CRIME MAPPING & ANALYTICS

A Safer Community Together

PEEL REGIONAL POLICE

PSB Presentation:
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Community Engagement Through Data Visualization

CRIME: Where, When & What

CRIME MAPPING & ANALYTICS

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- In response to growing public interest in, and request for crime statistics.
- The more informed the public are, the more engaged they are in tackling community safety issues, and the more action they will take to support the police.
- Developed with inputs from various stakeholders and community partners:
  - Safe City Mississauga,
  - Brampton Safe City,
  - Neighbourhood Watch,
  - PRP Crime Prevention,
  - Information & Privacy Unit,
  - Corporate Communication.
- The mapping application was designed, developed and deployed using only our internal resources → cost effectiveness, easy customization and control of data.
- Strike balance between victim's privacy and the public's right to know about incidents affecting their communities.
- Similar mapping applications deployed by other law enforcement agencies across Canada.

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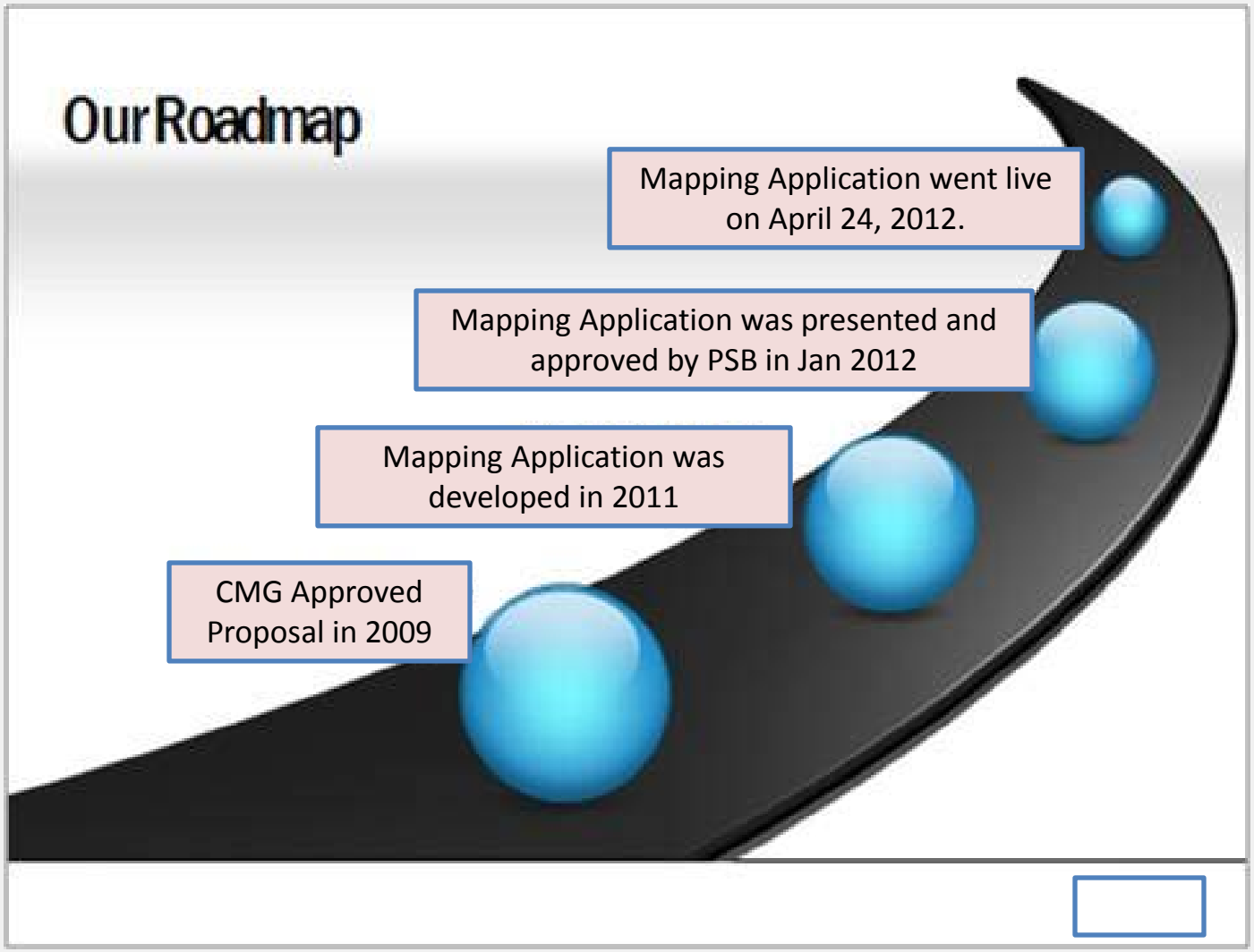

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- This is interactive system for residents to become more aware of crime trends and public safety issues in their neighborhoods.
- The 7 crime types considered for mapping are:
  - Homicide
  - Robbery
  - Muggings
  - Break-and-Enter
  - Auto Theft
  - Theft From Vehicle
  - Mischief.
- Users can display crime incidents for the past week or one month.
- Crime map is updated daily to show new incidents.
- Users can map crime locations by street, neighborhood, municipal ward or postal code.

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- Query results will show date of incident, block location and type of the incident.
- Users can display satellite view of the incident locations.
- Users can display landmark locations such as police stations, malls, parks and commercial centers.
- Benefits of web publishing of crime maps and statistics:
  - enhance transparency,
  - support community engagement,
  - promote community interest in neighborhood safety,
  - promote public confidence in crime statistics by providing prompt and accurate information
  - reducing time span for the public to gain access to the information
- As the needs change and technology improves, we are hoping to adapt the application appropriately to address public concerns and issues.

