Top 5 Strategies Towards Data-Informed Law Enforcement

1. **Commit to a Data-Informed Culture**

   Police departments across the country are engaging the digitization of data and platforms syncing up multiple data sources. If they seek to analyze it, data can enlighten decision-making, dispel misconceptions, pick up predictive patterns, uncover bias, determine if strategies are working and assess performance. Learning from solid, trustworthy data is a value held by all within the organization.

2. **Make Data Accountable**

   What’s counted, is what’s measured. It’s the foundation from which analysis and informed decision-making take hold. It’s why collecting data on all stops - not just those that result in a citation or arrest - is widely supported by Des Moines community members and has prompted 23 states to pass legislation requiring it. Knowing why an officer chose to stop someone, in the first place, with data on race, ethnicity, sex and age is good practice.

3. **Make Data Analytic**

   Data is much more than adding numbers and reporting totals. It’s learning to dig deeper, unravel patterns, understand connections. Software can help, but it starts with asking probative questions. Nine out of ten survey respondents want to know rates on use of force by police officer, crime rates in neighborhoods, and an analysis of crime reduction rates. They also support the idea of a Data Analysis Unit within DMPD and forming task forces to study issues raised by data.

4. **Make Data Transparent**

   Sharing data with the community is paramount to gaining trust. It enables candid and informed dialogue between police and the public. And it sparks insights neither would have had without interpreting the data together. Open Data Portals and Dashboards that allow the public to easily interact, filter, & analyze policing data posted on DMPD’s website is a winning strategy.

5. **Make Data Actionable**

   The goal of collecting reliable and analyzed data is to act upon what’s learned from it. The strategies, solutions, and innovations needed to act knowledgeably are more likely to succeed when community members are partners in the process. It’s why Community Advisory Review Boards make good sense for both law enforcement and the people they’ve sworn to protect. It’s the forum by which data becomes accountable, analytic, transparent and actionable.

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This project engaged nearly 400 Des Moines residents via interviews, surveys, & focus groups to learn what data they'd like DMPD to collect, analyze & share with the public. Public Works LLC consulting firm also conducted a needs assessment, a review of promising practices on data and policing and proposed 21 recommendations to foster a data-informed culture at DMPD and with the community.

See the full report at www.dsm.city
Executive Summary

The City of Des Moines commissioned the consulting firm Public Works LLC to perform five basic functions:

1. Identify the current state as to how and what data is being collected by and within the Des Moines Police Department (DMPD) and how that data is applied to inform the practice and policies of law enforcement.
2. Identify promising (best) practices in the field of law enforcement data and show the ways that police departments are applying these practices to enhance how they collect, analyze, share, and act upon what they learn from data.
3. Conduct a needs assessment to identify gaps the DMPD faces between the current state and what could ideally be achieved by implementing promising practices in the field.
4. Identify opportunities to address those gaps and enhance what and how data is collected, analyzed, shared with the community, and acted upon.
5. Engage and learn from the community as to their perspectives and insights as to how and what law enforcement data is being collected, analyzed and shared.

Public Works created a conceptual framework to research, examine, assess and organize the law enforcement data initiative we were tasked to develop. It centers upon the basic principle that data systems should achieve four core attributes - they should be accountable, analytic, transparent, and actionable. These four core data attributes serve as the architecture for the entire project, the framework for our research determining and describing the DMPD’s current state of data policy and practice, and our research in scoping out promising practices in the field of law enforcement data. This structure also guided how we determined needs, how we framed questions and gathered insights from the community and, finally, how we came to recommend action steps for the City of Des Moines to pursue in order to realize the ideal state in the field of law enforcement data policy and practice.

Data Collection in Des Moines

The goal of data collection is to record integral information on policing encounters and activities that enable the identification of trends, patterns, and outcomes leading to informed insights and action through policy and practice. The Des Moines Police Department currently collects data on: stops resulting in citations, arrest data, calls for service, use of force, offenders and victims of crimes.

Data on Stops: The Des Moines Police Department does not currently collect data on stops that do not result in a citation, warning, or arrest.

Data on Citations: Police officers issuing citations after a stop enter the citation data using the TraCS software that has been installed in their vehicles. A large part of the data is generated automatically from the cited individual’s driver’s license, but the driver’s license does not always include race and ethnicity data. Officers may manually enter that data based on observation, but the TraCS software does not require that the race and ethnicity data fields be collected. The Tyler New World System recently launched should alleviate the need for staff to manually enter data.

