# Ontario Public Services- Ministry of Education
# Early Years and Child Care Division- Licensing and Inspection unit

# Supervision and Prohibited Practices Analysis

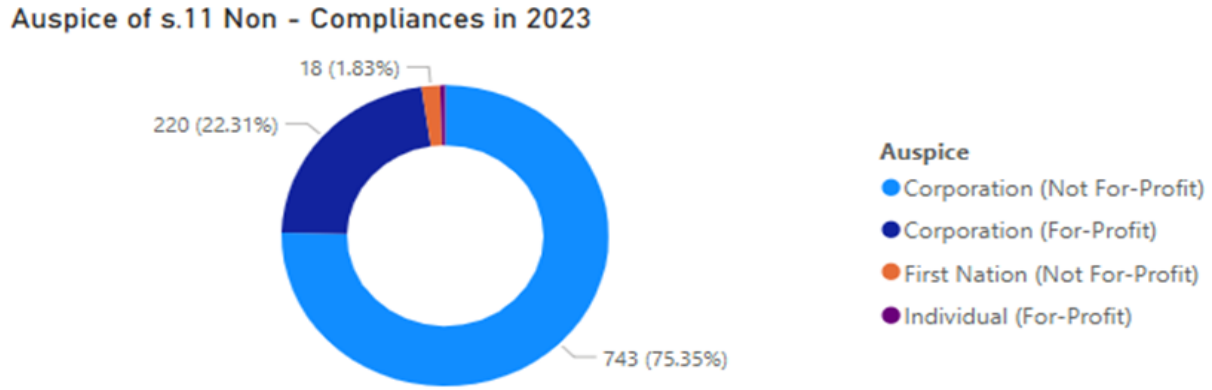
**Project Overview:**

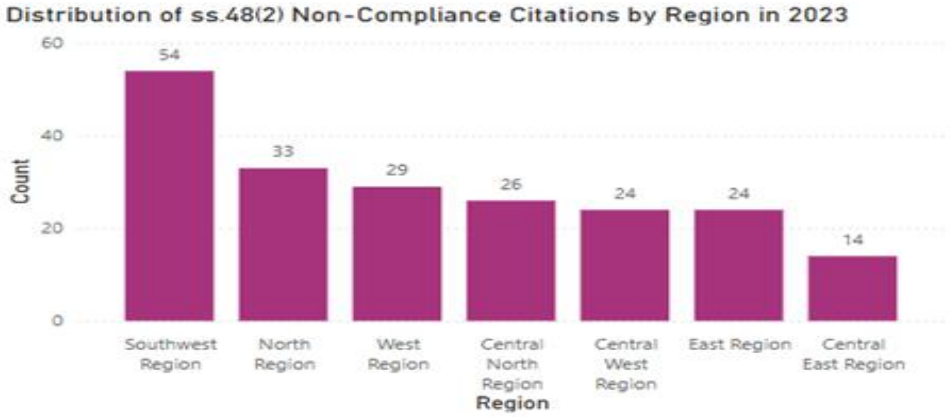
Analyzed compliance trends under the Child Care and Early Years Act with respect to supervision and prohibited practice requirements across child care facilities in Ontario. Identified patterns and provided actionable insights for improving compliance and operational standards.

**Tasks & Responsibilities:**

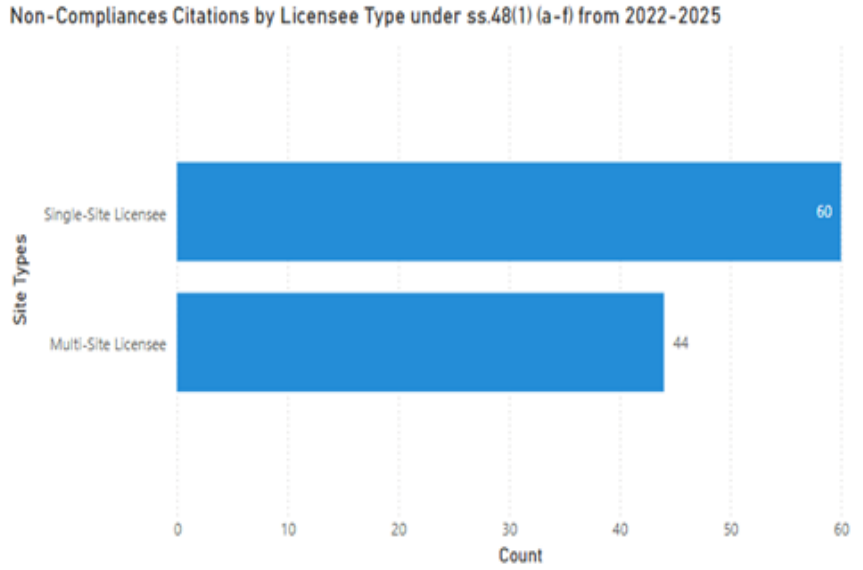
- Extracted large-scale compliance data from Early Years Integration Analytics spanning multiple years (2022-present).
- Performed thorough data cleaning, transformation, and preparation using Excel to ensure accuracy and reliability.
- Conducted detailed analysis exploring year-over-year, seasonal, geographic, and program-type compliance trends.
- Built interactive dashboards and sophisticated data visualizations in Power BI, enabling stakeholders to easily interpret complex data insights.
- Utilized advanced analytics through DAX queries for deeper insights and to uncover hidden patterns.
- Provided recommendations based on the analysis to enhance regulatory compliance and improve supervisory practices.

