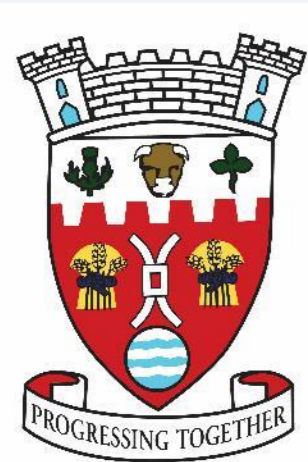




DILLON
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Puslinch Master Fire Plan

Preliminary Findings

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Dillon Consulting Limited

June 11, 2015

Presentation Outline

- **Study Progress**
- **Preliminary Findings/Discussion of Options**
 - Community Risk Model
 - Non-Suppression
 - Suppression
- **Next Steps**
- **Questions**



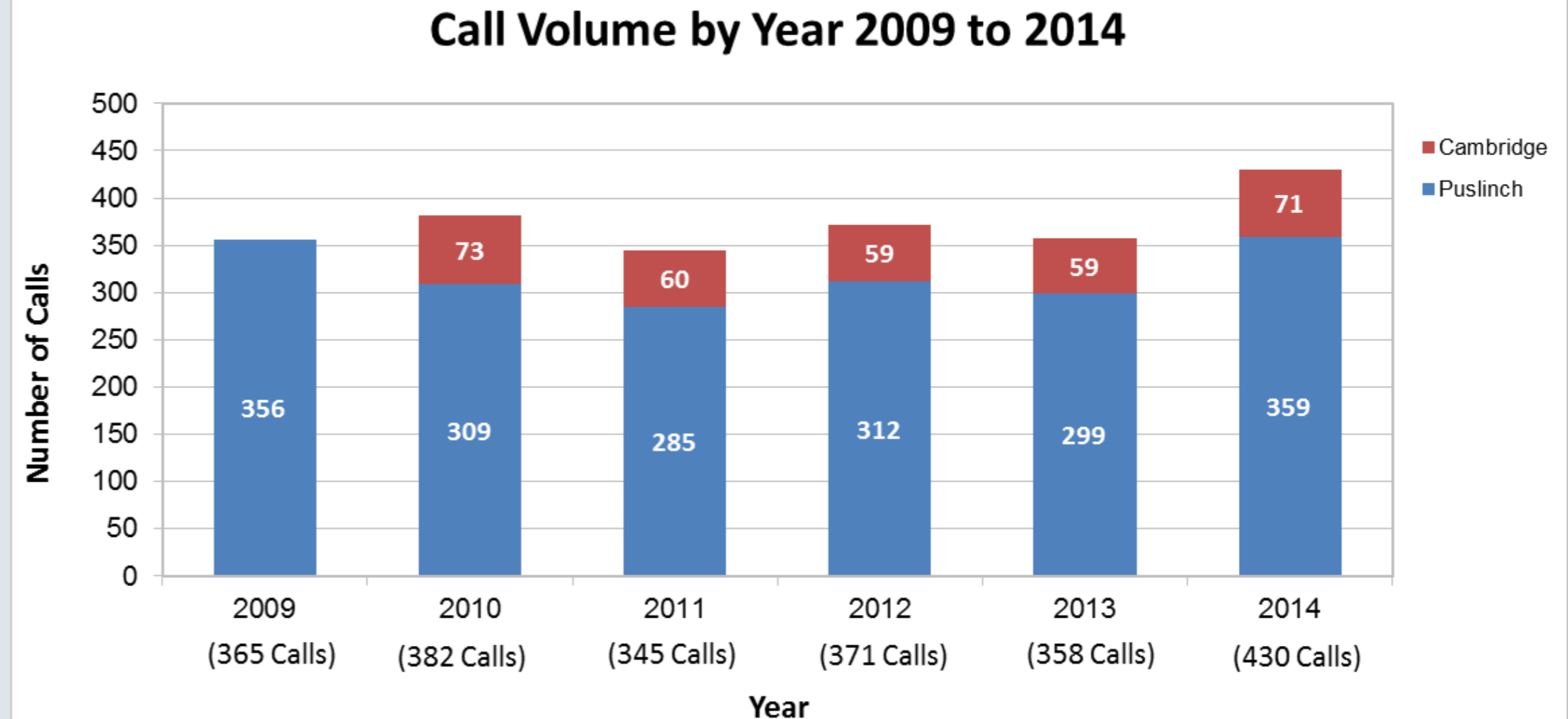
Study Progress

- ✓ Data Collection
- ✓ Site Visit/ Project Initiation Meeting
- ✓ Background Review
- ✓ Staff/Stakeholder Interviews
- ✓ Non-Suppression Operations Review
- ✓ Suppression Operations Review
- ✓ Community Risk Model / Emergency Response Model
- ✓ Draft Report Progress