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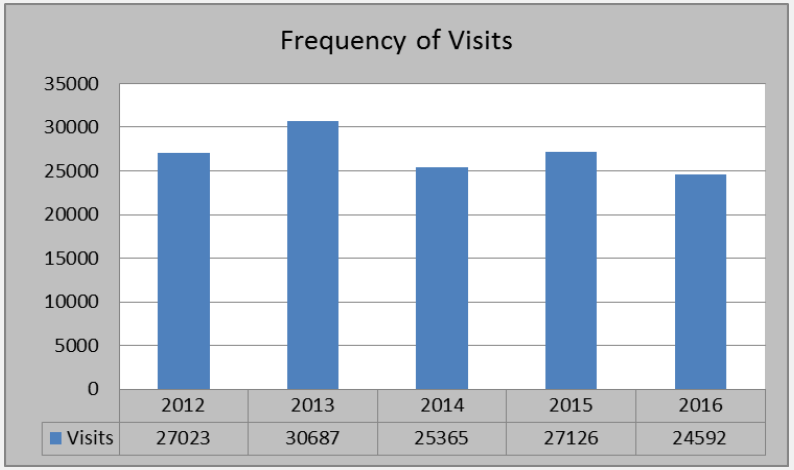
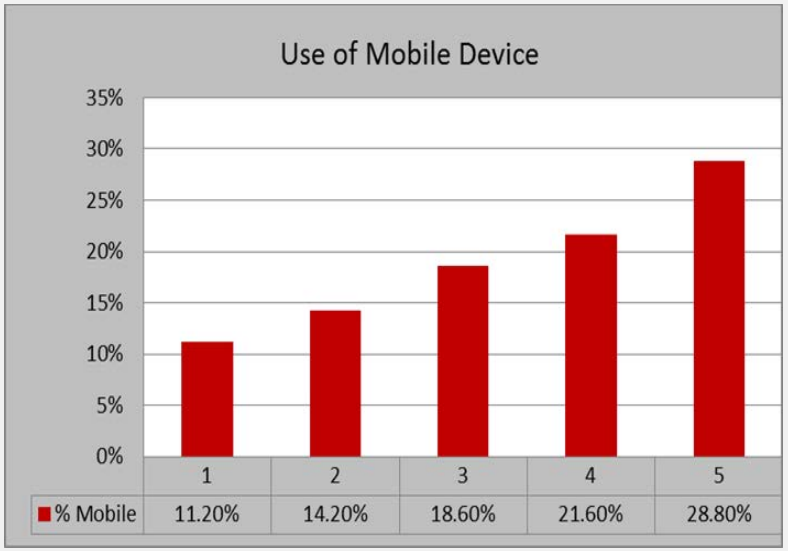
- On average, there are about 27,000 annual visits to the crime mapping website. An average of about 2,200 active visitors per month.

- About 75% of visitors are being new visitors and 25% are returning visitors.

- About 78% of the users access the mapping application from their desktop computers while 22% did so using their mobile devices.

- The trend is gradually shifting towards the use of mobile device to access the mapping application.





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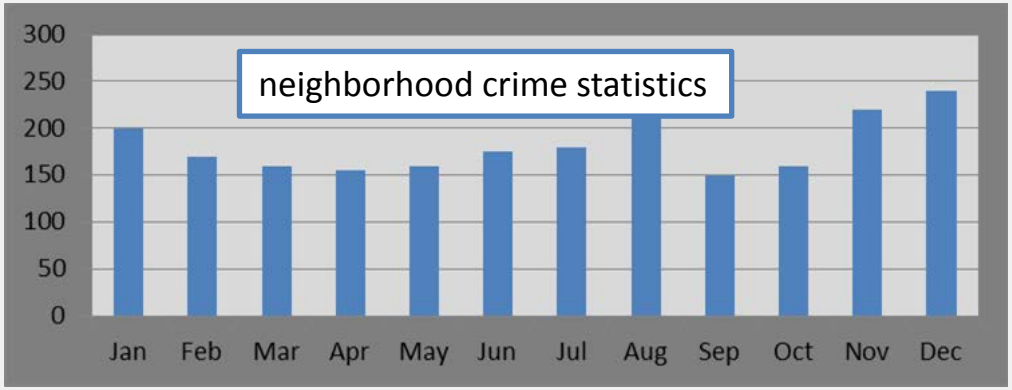
- As a results, we intend to transition to a more robust, advanced mobile, tablet-based, dashboard environment which provides up-to-date snapshots of crime trends