Data on Arrests: When arrests are made in the field, an officer enters the incident into the Intergraph Field Reporting (IFR) Incident module, which is available in the police officer’s vehicle. Police Information Technicians use this information to generate an arrest record in the RMS.
Data on Calls for Service: Calls for service to law enforcement agencies generally include calls to “911” for emergency assistance and calls to non-emergency numbers. Calls for service data are input into Hexagon CAD and imported to RMS I/LEADS. Calls for service data (CFS) input screens are set up for law enforcement, as well as for Fire/EMS calls. CFS data are collected by DMPD Public Safety Dispatchers by entering information into Hexagon CAD; they are then imported to Hexagon I/LEADS.

Data on Use of Force: On January 1, 2019, the FBI began collecting use of force data from law enforcement agencies across the country that voluntarily participate. The data collection offers big-picture insights, rather than information on specific incidents. The collection neither assesses nor reports whether officers followed their department’s policy or acted lawfully. The data includes any use of force that results in death, serious bodily injury, or discharge of a firearm by law enforcement. The Des Moines Police Department collects use of force data through web based IAPro/BlueTeam software programs, which enables input of complaints, use of force incidents, pursuits, and city-owned vehicle accidents.

Reporting of Data: The Des Moines Police Department uses a Hexagon RMS custom-tailored data package for sending monthly crime and arrests data to the Iowa Department of Public Safety’s Uniform Crime Code Classification (UCR) program. At present, Des Moines is moving from UCR codes to National Incident-Based Reporting System (NIBRS) codes. Crime data are organized by incident, offense, victim, known offender, and arrestee. They are collected by the Des Moines Police Department RMS/I/LEADS Incident and Arrest modules by entering information into FBI UCR/NIBRS.

Geographic Data: The Des Moines Police Department currently collects GIS coordinates, and zip code data for Calls for service incidents. The citation module in RMS is exclusively used by the Police Information Technicians to re-enter selected citation information from the PDF copy generated by the TraCS system, making it vulnerable to human error. When the Police Information Technicians enter the “Offense location,” the RMS system uses that information to automatically populate GeoX and GeoY coordinates. The Des Moines Police Department uses GIS data with its CrimeView system that links crime data with GIS information to map out where the crime took place. The Des Moines Police Department does not analyze the GIS data of Stops resulting in a citation, nor does it connect it to the rest of the Stop data collected. Not having such analysis makes it very challenging to produce any summary of analytic results by census track or zip code.

ACCOUNTABLE

Accountable data must meet standards of integrity, validity, and reliability. There was widespread agreement amongst stakeholders in Des Moines as to what sort of data this comprises: Nearly 85 percent of survey respondents believe that collecting data on all police stops – not just those resulting in a citation or arrest – is either “Extremely Valuable” or “Valuable,” the majority of whom saw it as Extremely Valuable.” The outcomes of the stakeholder engagement comport with the findings of research and promising practices from around the country: Research demonstrates the importance of collecting and analyzing stop data. Limiting data collection only to stops that result in citations or arrests misses the opportunity to learn why the stop was made in the first place, if stops are made more frequently in certain locations, for certain reasons or among certain populations, and if an officer shows a pattern of high stop rates resulting in arrests. When it comes to building trust with the community, this data is valuable. In addition, capturing race/ethnicity and gender data is considered critical to being able “to identify any disparities in individuals stopped or how they are treated during the stop.” Promising practice examples presented in the compendium, some of which are listed below, recommend that police officers record his/her initial perception of the stopped person’s demographic
information. At least twenty-three states and the District of Columbia have laws related to or requiring collection of stop data; all of Iowa’s neighbors—Illinois, Kansas, Nebraska and Missouri—have stop data collection and reporting laws.

Comparing the current state of data collection and analysis in Des Moines with the desired state that emerges from both stakeholder engagement and promising practices nationwide indicates that Des Moines needs to:

- record data on “All Stops.”
- enhance data collection on race, ethnicity, and sex.
- create a unique identifier system.
- apply officer data on stops and other actions.
- integrate and sync up crime data by neighborhoods.

We recommend that Des Moines:

- Institute the practice of collecting data on All Stops.
- Expand the type of data collected on stops based on promising practices.
- Address the collection of Race and Gender data to reflect best practices.
- Consider expanding and refining Calls for service, Crime/Offense, and Use of force data to meet promising practices.

**ANALYTIC**

Analytic data fosters an informed interpretation and allows for multi-disciplinary research that furthers an understanding of causal factors that influence trends and outcomes.

Data analytics helps researchers, policymakers, stakeholders, police officers, and members of the public interpret data collected by law enforcement. Data analytics enables stakeholders to discover patterns, trends, and connections among a host of variables. A data framework requires that data standards, platforms, and objective evidence-based metrics are used to assure that those reviewing it have an informed and trustworthy understanding.

The Tyler Technologies New World Services suite of law enforcement and public safety data collection, analysis, community engagement, and decision-making tools, which the Des Moines Police Department recently launched in April 2022, is intended to increase the analytic capacity of DMPD.