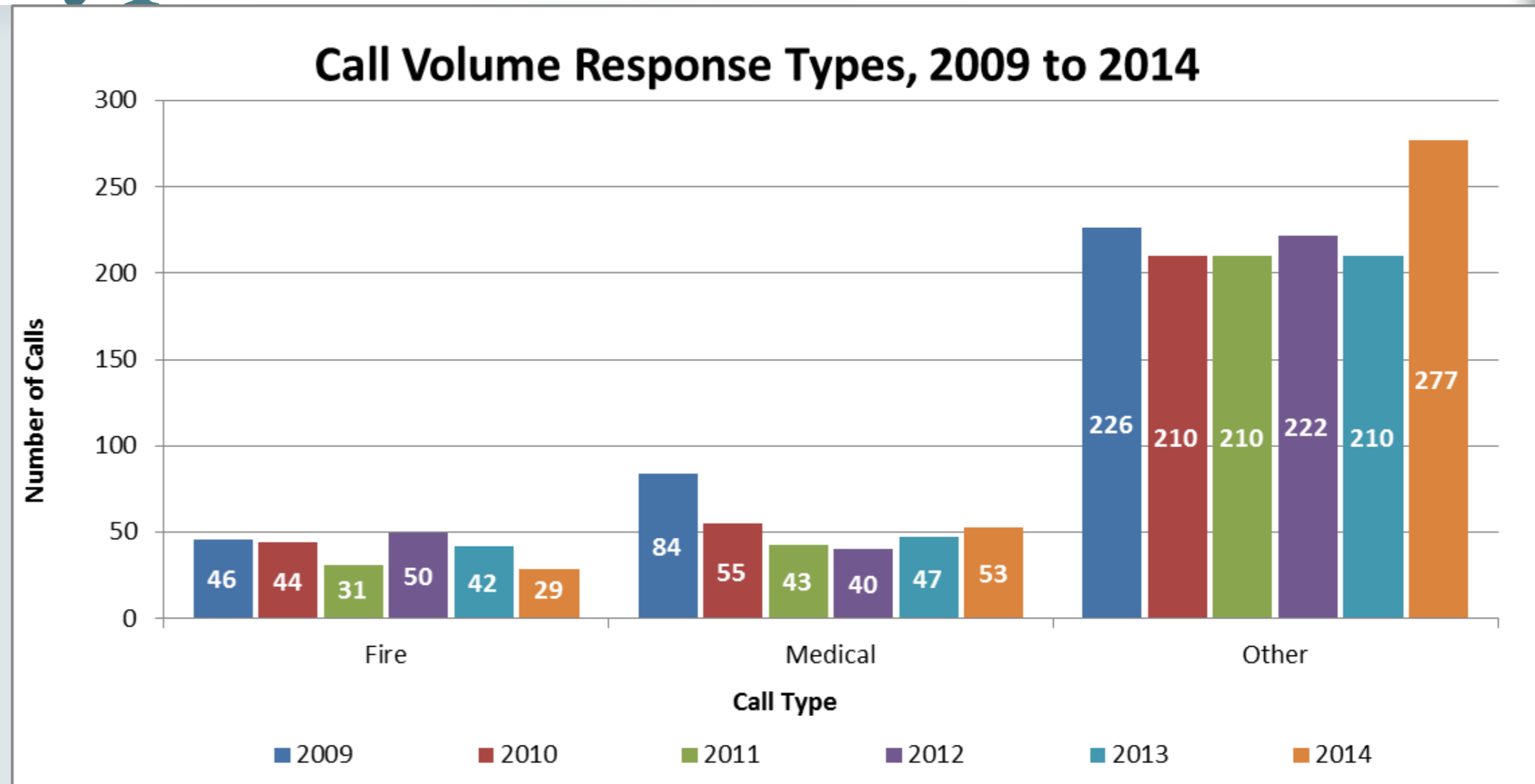
Emergency Call Volume

- Over the period 2009 to 2014 total call volume has been relatively consistent.
- Puslinch calls are shown in blue and the calls Cambridge responds to (within the contracted area) is shown in red.