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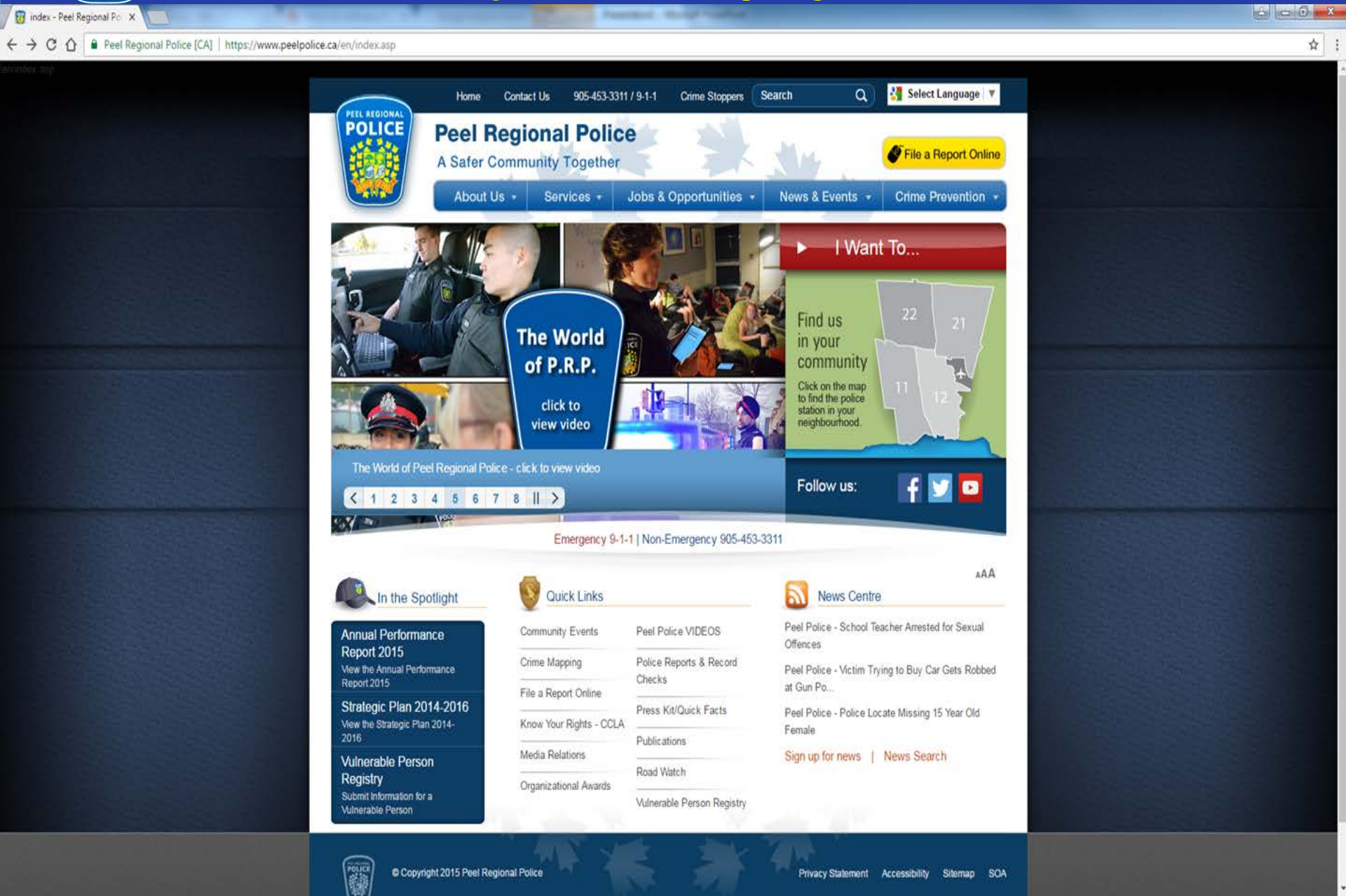

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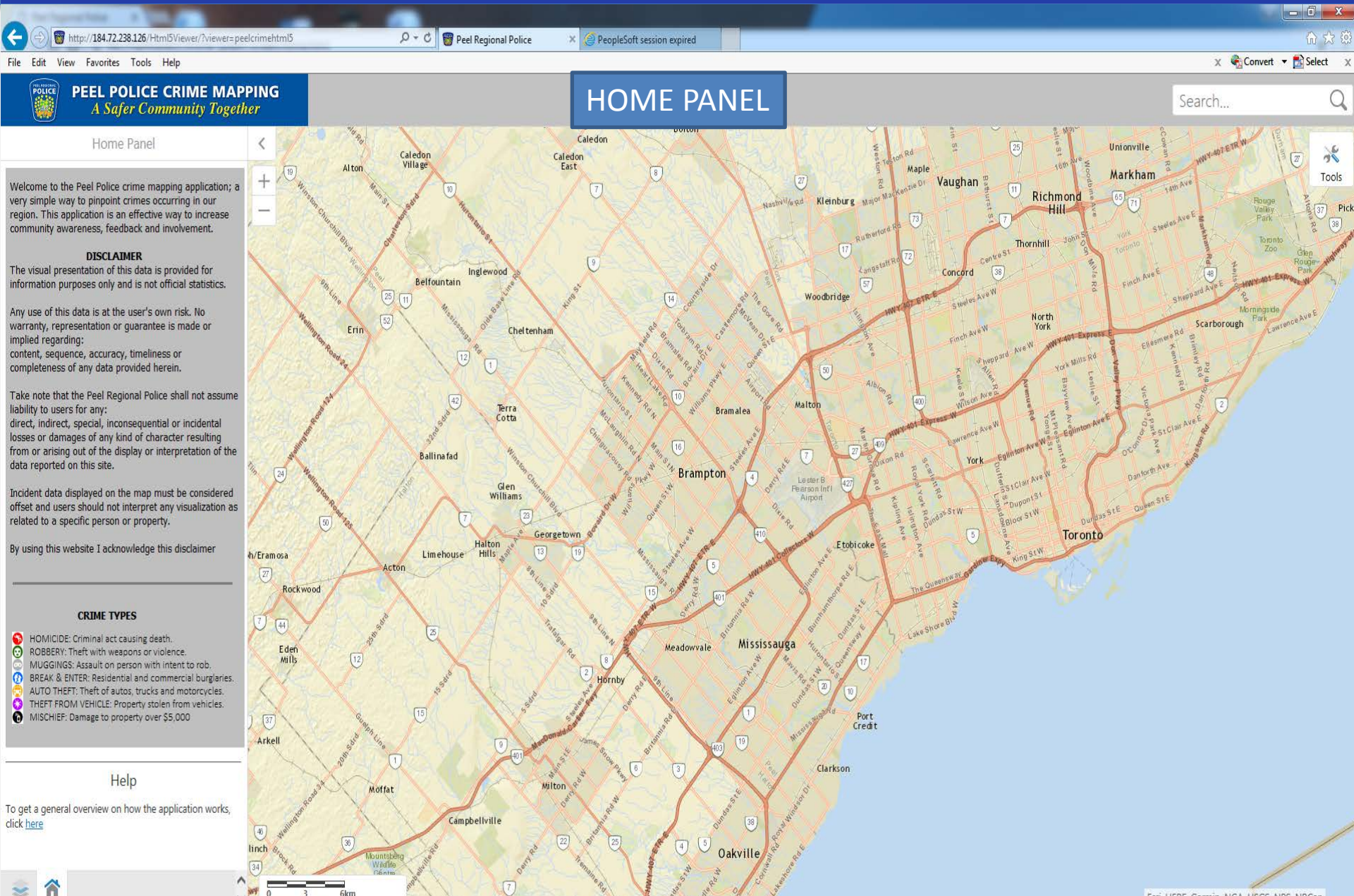