# Snippet of the Graphs created for Analysis







# Compliance Monitoring Dashboard

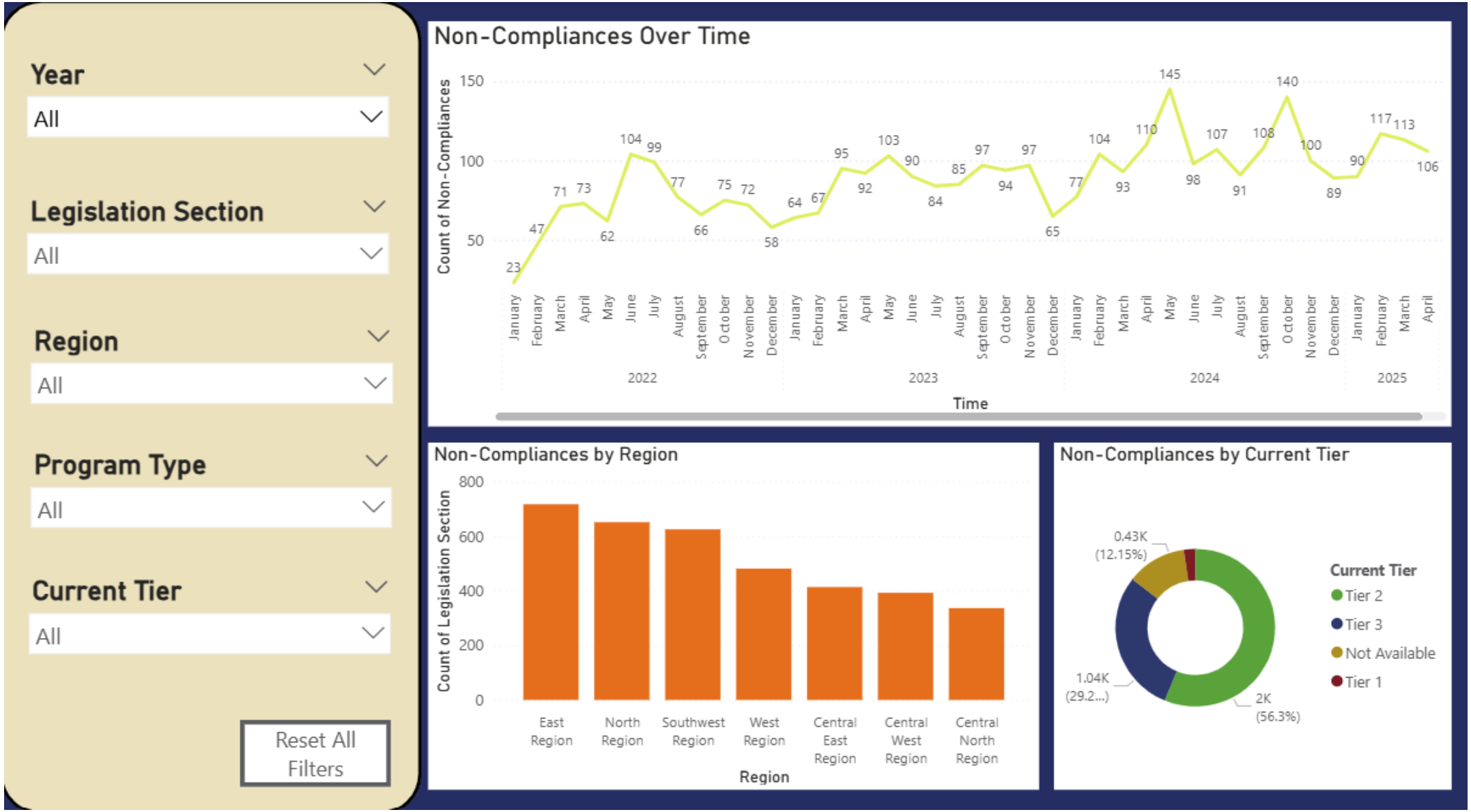
**Project Overview:**

Developed a functional prototype of a sector compliance monitoring dashboard in Power BI to support potential enhancements to the EYIA system. The dashboard aimed to help regional managers and senior program advisors visualize compliance data more effectively and improve oversight capabilities. Furthermore, it will support the senior leaders to get an overview of the health of the sector and make informed decisions based on the insights. The project involved designing mock-ups using a mix of dummy and available data, with a focus on usability and stakeholder needs.

**Tasks & Responsibilities:**

- Designed and developed interactive Power BI dashboards using DAX queries and dummy datasets aligned with operational goals.
- Extracted, cleaned, and prepared data from internal sources using Excel to support dashboard development.
- Created dynamic visuals, filters, and slicers to represent compliance patterns and sector trends.
- Iteratively refined the dashboard based on informal feedback to align with user expectations.
- Prepared and documented the prototype to support future integration and stakeholder review.