Response Types

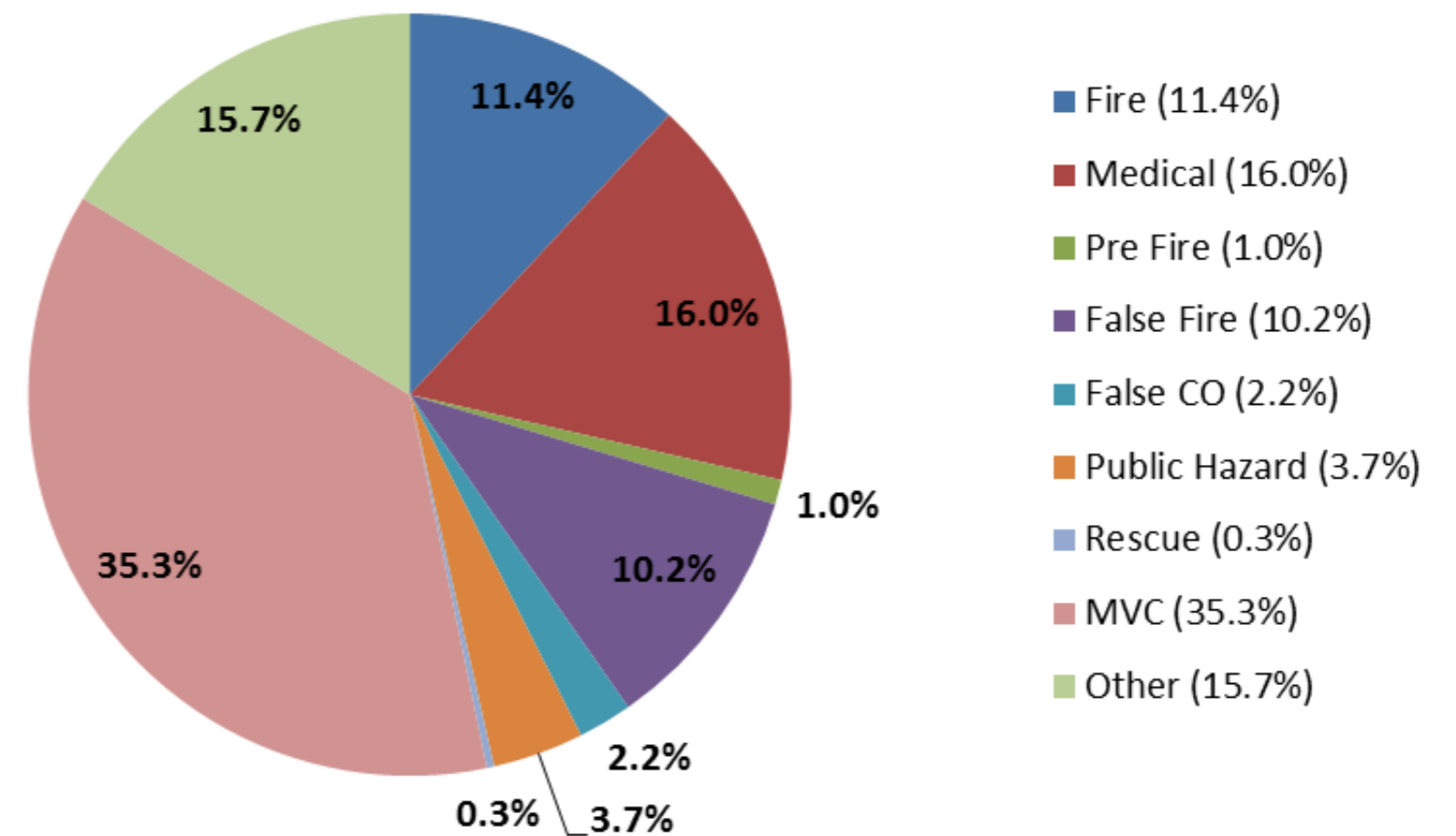
- Only the calls Puslinch responds to are shown in the graph.
- The number of fire related calls have remained relatively the same over this period.
- Averaging approximately 40 fire calls per year.



