)

Appendix 2 – Current access to and use of footfall data

Overview

Workshop participants answered a series of questions on their experience with footfall data: whether and how they have put it to use, what sources of footfall data they were familiar with, the scale of resources required for this activity, and how widely they disseminate their data or analysis. This appendix summarises their responses and the wider discussion this prompted.

Access to and use of footfall data

Purpose of gathering footfall data

Every constituent authority either has or recently had access to some extent of town centre and high street footfall data. It is put to a wide range of uses:

- **Corporate** – To monitor service KPIs, to design services
- **Collaboration** – To provide information to other service areas and partners such as BIDs
- **Strategy** – To inform strategy development incl. economic strategies and visitor strategies, to validate or challenge perceptions using evidence, to analyse trends in use, to benchmark performance, to plan interventions, to justify new projects
- **Economy** – To target business support activity, to tailor marketing campaigns, to assess the impact of events, to inform economic health assessments, to understand an area's role within the wider economy, to inform economic modelling, to monitor the return of activity post-Covid
- **Transport** – To count foot traffic, to evidence the impact of active travel projects, as in input for transport modelling
- **Regeneration** – To quantitatively measure the success of regeneration projects
- **Investment** – As in input for funding applications, for reporting to MHCLG on grant-funded projects, to inform investment decisions

Sources of footfall data

A range of methods and products for tracking town centre and high street footfall are in use across the region:

- Traffic cameras / counters – incl. Vivacity and UTC
- Visitor counters – incl. MRI Springboard, event attendance, and car park / shopping centre usage
- Travel and visitor surveys – incl. STEAM tourism economic impact model
- Mobile network and app data – incl. Place Informatics, Huq, Google Mobility, Strava Metro, and BT/EE

Some products provide footfall count data with additional attributes such as age and gender, journey purpose and mode, dwell time, and time of day. Others provide volume, density, and dwell time, or count data only. Users preferred count data with demographic etc. characteristics.

A recurring issue was the need for a well-established baseline so year-on-year comparison can be used to understand newer data points. Procuring products with no historic baseline requires a level of foresight and lead in time that is not achieved in reality.

In several cases, footfall data is used alongside transport data and consumer spending / transaction data. Some participants could not fund their preferred range of data types.

Methodological concerns were raised about both footfall counter and mobile phone generated data:

- Fixed position footfall counters were seen as useful but only capable of providing 'rough' estimates of activity levels. There were multiple reports of counters frequently going offline and producing irregular results.
- Individual counters are considered to both underestimate total footfall across an area and to overestimate unique visitors. Clusters of counters are considered prohibitively expensive.
- Counter results also fell short of the level of information desired by many authorities, including the demographic and socio-economic characteristics of visitors, and their dwell time, visit purpose, and origin.
- Mobile data is produced on a broad area basis rather than from lines of sight from fixed points. The shortcomings of this solution include misidentification risks where passengers of slow-moving vehicles are recorded as pedestrians, over extrapolating results from undersized or unrepresentative samples, and insufficient geographic resolution. For example, TfWM's otherwise sophisticated BT/EE mobile network data is not considered granular enough for town centre and high street footfall analysis.

Analytical capacity and use in decision-making

Participants generally desired greater access to footfall data and a greater role for it in decision making. This was caveated with the need for additional analytical support and buy in from organisational leaders. One participant suggested that improving town centre and high street footfall should be a strategic objective in its own right.

While some users review footfall data periodically, in other cases the data is not routinely monitored. It is often used when a specific need arises, such as impact assessment. There was appetite for more analysis of footfall data and more use of footfall analysis in decision making, subject to greater availability of high-quality analytical resource.

The extent to which organisational leaders are bought in to the use of footfall data in decision making varies. Some use it to support their ongoing strategy development and as a measure in support of their strategic objectives. Others do not factor it into their priority setting. The pressure to focus on delivery activity over the achievement of strategic objectives was seen as a barrier to the greater use of footfall data by organisational leaders.

Several participants felt that footfall data was underutilised in their organisation, despite its applicability across a range of service areas. It was noted that wide interest across different service areas, including transport, inward investment, culture, tourism, etc., in fact made it harder to fund access to footfall data as individual teams were not willing to shoulder the cost for other users.

Several authorities report insufficient analytical capacity to make best use of footfall data. Policy audiences need the data to be 'interpreted and translated' before it can be used effectively in decision making. This work is considered to be time consuming and requiring a specific skillset, entailing additional resources beyond procuring the data source itself.