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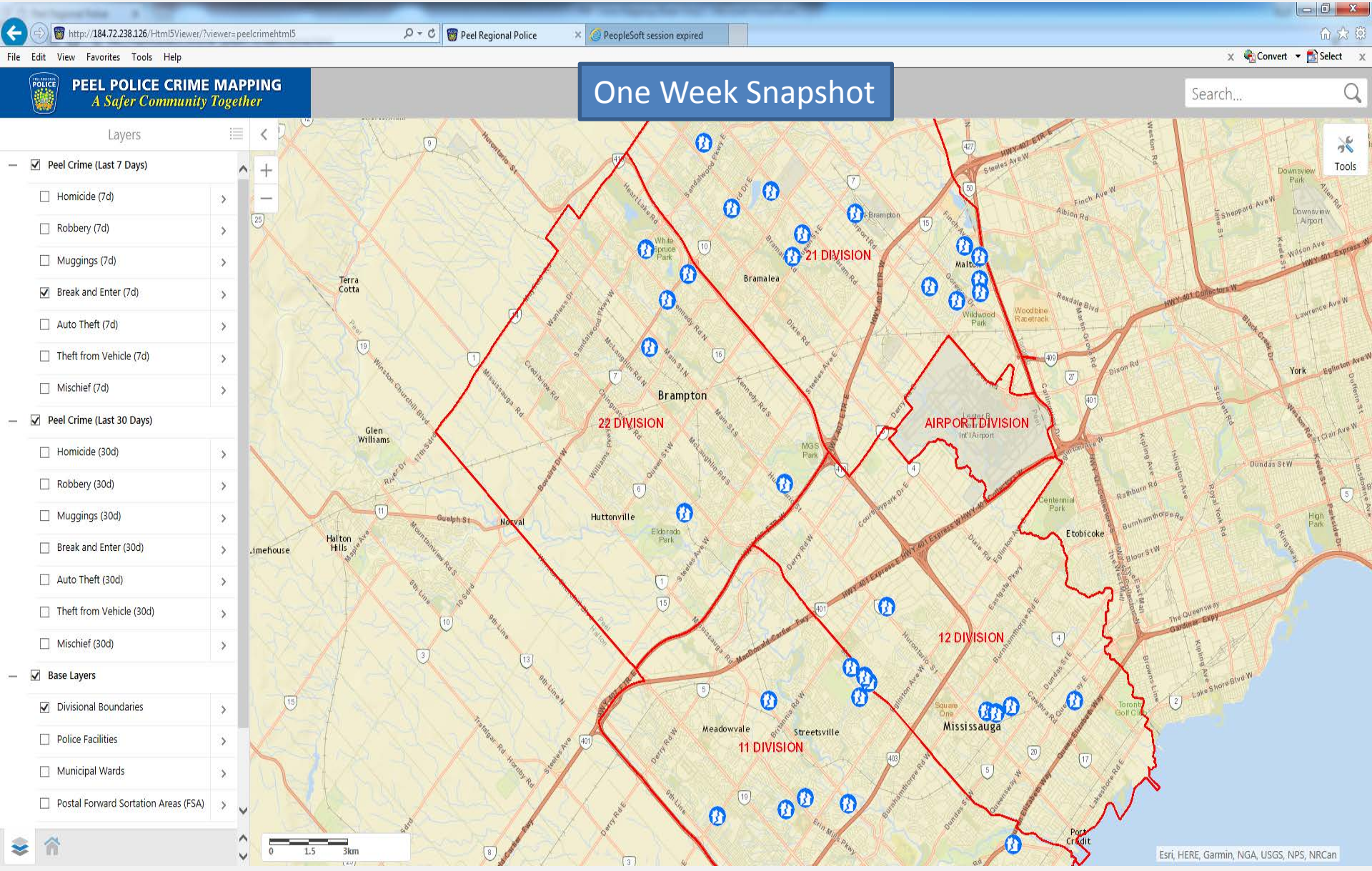