Currently, the Des Moines Police Department conducts very few analyses on the data it collects; this limits the use of data analytics in decision-making and keeping the public informed. The Police Department neither analyzes nor produces regular reports on stops resulting in citations, stops resulting in arrests, or calls for service (CFS), which can lead to a lack of accountability between the Police Department and the public. Currently, the department does not have any staff (sworn or civilian) dedicated to data analysis. The DMPD also has purchased a suite of analytic platforms from Tyler Technologies New World intended to conduct a wide range of analyses, including “real-time data mapping and charts for internal use, actionable insights for resource allocation and tactic deployments, and mapped data sets for citizens.”
Comparing the current state of data collection and analysis in Des Moines with the desired state that emerges from both stakeholder engagement and promising practices nationwide indicates that Des Moines needs to:

- hire analysts and fill the senior management position to oversee data analysis.
- fully assess the skillsets and resources needed and available among current staff (including IT) to generate more in-depth and insightful reports to advance their work in policing and acquire the additional training to do so; develop a comprehensive internal "Data Analysis Handbook" for police officers; and including a session on data initiatives and analysis at annual training events.
- develop relationship with local higher education institutions in the form of a data partnership or in commissioning them to conduct in-depth and independent studies on the data it collects.
- start analyzing data collected on stops other than simply reporting the counts of citations, arrests, and/or warnings – as well as start recording, collecting and analyzing stop data.
- develop metrics, measures, indices, and criteria to analyze data.
- institute comprehensive, frequent, and in-depth community member and stakeholder surveys.
- develop more comprehensive reports that use an analytic and equity lens to interpret data and explore the rationale behind patterns and trends revealed in the analysis.

We recommend that Des Moines:

- Establish a Police Data Task Force to guide the Data Analysis Unit in implementing the recommendations cited throughout this report.
- Create and staff a Data Analysis Unit within the Des Moines Police Department.
- Computerize/automate and upload the updated/modified data sets to the new RMS.
- Analyze Stop Data and prepare an annual report to share with the public.
- Develop a data analysis plan including metrics/measures and indices for each data set and create data analysis templates.
- Add a data training module to the Des Moines Police Department’s annual training program.
- Form Analytic Data Partnerships with local colleges and universities
- Link disposed charges and convictions data to DMPD data on stops resulting in citation or arrest.

**TRANSPARENT**

Transparent data are presented in an open, clear, accessible, and timely manner. Transparency builds a foundation from which informed dialogue among community stakeholders and those enforcing laws is achieved. Openly analyzing and interpreting findings creates the opportunity for shared problem-solving and creating solutions that are embraced by those invested in making them work. Transparency fosters trust among all parties when they openly derive their insights and solutions from data they mutually understand and embrace. There are essentially four key strategies that police departments deploy to make their data more shareable and transparent to the public:

- **Producing Data Briefs and Reports.** While The Des Moines Police Department provides a significant number of general resources and information on its website, the amount of publicly available data and reports displayed for public review are few.

- **Providing Open Datasets and Dashboards Online.** The DMPD does not offer an Open Data platform or Dashboard (a way of organizing and displaying information at a glance) on the data it collects and reports to state and federal agencies for the public to independently view, analyze, research or share.
• **Participating in Civil Society Database Initiatives.** The emergence of digitizing massive amounts of data and the capacity to analyze it with artificial intelligence and machine learning has given rise to the Open Data movement. Some non-profit organizations have formed voluntary partnerships with local police departments that share data beyond what is reported to state and federal agencies. The DMPD currently does not have such an Open Data relationship.

• **Enhancing Transparency via Websites.** The only DMPD open dataset now available online is through the crime mapping platform that allows the user to see incidents of various types of crime by location. It does not, however, enable the public to aggregate sets of data and conduct an analysis of comparing, for example, crime rates over a set period within certain neighborhoods.

Comparing the current state of data collection and analysis in Des Moines with the desired state that emerges from both stakeholder engagement and promising practices nationwide indicates that Des Moines needs to:

• develop an Open Data database accessible to the public with user-friendly, intuitive dashboards so that independent sources can conduct their own analyses.
• enhance the DMPD’s website to support the sharing of reports and hosting Open Data initiatives.
• make FOIA requests more accessible and user-friendly and streamlined.
• enhance the data included in the DMPD Annual Statistics Report.

We recommend that Des Moines:

• Produce a comprehensive “Annual State of Policing and Public Safety Report.”
• Develop, launch, and maintain an online, interactive Open Data Portal with a User-Friendly Dashboard.
• Enhance and redesign the current Des Moines Police Department website to support an Open Data Portal, Dashboards and Reports that engage the community.
• Participate in national Open Data initiatives.
• Enhance and streamline the Freedom of Information Act (FOIA) Process.

