

# **Past, Present & Future: Liverpool City Council & Sentinel Partners Improving Lives Through Trusted Data Insights**

**16<sup>th</sup> October 2024**

**John Bowers**

**Liverpool Families Programme Data &  
Information Manager**

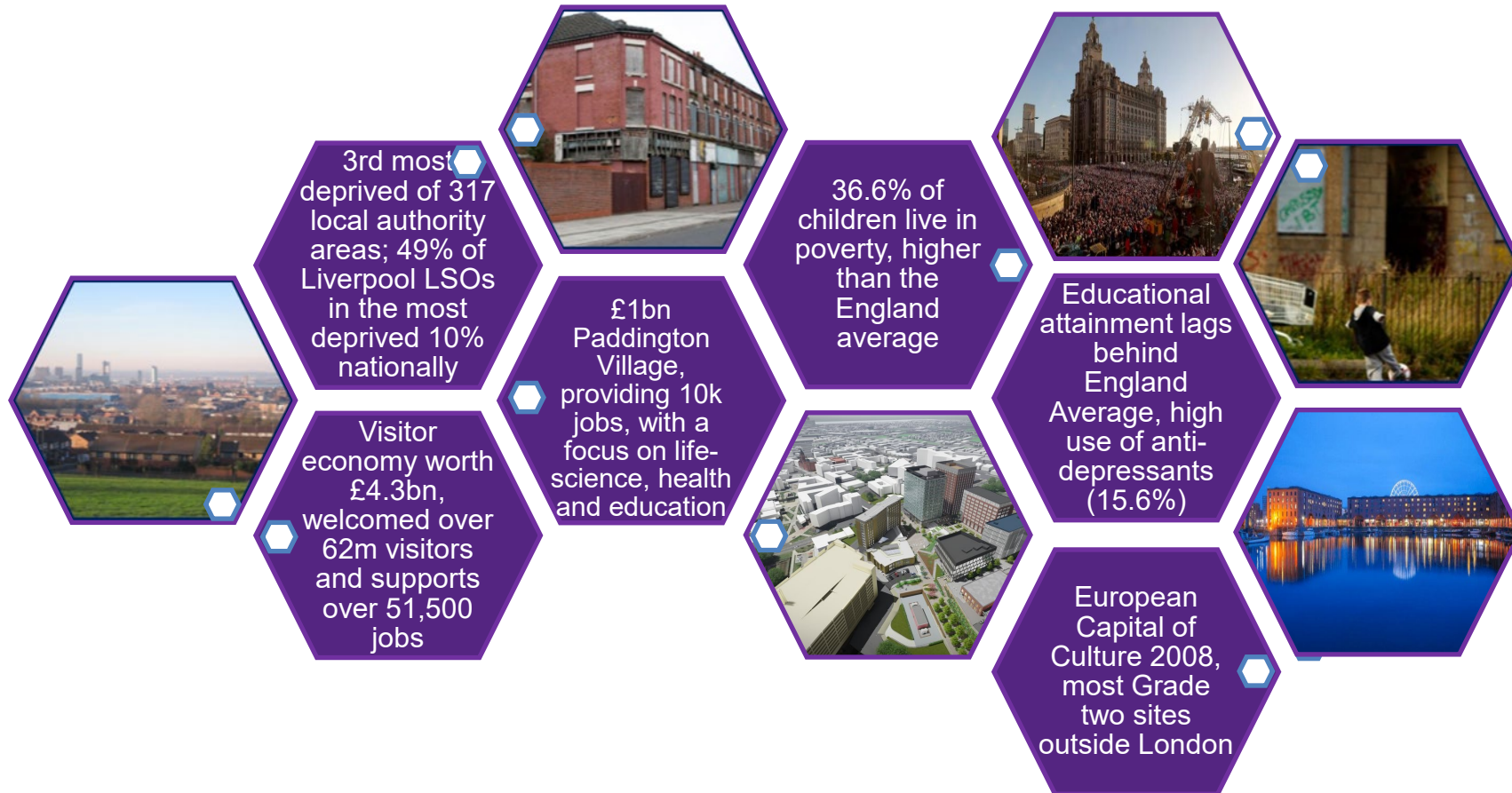
**UKAuthority AI & Data4Good**



# Liverpool Supporting Families Programme Overview

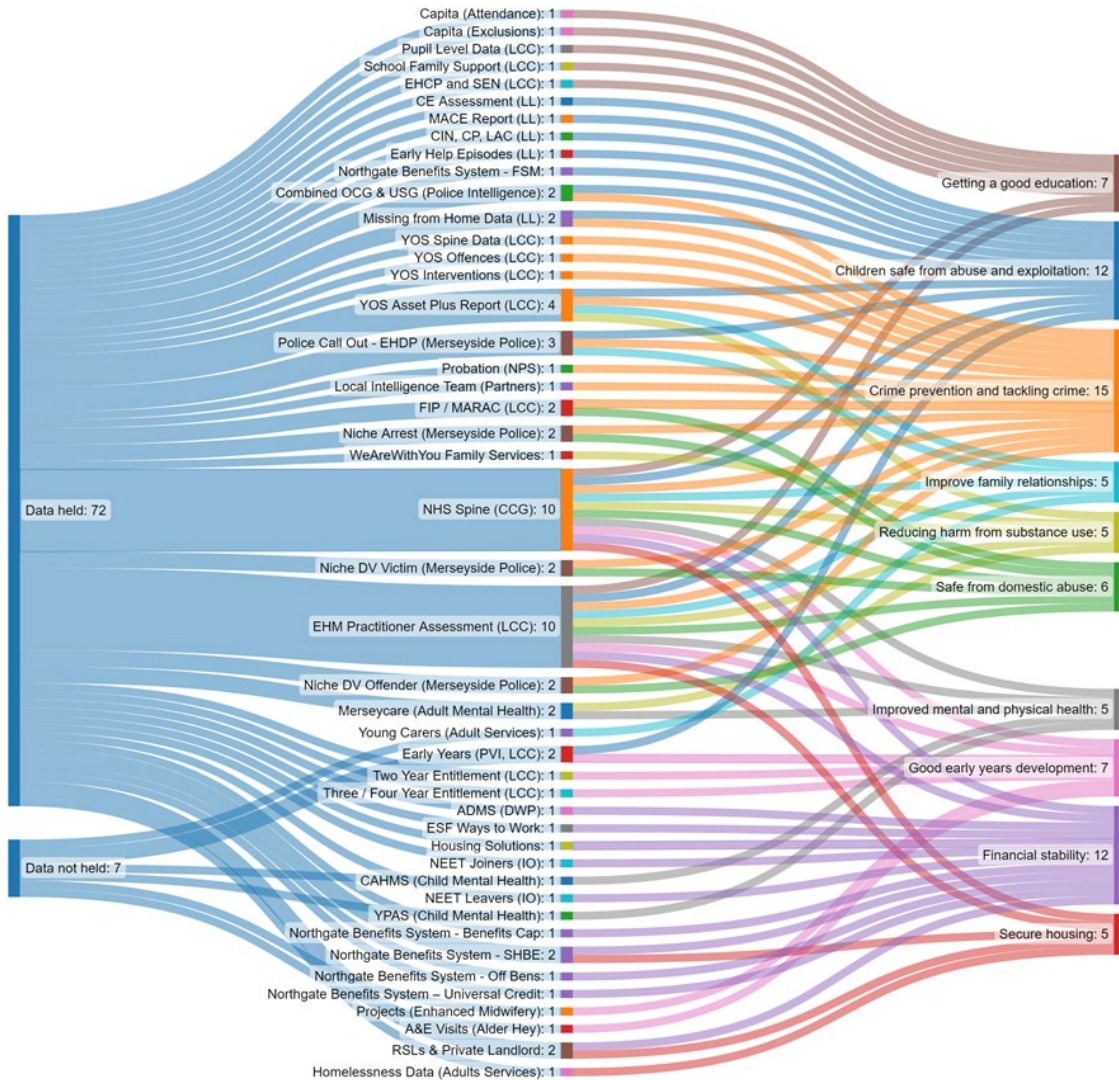


The Liverpool Supporting Families Programme was established in 2012 as a local response to the National Troubled Families Programme. This Early Help programme is co-ordinated from Children's Services and Corporate Policy & Intelligence



- The current three year programme runs from Apr 2022 to Mar 2025, Liverpool's target is to identify / find outcomes for 4973 complex families
- Funding formula based on deprivation levels
- Programme underpinned by a ten point outcomes framework
- 33 issues identified and 72 outcomes
- Families need to meet at least three of the new outcomes plan criteria to be eligible for the programme
- Programme worth £10.3 million in Liverpool for intensive family support and Early Help services
- Liverpool retained Earned Autonomy status by DLUHC in 2022

# Liverpool Families Programme Data Solution Overview



- Liverpool invested heavily in a “data management” solution provided by Sentinel Partners to complement existing systems
- The solution handles large volumes of data to automatically match and score families; providing family outcome performance data returns and reports for the new Early Help data collection
- Sentinel creates a full intelligence picture for local partners
- The system utilised during the COVID-19 pandemic to identify vulnerable residents based on economic, social and medical need – ability to prioritise internal and partnership help
- Later Sentinel was adapted to provide intelligence for the national test and trace pilot.

- Recent and future innovations include;
- Building upon the SAFE Taskforce Intelligence Portal to include vulnerability mapping, new data feeds & wider roll-out
- Early Years Intelligence Portal and Family Hub data management solution which will include new health care datasets
- Working with Social Finance and Sentinel to integrate PowerBI to create management level dashboards and scorecards.

