



## City Auditor's Office Data Analytics Program

Complements, supports and extends assurance in the 2022 Audit Plan and whistleblower investigations by assessing risk and controls through data analytics.





Continuous Auditing – Ongoing evaluation of risk, controls and policy compliance

Automating testing of transaction and control data against rules and risk thresholds.



Risk Based Analytics Reporting –
Assurance on specific risks
Offers deeper data driven exploration on risk exposure.



Data Analytics Advisory Services –
Supporting use of data to manage risk
Data analysis support to aid Administration in
the management of risk. Ongoing support to
CAO audits, and investigations.

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# **Core Benefits of Data Analytics Program**

- Additional assurance coverage.
- Reduced support time from business under evaluation.
- Ongoing assurance with continuous auditing.
- New insights into risk exposure.

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# **Data Analytics Program Service Lines**

|   | Service Line                          | Activity Type  | Communication of Results   |
|---|---------------------------------------|--|--|
|   | Continuous<br>Auditing                | Planned activity: Priority Area of Focus identified annually for year ahead and scheduled                            | <ul> <li>Interactive Power BI scorecards to Administration.</li> <li>Summary scorecard to Audit Committee.</li> </ul>                                  |
| Q | Risk Based<br>Analytics<br>Reporting  | Planned activity: Priority<br>Area of Focus identified<br>annually for year ahead<br>and scheduled                   | <ul> <li>Summary report to<br/>Administration.</li> <li>Any significant risk<br/>concerns additionally<br/>reported to Audit<br/>Committee.</li> </ul> |
|   | Data Analytics<br>Advisory<br>Service | Responsive activity: Initiated in response to requests from within the City Auditor's Office or from Administration. | <ul> <li>Dependent on request.</li> <li>Examples include data tables for further analysis or sharing continuous auditing scripts.</li> </ul>           |

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## **Identification of Priority Areas of Focus**



#### Why we identify Priority Areas

 Priority Areas of Focus provide a planned medium-term vision for Continuous Auditing and Risk Based Analytics activities aligned with organizational goals and the annual audit plan.

#### **How did we identify Priority Areas?**

- We identified Priority Areas through:
  - Stakeholder engagement
  - Availability of data
  - Analysis of risk exposure
- Coverage was considered in conjunction with the development of the 2022 Annual Audit Plan.
- Three Priority Areas of Focus were identified for 2022 and communicated to Administration.

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## **2022 Priority Areas of Focus**



Continuous Auditing Projects and Risk Based Analytics Reporting Projects will focus on the three Priority Areas identified below.

The type of project is determined as part of detailed planning.

 Review of user accounts in Active Directory, including higher risk security groups.

Access Management

- Review of:
  - System access to post journal entries.
  - Patterns of journal entries.

Journal Entry



 Comparison between vendor master file and employee information to identify potential conflicts of interest.

Vendor Conflict of Interest



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