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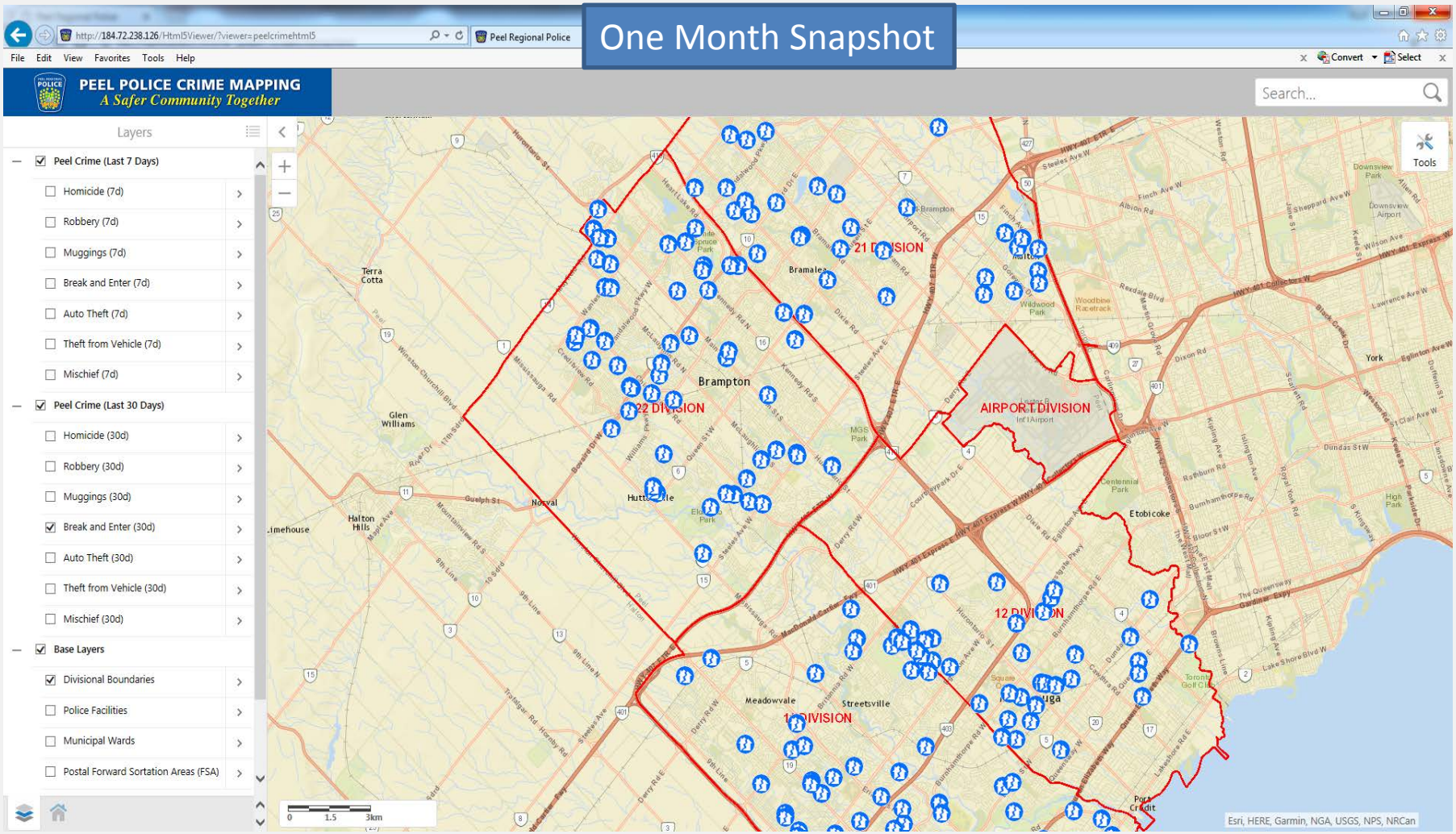
One Month Snapshot