# SAFE (Support, Attend, Fulfil, Exceed) Taskforce Data Intelligence Portal



DfE funded have provided £30 million to fund SAFE Taskforces in 10 areas across England.

Circa. £3 million funding devolved to secondary school consortia in Liverpool, with Local Authority backing to support vulnerable young people in serious violence hotspots. Initiatives have been developed to target support to young people who are most at risk of serious violence or gang exploitation to keep them engaged in education and attending lessons.

## Overview of Discussion

- History of serious Youth Violence in Liverpool
- Data Ethics and Data Protection
- Overview of development
- System walkthrough
- Outcomes – Child A

# Youth Victims of Serious Youth Violence in Liverpool



2007

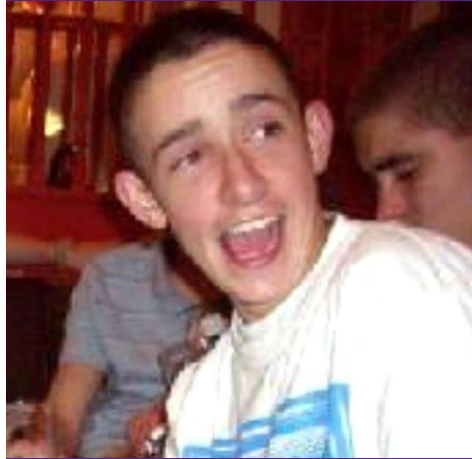
Reece Jones, 11  
died of a gunshot  
wound



Offender was 16,  
parents separated,  
father previous  
convictions, part of  
street gang selling  
drugs, poor school  
attendance carried  
weapons

2013

Sean McHugh, 19  
died of a stab  
wound



Five offenders aged  
between 13 and 15  
were convicted of joint  
enterprise murder. All  
convicted were part of  
North Liverpool  
street gang

2018

Daniel Gee-Jameson,  
16 died of a stab  
wound



Offender was 17,  
parents separated (no  
contact with mother),  
associated with  
negative peer group,  
easily led, anxiety

2021

Ava White, 16  
died of a stab  
wound



Offender was 14,  
previous convictions  
for violence, witnessed  
household domestic  
abuse, criminally  
exploited, carried  
weapons, impulsive  
behaviour