Percentage of Calls

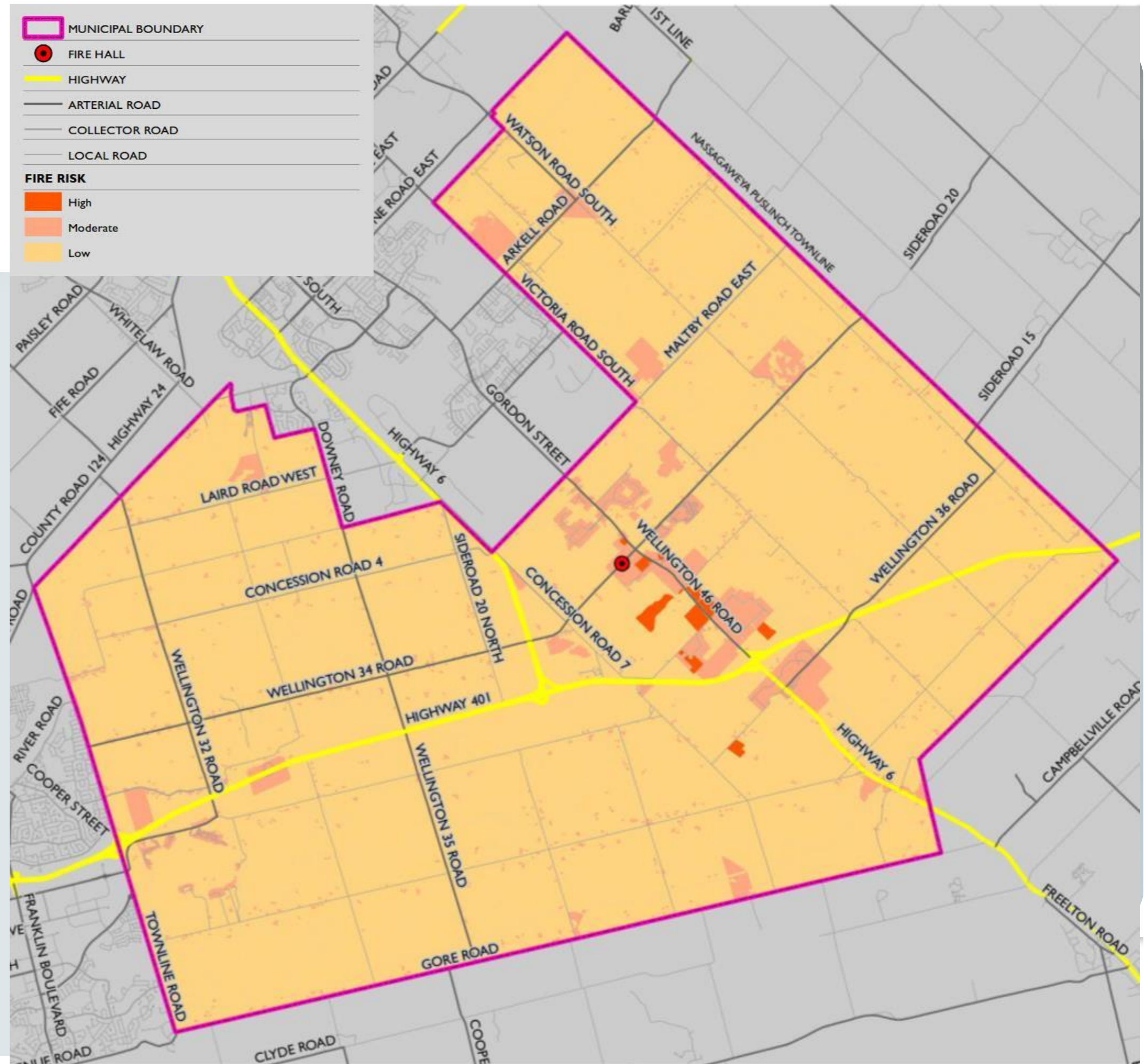
- Only the calls Puslinch responds to are shown in the graph.
- Fire calls represent 11.4% of all call types.
- Motor Vehicle Collisions (MVC) calls account of 35.3% of calls.