One officer reported their concern over their upcoming loss of access to footfall data. While footfall data was considered important for their work and to their organisation's leaders, financial considerations meant that a 'difficult decision' had been taken to discontinue footfall monitoring.

Cost and funding

The cost of accessing footfall data has been the most important factor in procurement decisions. In many cases, it was the only factor. Participants reported having no alternative but to select the lowest cost provider, even where other options were preferred. This was attributed to funding constraints – other relevant characteristics such as quality, utility, and value for money were not able to be taken into account.

Several authorities are coming to the end of three-to-five-year contracts with footfall counter providers. This option is reported to cost £2,700 - £3,300 p.a. per footfall counter, excluding the cost of installation. Counters are typically used in clusters so the total annual cost per authority has been £10,000 - £25,000 to cover one or two locations.

There are no cases where a footfall counter contract is going to be renewed, mostly on cost and funding grounds but in one case due to dissatisfaction with the methodology. One authority was planning to replace their footfall counter contract with a mobile data solution, but this fell through when the activity was reclassified as non-essential during a spending review.

Newer mobile-derived solutions varied in cost between £8,000 - £10,000 p.a. to cover one to five broad areas. A non-live 'data dump' covering the West Midlands region at an LSOA level was purchased for wider transport purposes at a one-off price of £80,000.

VivaCity traffic sensors are also in use across the transport system, at a cost of £1,700 p.a. per location. Further to this, some online platforms can be free to approved transport partners, though one was recently discontinued.

Activity undertaken in house and manually has no specific budget but does entail an uncalculated opportunity cost.

As current contracts expire, several local authorities will no longer monitor town centre and high street footfall in any location due to a lack of funding for either renewal or an alternative.

Scope for joint working

Sharing data across organisations

There is not currently universal footfall data sharing across organisations. WMGC share visitor attraction data with LAs and TfWM share BT/EE mobile network data with LAs and universities.

There was a consensus around the value of sharing footfall data across organisations. Having access to a wider information set was seen as beneficial for contextualising what would otherwise be local data points viewed in isolation. The opportunity to compare footfall data across locations would provide an understanding of common trends and the regional backdrop for changes at the local level. Consequently, the main benefit of data sharing was seen as the ability to benchmark local performance against nearby and similar comparators.

Given the commonalities in need observed by the participants, co-operation between authorities as well as university and BID partners was seen to avoid unnecessary duplication. Some participants called for data sharing to be the norm.

Several practical challenges to sharing footfall data were raised:

- Firstly, with different methods and products in use across the region, simply exchanging data wouldn't be 'comparing apples with apples'. Incompatible methods produce incomparable results. This was seen as undermining the option to report upwards to create a regional picture. It was pointed out that effective benchmarking requires a common methodology or a single approach to footfall measurement.
- Secondly, both accessing data held by other organisations and sharing data with third parties were seen as difficult. License terms and conditions, securing permission from data providers, the absence of formal sharing mechanisms, and concerns about uncontrolled disclosure were all given as barriers to data sharing.

Several participants suggested that a joint or coordinated future procurement could resolve such issues. Others favoured maintaining a level of autonomy alongside any regional footfall data solution.

Awareness of use cases and technical solutions

Participants sought a peer network to share ideas, practices, and systems as well as data. This included knowledge of good and bad footfall data use cases and good and bad experiences with different technical solutions and data providers. This was likened to a market research exercise that

would support officers to understand the characteristics and suitability of the available commercial options and their associated costs.

Several authorities proposed that the discussions initiated at the workshop should continue and be allowed to evolve and mature through a footfall data user network or working group. This cross-authority group would take forward the proposals around data sharing and seek buy in from local authority data and insights groups and senior leaders, as well as from the combined authority. It would also consider best practices from outside the region, such as at other combined authorities.

It was also suggested that future efforts could go beyond footfall data sharing, bringing different types and sources of data together to 'strengthen the picture'. This included vacancy and commercial spend data, retail, hospitality, and leisure employment, and air quality reports, as well as public transport data that would support trip chain and catchment analysis.

Appendix 3 – Defining options for the future

Overview

The following options were generated by workshop participants working to a scope ranging from receiving no additional resources to working with no resource limitations. The first section provides a product specification to assess any proposed solutions against. The second section considers the actions required to implement a change.