2022

Olivia Pratt-Korbel, 9  
died of a gunshot  
wound

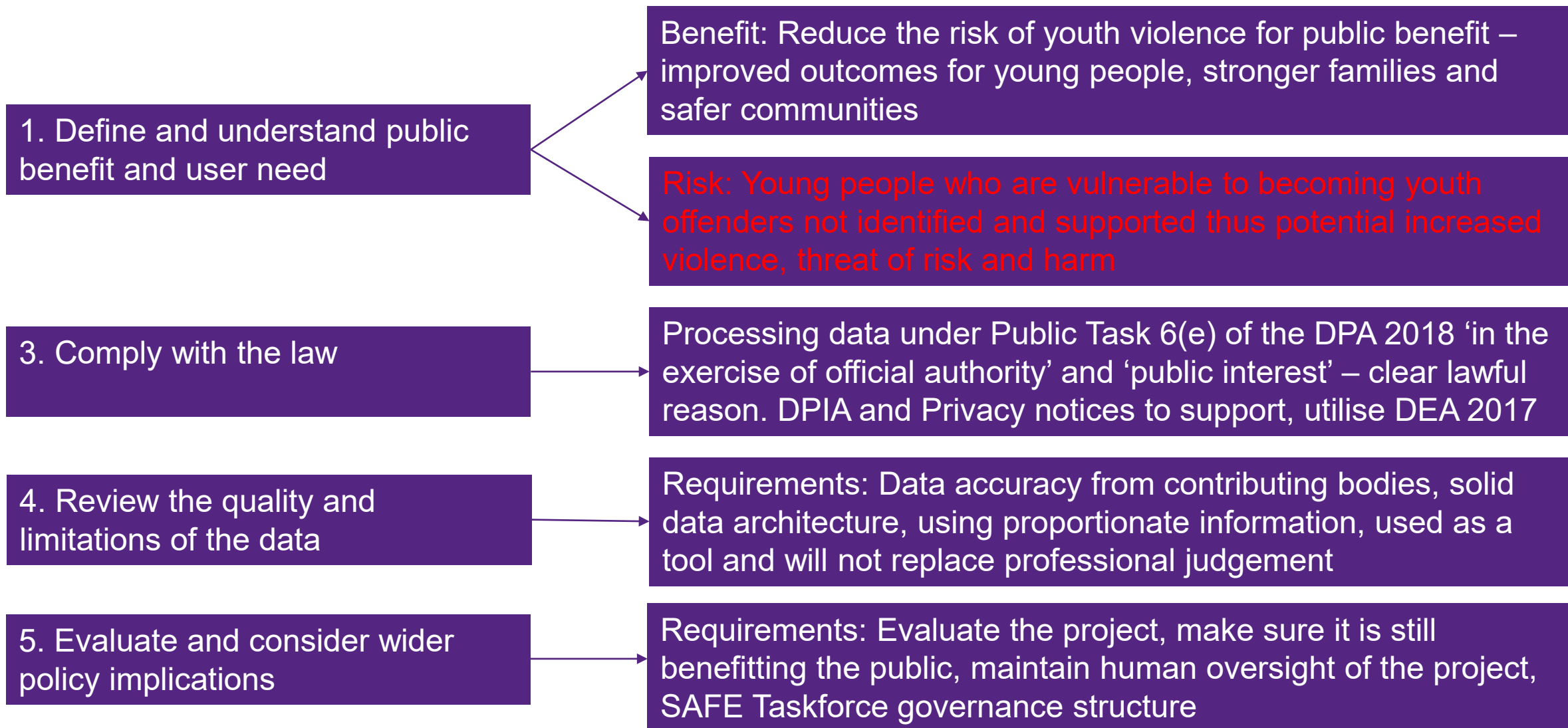


Offender was 34,  
previous convictions  
and troubled  
background. Murder  
linked to ongoing gang  
violence and drug  
distribution in the local  
area

# Reflection on Data Ethics Framework 2020



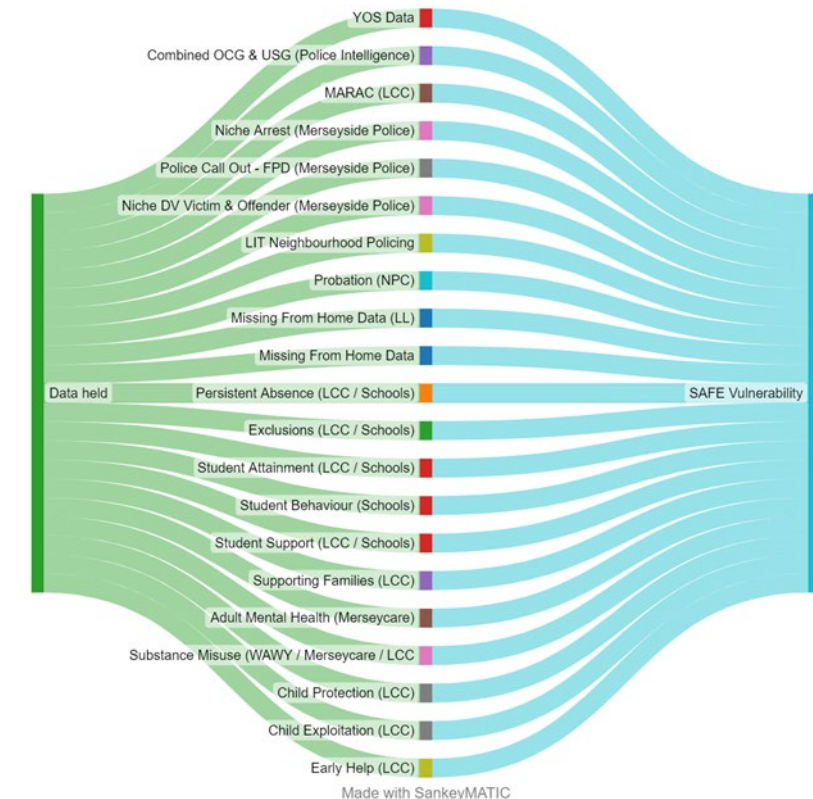
## “Was there an option to do nothing to reduce Youth Violence using available data”?



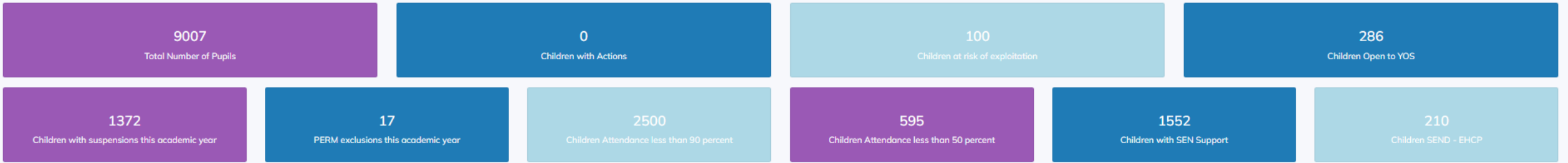
# Liverpool Supporting Families Programme – Working with the SAFE (Support, Attend, Fulfil, Exceed) Taskforce