Percentage of Calls by Type 2009-2014



Community Risk Profile

- Typical level of risk that would be found in comparable municipalities.
- No significant amount of growth is expected.
- A minor population shift occurs during the spring and summer months with seasonal camping, trailers and cottages.
- Residential occupancies dominate the community at 93% of the building stock.
- The historic hamlets, Aberfoyle and Morriston, are at a higher fire risk due to the buildings being constructed before 1981 and the exposure to other buildings.
- 9 buildings were identified as high risk: a school, a nursing home, and industrial buildings.



Preliminary Findings

Overall:

- Commitment to sustain and support volunteer model
- Highly committed group of volunteers
- Turnout and travel time are key challenges
- Optimize first two lines of defence (Ontario Fire Protection Model)
- Optimize use of available resources

Preliminary Findings

Administration:

- Sufficient administrative workspace
- Current automatic aid agreements:
 - Guelph Eramosa
 - Cambridge
- Wellington County prepares and manages the Emergency Response Plan and the CEMC role

Fire Prevention and Public Education:

- Smoke Alarm Program requirements were not met in 2013
- Part time Fire Prevention Officer, shared with the Township of Welling North
- Current Inspection Target in SOG 8-102 is not being met.
- Insufficient workspace



Preliminary Findings

Training:

- Strong core curriculum
- Training Officers are groups of individuals that specialize in the particular topic and have instructor level training

Apparatus and Equipment:

- The fire station is attached to the Township Building
- Good equipment for diesel emissions
- Replacement of current Aerial needs to be considered
- Apparatus maintenance is outsourced to C-MAX