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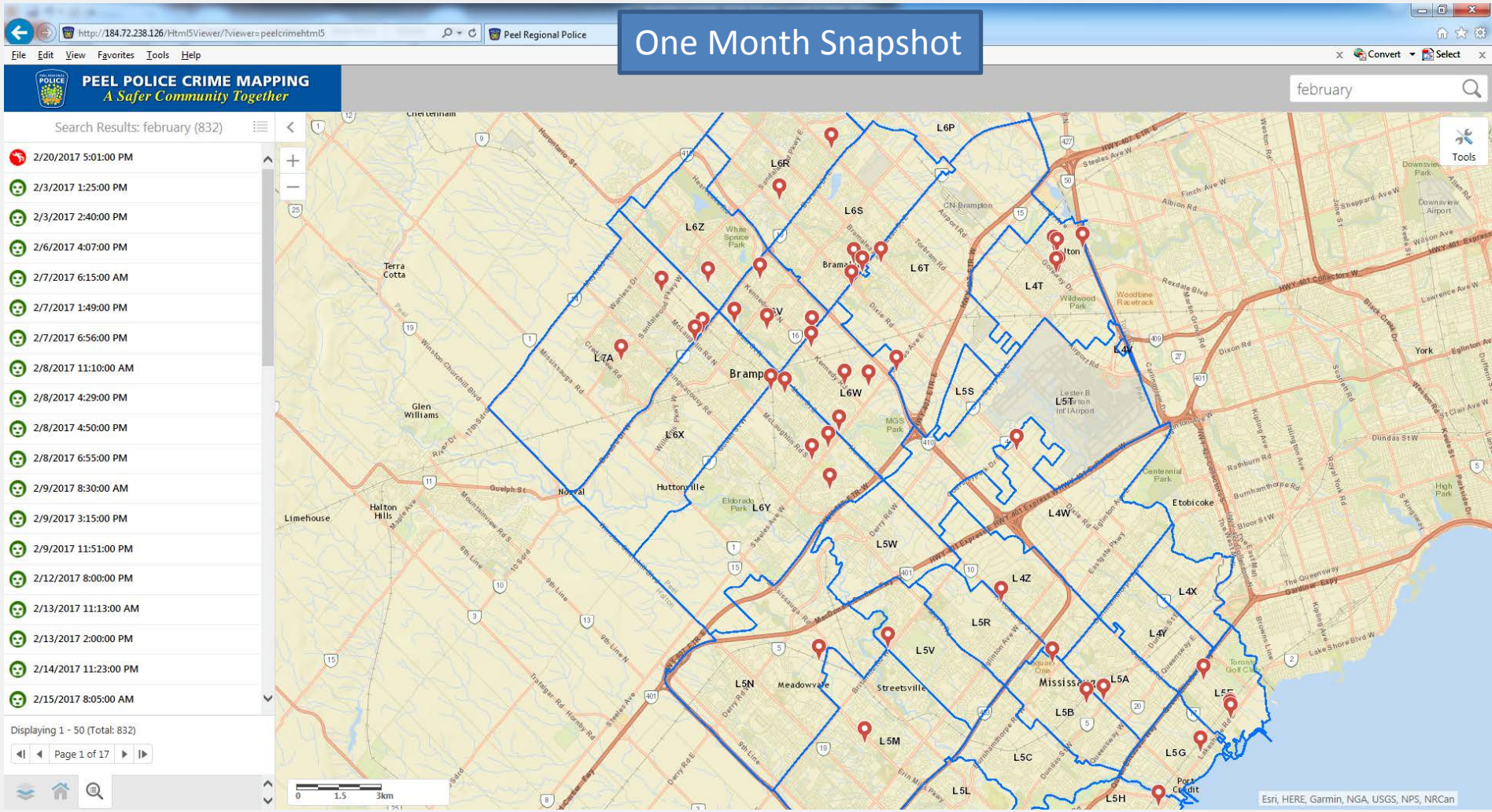

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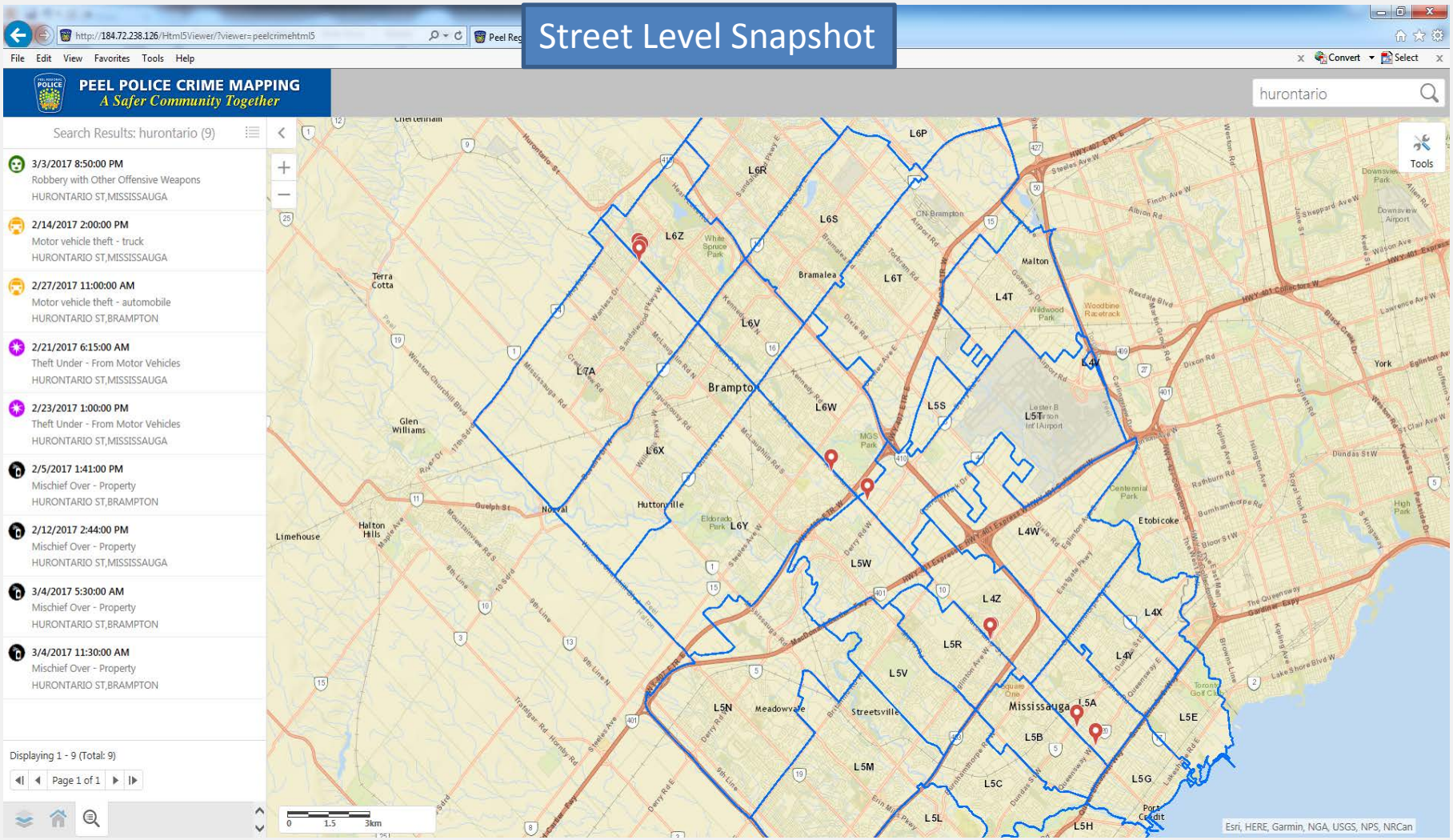
Street Level Snapshot