- Intervention 2 – Data and Intelligence Portal (Supporting Families Data Team Led), number of workshops held to develop the product
- Designed on an Ethical Framework balancing safeguarding risk with data intelligence
- Built on existing Supporting Families data architecture – quick development, cost effective, partnership data already in one place and allows access based on a “need to know” basis
- To be used by Head Teachers and safeguarding leads as a resource for allocating SAFE Taskforce interventions with links to early help
- The Data and Intelligence Portal brings together information from school settings (attendance, exclusions, SEN, disadvantage and school base history), Youth Offending, Police Arrests, Police Intelligence, Health Information, Historic Education data (Census), Early Help Status, Social Care and risk of exploitation Risk
- Ongoing discussions to adapt the portal for MASH and front line Liverpool City Council Social Work and Early Help teams



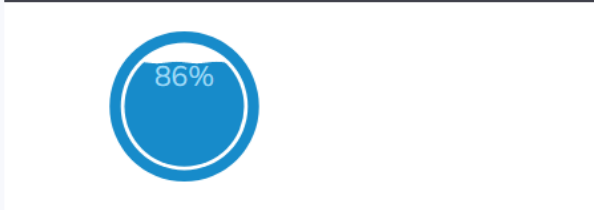
# Liverpool Supporting Families Programme – Working with the SAFE (Support, Attend, Fulfil, Exceed) Taskforce



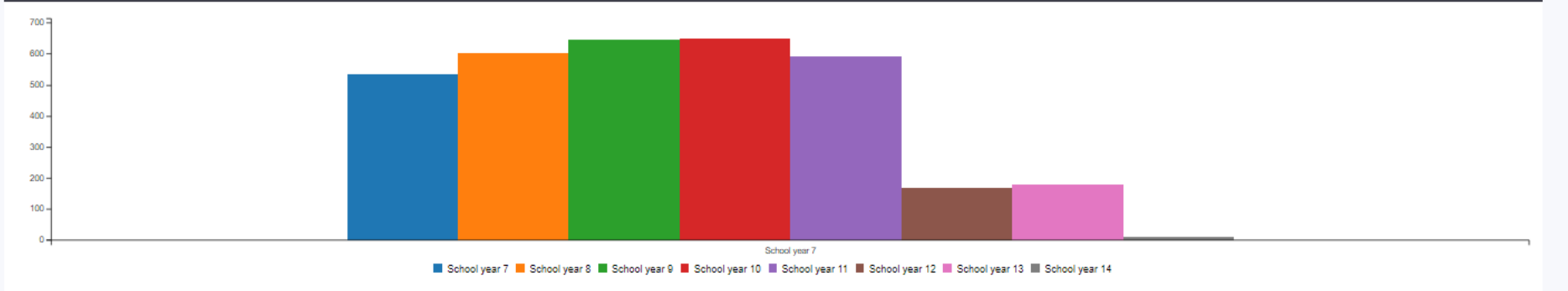
## Safeguarding



Total Year Attendance



Children per Year Group with Attendance Below 90 Percent



Total Term Attendance

Children per Year Group with Attendance Below 50 Percent



# Liverpool Supporting Families Programme – Working with the SAFE (Support, Attend, Fulfil, Exceed) Taskforce



**Manage**

**Child Overview**  
View details about this child

**Safeguarding**  
Safeguarding Data

**Attendance, Exclusions**  
Check attendance and exclusions information

**SEND Data**  
SEND Information

**Exploitation Risk**  
Check Exploitation Risk Data

**Youth Offending**  
Youth Offending Data

**Family Info**  
Check Family Information

**Chronology**  
Chronology

**Transition**  
Check Transition Information

**Basic person information**

Sentinel Key 7619173

Forename DAMAS

Middle Name NOMSA

Surname BOWEN

Forename Alternative

Date Of Birth 25/09/2014

Gender Male

Pronoun

National Pupil Id M341300111032

Student Id M341300111032

Unenrolment Reason

[+ Add Actions or Notes to Child](#)

[+ Add or Amend Alternative Forename](#)

**VPT Information**

School Year 9

School Name The Academy of St Nicholas

Registration Single Registration

Safeguarding Level CP

Safeguarding Start Date 02/06/2021

Safeguarding End Date

Term To Date Attendance 0.0%

Year To Date Attendance 3.6%

Disadvantaged at any time Yes

Looked after / In care

PERM Exclusions this academic year 0

Suspensions this academic year 0

EAL at any time No

**Notes** Actions

25 rows records per page

Search:

Sentinel key	Edit	Last Note Date	Type	Police Sub Type	Action	Note	Start Date	End Date	Last changed by
No data available in table									

Showing 0 to 0 of 0 entries

[Previous](#) [Next](#)

# Liverpool Supporting Families Programme – Working with the SAFE (Support, Attend, Fulfil, Exceed) Taskforce



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- SEND Data**  
SEND Information
- Exploitation Risk**  
Check Exploitation Risk Data
- Youth Offending**  
Youth Offending Data
- Family Info**  
Check Family Information
- Chronology**  
Chronology
- Transition**  
Check Transition Information