**ACTIONABLE**

Data collected, analyzed, openly discussed, and researched present an opportunity for the Des Moines Police Department to foster informed, insightful policy and practice that generate continuous quality improvement in law enforcement. It also empowers those reviewing the data to act upon what they've learned from it – this is what makes data actionable. Beyond conducting their own analysis of law enforcement data, and investing in the infrastructure to do so, police departments across the country have been reaching out to the public and community stakeholders to review the policing data they collect to collaboratively analyze and respond to issues, trends and questions raised by data. To effectively act upon data, it is helpful for a police department to:

• **Build a sound and accountable infrastructure to support how data informs decision-making.** There are essentially three components to creating an infrastructure that allows accountable, analytic, and transparent data to be acted upon: Strategic Plans, Key Performance Indicators, and Implementation Plans.
• **Build a collaborative and ongoing community engagement infrastructure that enlightens shared decision-making being made with community members.** Currently, the City of Des Moines employs three approaches to engaging the community as it relates to making data actionable:
The Community Policing and Code Enforcement Policy and Practice Review Committee (PPRC).
- A bi-annual city-wide community satisfaction survey on city department services.
  - Neighborhood Based Service Delivery (NBSD) Officers.

Comparing the current state of data collection and analysis in Des Moines with the desired state that emerges from both stakeholder engagement and promising practices nationwide indicates that Des Moines needs to:

- Develop a DMPD Strategic Plan, as well as Quality Assurance policies on assuring the accuracy, completeness, validity, consistency and timeliness of data and information.
- Institute Key Performance Indicators related to the collection, analysis and use of data within the police department; what is shared publicly and how; methodology for assessing how data informs the decision-making of police management or officers in the field; and how it is used for collaborative community problem-solving.
- Develop an Implementation Plan and Schedule.
- Create an Ongoing, Collaborative, Formalized, Community Advisory & Review Board.
- Enhance the current resident satisfaction survey, create police department-specific surveys, and perform "Service Quality Surveys" of persons who have interacted with police in the field.

We recommend that Des Moines:

- Create a three-to-five-year strategic plan for the DMPD that includes a focus area on data accountability, analytics, and transparency.
- Develop Data Key Performance Indicators to assess and track the outcomes DMPD intends to achieve resulting from collecting, analyzing, sharing, collaborating, and acting upon data.
- Create a Data Initiative Plan and Implementation Schedule citing tasks, timelines, and persons responsible to execute the recommendations of this report.
- Form a Law Enforcement Community Advisory & Review Board (CARB) representing diverse community members, stakeholders, advocates, and people with lived experience to both review and collaborate with the DMPD on matters of public safety.
- Enhance the current bi-annual survey and solicit ongoing "customer service" feedback among persons who have recently interacted with law enforcement via calls for service, citation, warnings or arrest, along with a quarterly review of complaints made.
Des Moines Law Enforcement Data Initiative Report Recommendations Inventory

The following table identifies the 23 recommendations presented in the report:

<table>
<thead>
<tr>
<th>Core Attribute Category</th>
<th>Recommendation</th>
<th>Report Reference #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accountable Collect Data on all Stops made by a police officer, not just those that result in a warning, citation, or arrest.</td>
<td>2.5.1</td>
</tr>
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<td>Accountable Expand the kind of data collected on all stops as recommended by the Center for Policing Equity Stop Guidebook and others.</td>
<td>2.5.2</td>
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<tr>
<td>3</td>
<td>Accountable Expand demographic data collected on all stops as recommended by the Center for Policing Equity Stop Guidebook and others.</td>
<td>2.5.3</td>
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<tr>
<td>4</td>
<td>Accountable Expand data on Calls for Service, Crime/Offense and Use of Force as recommended by the CPE Guidebook on Stop Data and others.</td>
<td>2.5.4</td>
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<tr>
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<td>Analytic Establish a Police Data Task Force to guide the Data Analysis Unit in implementing the recommendations cited throughout this report.</td>
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<td>Transparency Enhance and streamline the Freedom of Information Act (FOIA) Process for community members to file and process a request.</td>
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<td>18</td>
<td>Actionable Create a three-to-five-year strategic plan for the DMPD that includes a focus area on data accountability, analytics, transparency and actionability as presented in Law Enforcement Data Initiative Report.</td>
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<td>Actionable Develop data Key Performance Indicators to assess and track the outcomes resulting from collecting, analyzing, sharing, collaborating, and acting upon data.</td>
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<td>21</td>
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<td>Form a Community Advisory &amp; Review Board (CARB) representing diverse community members, stakeholders, and advocates to review and collaborate with DMPD on matters of public safety and community well-being.</td>
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