Functionality of footfall data

Scope	Minimum acceptable scope	Intermediate scope	Maximum envisaged scope
Tracked variables	Manually or digitally counted levels of footfall, preferably unique visitors Reliable, accurate results that produce consistent figures over time for the purpose of trend analysis	Plus: timestamped counts, purpose of visit, dwell time, and spend data incl. number and value of purchases and vendor details	Plus: origin and travel mode data, granular movement tracking via mobile phones, aggregate pattern of movements, socioeconomic and demographic characteristics of visitors

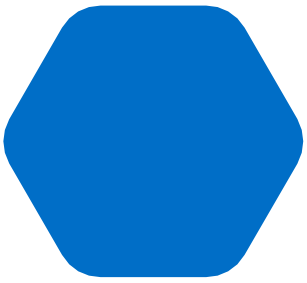
Data resolution, benchmarking, and reporting	Unique visitors to a single large area in each constituent authority, such as the primary centre, an LSOA area, or the entire administrative geography Reportable periodically – daily, weekly, monthly – or on request, as a document, spreadsheet, or dashboard Historic data dating back three to five years Either no benchmarking against comparator locations or potential to compare with existing footfall data being generated across WMCA area	Multiple areas per authority, either wards or all major centres plus district centres where high priority Regular measurements in each target location at sub-LSOA scale – hourly, daily, weekly, monthly Historic data dating back at least five years to capture pre-pandemic baseline Ability to compare a location's performance against socioeconomically and geographically comparable locations as well as national trends *Participants were evenly split on whether additional reporting formats should be considered a moderate or ambitious proposal*	Real time data captured at one-minute intervals for very small areas – i.e. individual properties or 10m2 areas – or individual streets across all tiers of centres Historic data dating back c. 15 years. Ability to compare a location's performance against similar locations in neighbouring authorities as well as nationwide benchmarks for all types of centres In addition to document, spreadsheet, and dashboard reports: Access to a platform to generate own reports and for exporting raw data for own analysis; Available via a live API feed into own analytical products
Contract particulars	Access to low-cost support on technical matters and use of system	Ability to share data on a case-by-case basis	Methodologies and T&Cs should support benchmarking and data sharing activity

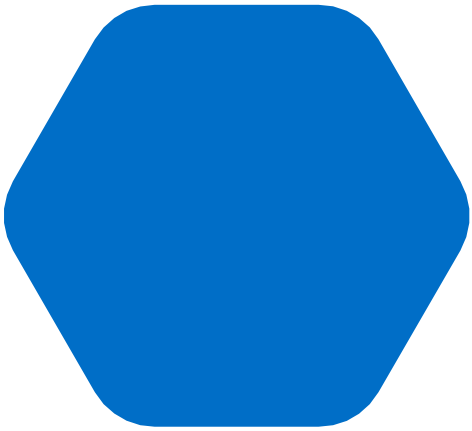
	Ability to share data across authorities, at least in limited cases		

Implementing a footfall data solution

Scope	Minimum acceptable scope	Intermediate scope	Maximum envisaged scope
Timeframe for implementation	Procure a solution for 3+ year period starting in 12 – 18 months' time (tied to two-year Integrated Settlement process)	Procure a solution for a 4–5-year period starting in six months' time (tied to single-year Integrated Settlement process)	Immediately procure a rolling three-month pilot to be reviewed quarterly
Implementation process	Start sharing data across authorities, supported by CA analytical teams, and work together to share knowledge and experience Either make use of existing data sources despite a lack of consistency or secure consistency across authorities through use of a single system and reporting process, jointly procured	Work together as partners to share data, potentially pooling data in a shared repository and sharing the cost of data access and analytical resource where possible Either develop in house solutions – facilitating continuous improvement and long-term cost savings – or share cost and ensure consistency through a joint procurement, where timelines align	Work together as a partnership group, agreeing what data to collect and share, ensuring consistent methodologies across authorities, and providing resources to support the analysis and use footfall data Either jointly procure a single, centrally managed solution or individually procure from a joint framework of suitable commercial solutions according to organisational requirements Enabled by joint analytical support – including from EIU and ONS – and joint funding pot

Decision making and funding	Funding limited to underspend available from existing projects	Pool data, analysts, and funding to achieve economies of scale	Move away from interim and short-term solutions to a permanent solution CA to convene group of LA officers to secure buy in from organisational leaders Address financial / staffing constraints to provide more time to analyse and use data Fully or partially funded by WMCA or HMG alongside pooled LA funding Write M&E / data analysis requirements into funding contracts as anything non-statutory and not a funding requirement will be cut





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