**Current Academic Year Exclusions** Actions

25 rows records per page

Search:

Sentinel Key	File Date	Perm Exclusions	Suspensions
7619173	27/04/2023	0	0

Showing 1 to 1 of 1 entries

Previous **1** Next

**School History** Actions

25 rows records per page

Search:

Sentinel Key	School Name
7619173	Matthew Arnold CP School, St Cleopas Church of England Primary School and Holy Family Catholic Primary School

Showing 1 to 1 of 1 entries

Previous **1** Next

**Historic Exclusions** Actions

25 rows records per page

Search:

Sentinel Key	Forename	Surname	Date of Birth	UPN	Academic Year	Category	Start Date	Sessions	SEN provision
7619173	DAMAS	BOWEN	18/01/1977	M341300111032	2020/21	FIXD	11/09/2020	12	E

Showing 1 to 1 of 1 entries

Previous **1** Next

**Attendance Summary** Actions

25 rows records per page

Search:

Sentinel Key	Academic Year	Date of Attendance	Year To Date Attendance	Year Authorised Absence	Year Unauthorised Absence	Term To Date Attendance	Term Authorised Absence	Term Unauthorised Absence	School Name
7619173	2022/23	27/04/2023	3.6%	0.4%	96.0%	0.0%	0.0%	100.0%	The Academy of St Nich
7619173	2021/22		20.27%	78.11%	1.62%				The Academy of St Nich

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SEND Information

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Check Exploitation Risk Data

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Youth Offending Data

**Family Info**  
Check Family Information

**Chronology**  
Chronology

**Transition**  
Check Transition Information

**Exploitation Risk** Actions

25 rows records per page Search:

System Code	Sentinel Key	Start Date	Completed Date	Data Downloaded	Referral Reason	Exploitation
LCC_MACE	7619173	01/12/2021	27/04/2022	01/12/2021		Child may be being exploited (Signs the child is exploited but no clear evidence) / Criminally
CE_ASSES	7619173	04/01/2022	25/04/2022	01/05/2022	Criminally	CE: Storing Weapons / Drugs for Others CE: Committing Offences Under Coercion
LCC_MACE	7619173	01/12/2021	27/04/2022	01/01/2022		Child may be being exploited (Signs the child is exploited but no clear evidence) / Criminally
CE_ASSES	7619173	06/10/2022	06/12/2022	01/01/2023	Criminally	CE: In Borough Drug Dealing CE: Storing Weapons / Drugs for Others CE: Family Linked to Organised Crime CE: Warning Signs CE: Committing Offences Under
LCC_MACE	7619173	01/12/2021	27/04/2022	01/02/2022		Child may be being exploited (Signs the child is exploited but no clear evidence) / Criminally
LCC_MACE	7619173	01/12/2021	27/04/2022	01/03/2022		Child may be being exploited (Signs the child is exploited but no clear evidence) / Criminally
LCC_MACE	7619173	01/12/2021	27/04/2022	01/04/2022		Child may be being exploited (Signs the child is exploited but no clear evidence) / Criminally
LCC_MACE	7619173	01/11/2022	17/11/2022	01/11/2022		CE Assessment in Progress / Criminally
LCC_MACE	7619173	17/11/2022		01/12/2022		Child is being exploited and presents a risk of exploitation towards children (Evidence of exploitation or multi-agency professi / Criminally
LCC_MACE	7619173	17/11/2022		01/01/2022		Child is being exploited and presents a risk of exploitation towards children (Evidence of exploitation or multi-agency professi / Criminally
LCC_MACE	7619173	17/11/2022		01/02/2022		Child is being exploited and presents a risk of exploitation towards children (Evidence of exploitation or multi-agency professi / Criminally
LCC_MACE	7619173	17/11/2022		01/03/2022		Child is being exploited and presents a risk of exploitation towards children (Evidence of exploitation or multi-agency professi / Criminally
LCC_MACE	7619173	17/11/2022		01/04/2022		Child is being exploited and presents a risk of exploitation towards children (Evidence of exploitation or multi-agency professi / Criminally
LCC_MACE	7619173	17/11/2022		01/05/2022		Child is being exploited and presents a risk of exploitation towards children (Evidence of exploitation or multi-agency professi / Criminally

Showing 1 to 14 of 14 entries

Previous **1** Next

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SEND Information

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Check Exploitation Risk Data

**Youth Offending**  
Youth Offending Data

**Family Info**  
Check Family Information

**Chronology**  
Chronology

**Transition**  
Check Transition Information

**YOS Interventions** Actions

25 rows records per page

Sentinel Key	Forename	Surname	Disposal Type	CMS Disposal Type	Start Date	End Date	Intervention Plan Agreed Date
7619173	DAMAS		Community Resolution	Community Resolution Programme (Voluntary)	09/06/2022	07/10/2022	
7619173	DAMAS		Other	Asses Assessment	14/10/2022	17/10/2022	
7619173	DAMAS		Other	Asses Assessment	10/05/2022	09/06/2022	
7619173	DAMAS		Community Resolution	Community Resolution Programme (Voluntary)	09/06/2022	07/10/2022	
7619173	DAMAS		Other	Asses Assessment	14/10/2022	17/10/2022	
7619173	DAMAS		Other	Asses Assessment	10/05/2022	09/06/2022	