# Snippet of the Dashboard



# HOTSPOT MAPPING

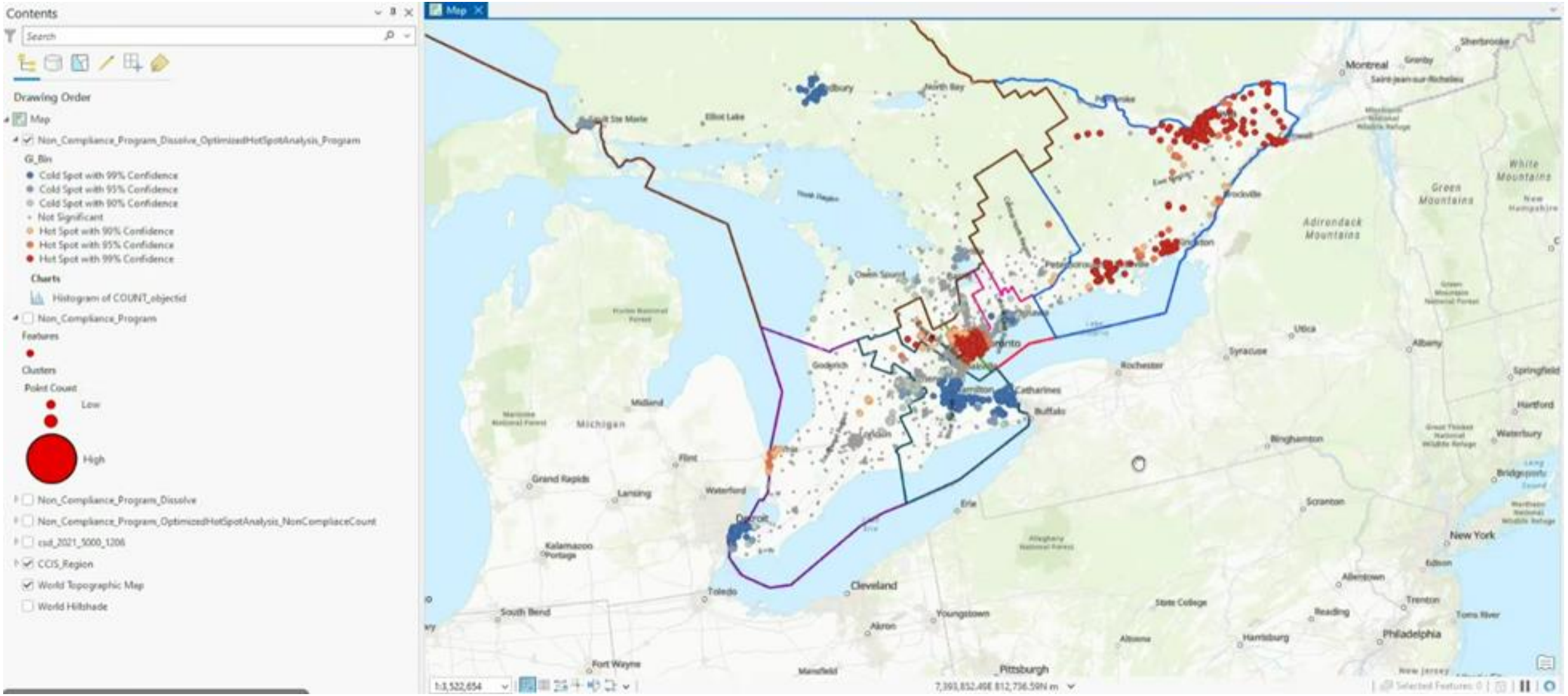
**Project Overview:**

Collaborated with the IT Cluster to develop real-time geospatial hotspot maps identifying regions with high non-compliance rates to provide a regional overview of non-compliance areas that may require closer regulatory oversight.

**Tasks & Responsibilities:**

- Developed precise geospatial hotspot maps using ArcGIS Pro, highlighting regions with significant compliance issues.
- Enhanced the clarity, accuracy, and interactivity of maps, improving user experience and operational responsiveness.
- Integrated real-time compliance data into the ArcGIS environment, ensuring map accuracy and immediate usability.
- Provided technical assistance to the IT Cluster in map enhancement and supported the ongoing refinement of mapping methodologies.
- Created detailed documentation to aid ongoing maintenance and updates of the geospatial visualization tools.

# Snippet of the Hotspot Map



# IRR Dashboard

**Project Overview:**

Designed and refined an exhisting dashboard to enhance consistency monitoring of child care program inspections by generating accuracy and similarity values between non-compliance checklists. The tool uses licence numbers to cross-verify inspection results from multiple program advisors, improving the reliability of compliance evaluations.

**Tasks & Responsibilities:**

- Developed and optimized DAX queries to calculate similarity percentages between non-compliance checklists conducted by different program advisors at the same child care program.
- Enhanced the functionality and accuracy of an existing Power BI dashboard, ensuring consistent and transparent calculation logic.
- Streamlined dashboard usability by improving data validation processes, enabling staff to more easily identify discrepancies between inspection reports.