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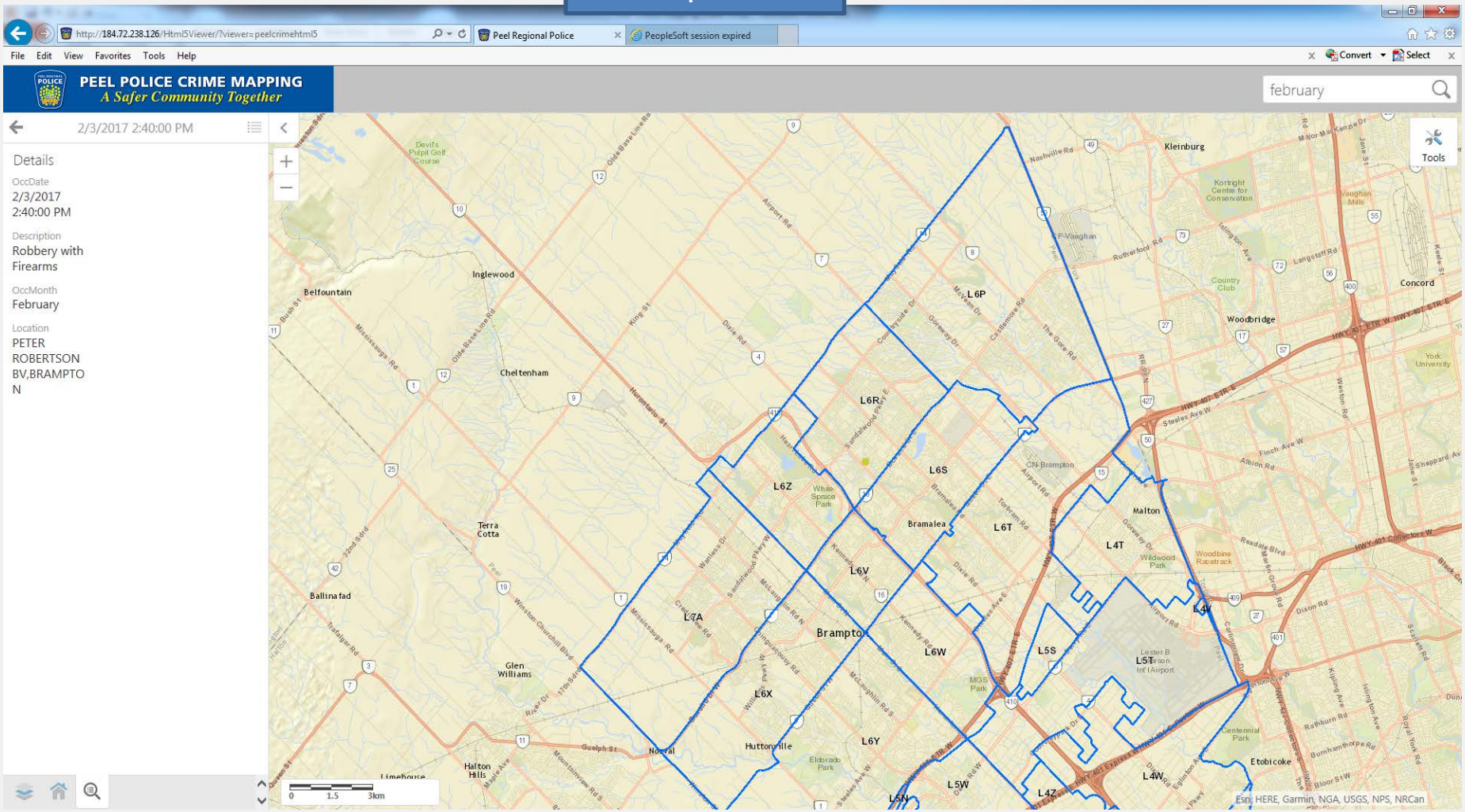
Municipal Ward