Showing 1 to 6 of 6 entries

Previous 1 Next

**YOS Asset Plus** Actions

25 rows records per page

Sentinel Key	Start Date	Stage	ROSH Judgement	Concerns Accommodation	Concerns Parenting	Parent Carer Alcohol Use	Parent Carer Drug Use	Caring For Family Member	Violence Abuse Towards YP	Violence Abuse Witnessed	Offending By Family Members	Experience Bereavement	Violent YP To Family	Frequent Break Up Of Relationships	Concer
7619173	07/10/2022	Case Closure	Medium	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes
7619173	07/10/2022	Case Closure	Medium	Yes	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes

Showing 1 to 2 of 2 entries

Previous 1 Next

**YOS Offences** Actions

25 rows records per page

Sentinel Key	Offence Date	File Yjb Category	File Kniferelatedoffence	File Outcome	Date Outcome
7619173	10/05/2022	Drugs	No	Community Resolution	09/06/2022
7619173	10/05/2022	Drugs	No	Community Resolution	09/06/2022
7619173	30/08/2022	Drugs	No	Other Informal Action - No YOT involvement	14/10/2022
7619173	30/08/2022	Drugs	No	Other Informal Action - No YOT involvement	14/10/2022

Showing 1 to 4 of 4 entries

Previous 1 Next

**Youth Offending Arrests** Actions

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Check attendance and exclusions information
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SEND Information
- Exploitation Risk**  
Check Exploitation Risk Data
- Youth Offending**  
Youth Offending Data
- Family Info**  
Check Family Information
- Chronology**  
Chronology
- Transition**  
Check Transition Information

**FAMILY INFO**

25 rows records per page

Sentinel Key	Tf Id	Family Identifi
7619173	4626813	BOWEN HOAR

Showing 1 to 1 of 1 entries

Previous 1 Next

**Family Members**

25 rows records per page

Sentinel Key	Tf Id
7619173	4626813
7619173	4626813

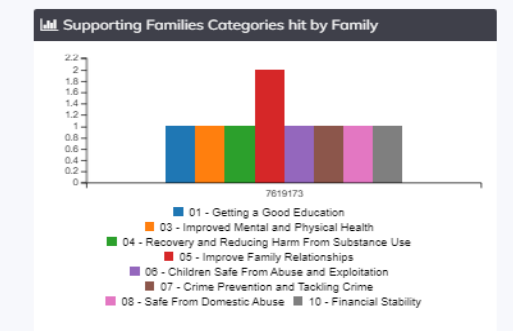
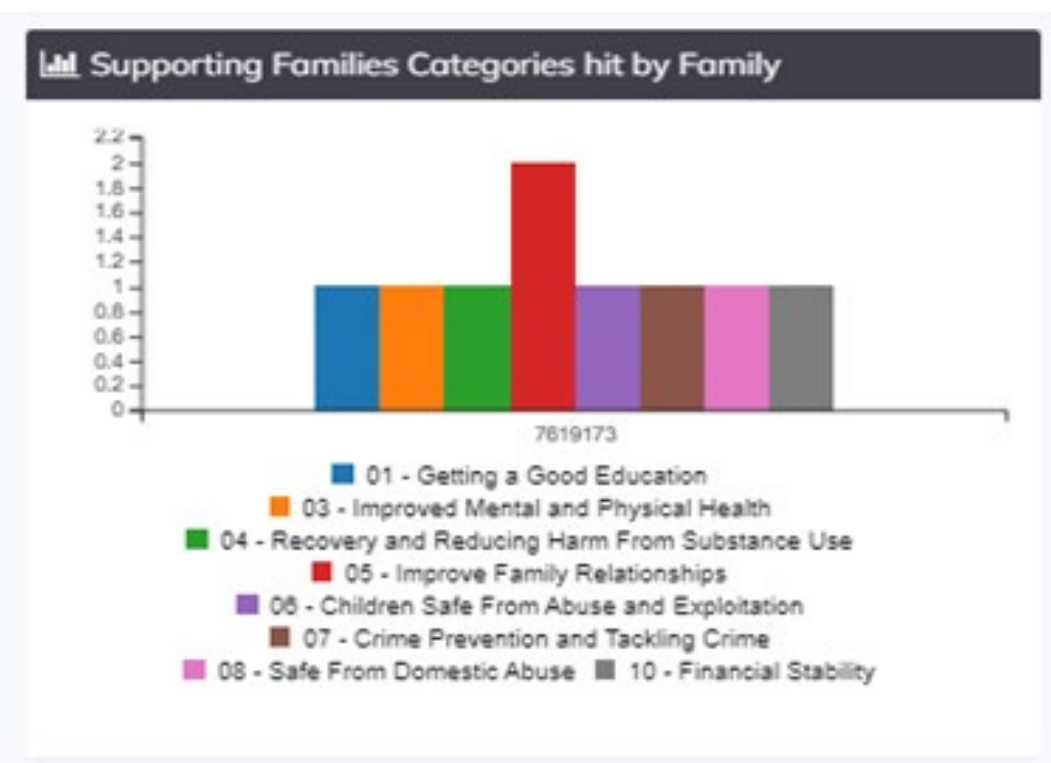
Showing 1 to 2 of 2 entries

Previous 1 Next

**Police Call Outs**

25 rows records per page

Sentinel Key	Llpg Upn	Inc Con Location	Incident Ref	Incident O Date Local	Primary Result Code Depre	Primary Result Text	Incident Ref 2	Secondary Result Code	Secondary Result Text
7619173	38082396	81 JACOB ST, LIVERPOOL,	MP-20220629-1071	29/06/2022	127	BURGLARY RESIDENTIAL	MP-20220629-1071		



**Supporting Families Categories hit by Family**

Search:

Death	National Pupil Id	Gender	Active
		Female	<input checked="" type="checkbox"/>
	M341300111032	Male	<input checked="" type="checkbox"/>

Search:

# Liverpool Supporting Families Programme – Working with the SAFE (Support, Attend, Fulfil, Exceed) Taskforce



SAFE Liverpool

Portals Dashboard Child Advanced Search Schools

John Bowers

Dashboard > Child Advanced Search > Search Results > SAF\_FAMILY\_TIMELINE\_SAFE

Timeline

**Manage**

- Child Overview**  
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Youth Offending Data
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Check Family Information
- Chronology**  
Chronology
- Transition**  
Check Transition Information

**Youth Offending Arrest**  
22/01/2023  
[Details](#)

**Youth Offending Arrest**  
03/01/2023  
[Details](#)

**Exploitation End**  
06/12/2022  
[Details](#)

**Exploitation End**  
17/11/2022  
[Details](#)

**Youth Offending Arrest**  
06/01/2023  
[Details](#)

**Youth Offending Arrest**  
03/01/2023  
[Details](#)

**Exploitation Start**  
17/11/2022  
[Details](#)

**Exploitation Start**  
17/11/2022  
[Details](#)



# SAFE Intervention Case Study – Child A

## Overview

- Child A was identified via safeguarding concerns and need through an examination of linked data held in the Sentinel portal
- The child was assessed as needing extra support by the SAFE Taskforce Youth Offending Service in November 2023
- No other services were currently involved – family previously open to Early Help in 2020
- Family identified as part of the Supporting Families Programme meeting three category areas

## Identified Risk

- Risk of being exploited due to lack of personal boundaries
- Limited social skills resulting in outbursts
- Undiagnosed learning difficulties

## Action Taken

- Intervention took place between November 2023 and January and May 2024 covering 28 sessions (highly intensive)
- Group sessions to address understanding of criminal exploitation, 1:1 sessions to explore consequences of behaviour, help with understanding social interactions and referral to additional specialist support services

## Outcomes for Child A

- No more anti-social behaviour reported since October 2023
- Attendance at school increased from 84% (2023/24) to 100% (current academic year)
- No suspensions or exclusions
- Family and school have noticed improved behaviour
- ADHD now being supported by improved medication protocols



# Domestic Abuse Pilot Research Data Science Results

## Data Pilot – Sentinel Partners and Liverpool City Council Data Science Results

- We utilised a linked dataset of 541 individuals, 324 were non-DV offenders and 217 were known domestic abuse offenders
- We concentrated on individuals aged 18 to 25 as we were able to utilise historical data for building patterns in the model
- The model was designed to predict whether an individual's information fits DV offenders' profile or not, with a probability score for each
- A decision tree approach for simple interpretation of data was utilised
- The test dataset was *completely unseen and unknown to the model*
- On the test dataset of 82 subjects; the model correctly predicted the probability of a domestic abuse offender **almost 70% of the time**
- Future: examine the use of AI modelling and how this can assist with decision making

### Contributing risk factors

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>• Witness family/parent DV</li><li>• Family drug/alcohol misuse</li><li>• Worklessness / NEET</li><li>• Divorce / separation</li><li>• Known to Children's Services</li><li>• SEN and caring responsibilities</li></ul> | <ul style="list-style-type: none"><li>• Parent mental health issues</li><li>• Victim of violence</li><li>• Violent behaviour in school</li><li>• Persistent absence</li><li>• Arrests (other than DV)</li></ul> |
|---|---|