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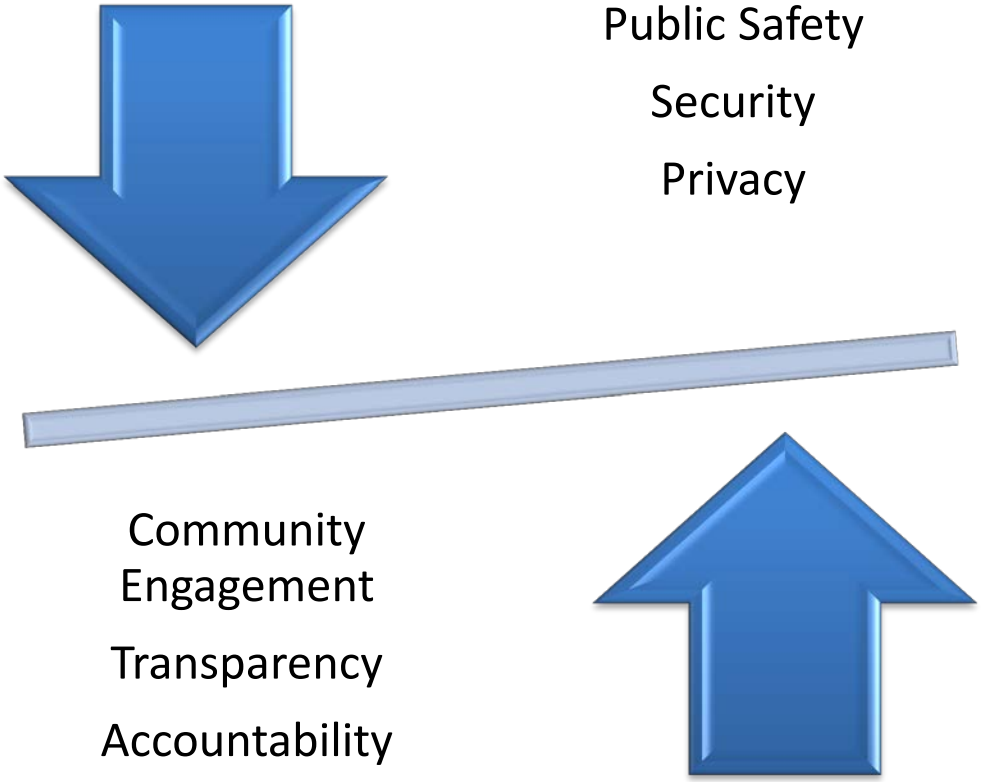

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- Internal capabilities to deploy robust analytics

- Using many leading technologies and methodologies
  - Descriptive statistics
  - Inferential Statistics
  - SPSS
  - SQL Server Analytics
  - GeoCortex/ESRI

- Change business processes to facilitate analytics

- Moving from providing information to providing insight

- Delivering the right insight to the right personnel at the right time to supplement and facilitate the decision making process

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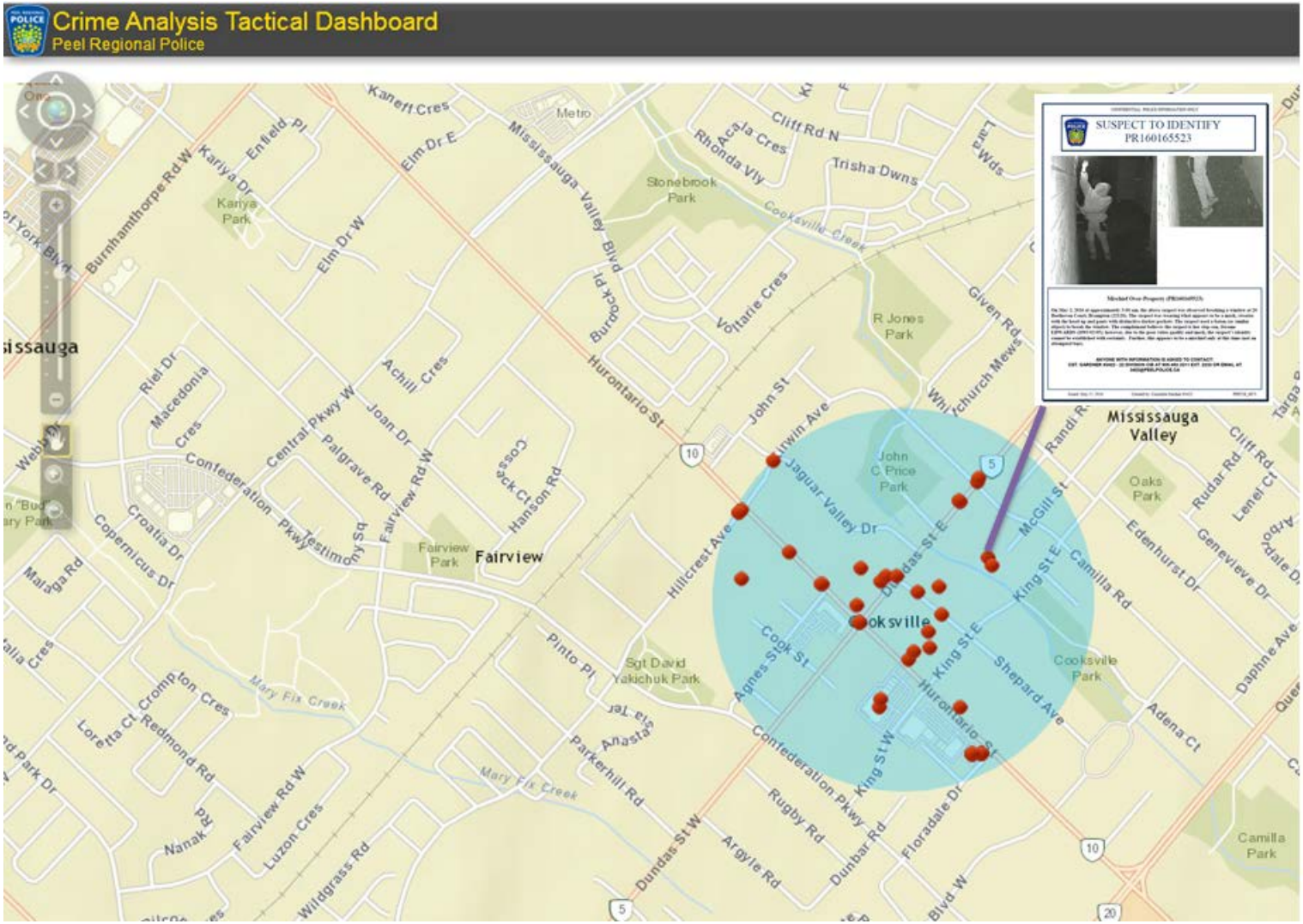

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Thank You

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