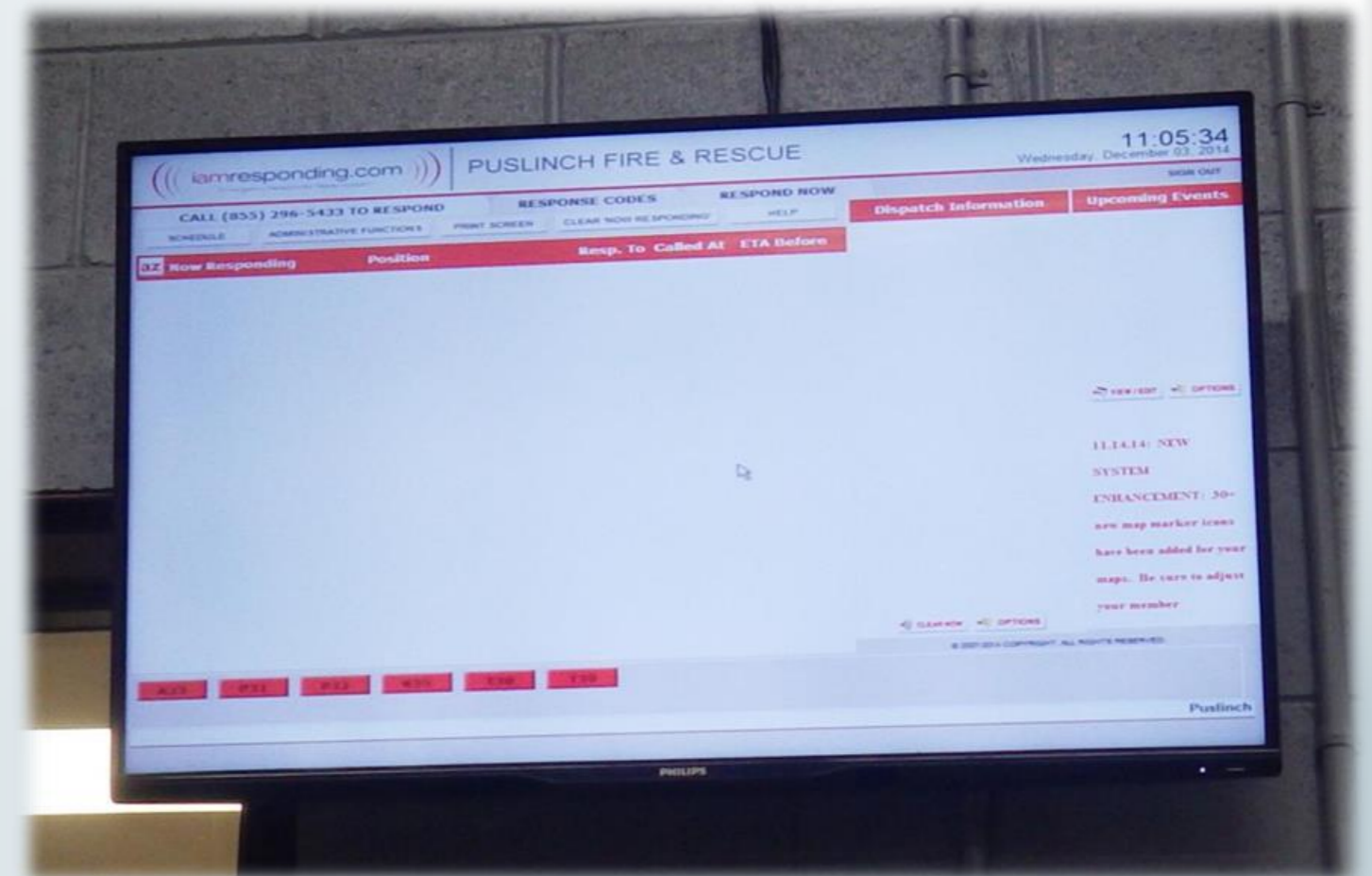
Preliminary Findings

Communications and Technology:

- Dispatch is being transferred to Guelph
- lamResponding

Fire Suppression:

- Turnout Times
- Travel Times
- Use of Automatic Aid



Emergency Response Performance Measures: NFPA 1720

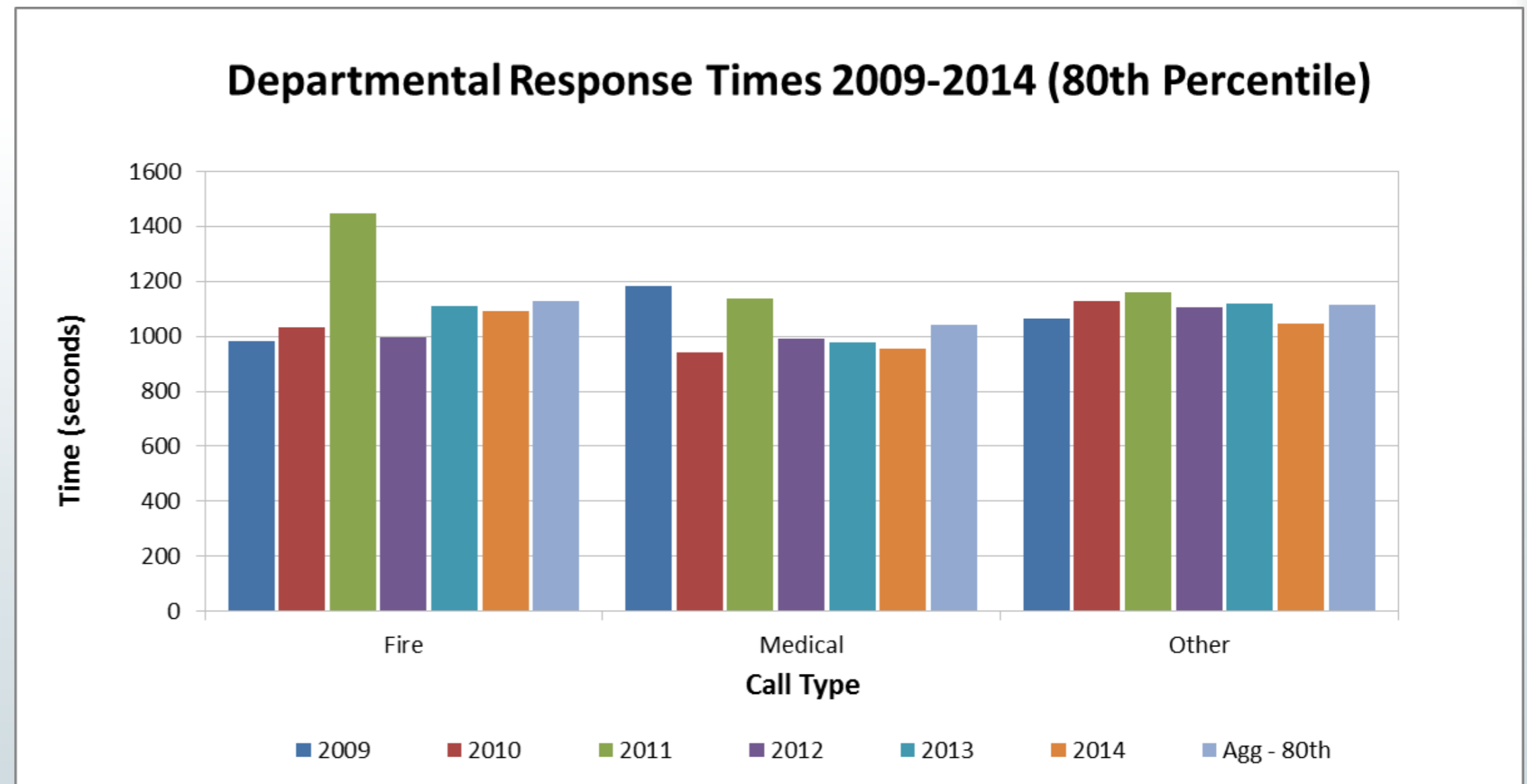
Puslinch has a population density of 84.8 people/mile squared

Demand Zones	Demographics	Minimum # of Firefighters Responding	Response Time (Turnout + Travel) in Minutes
Urban Area	>1000 people per square mile	15	9
Suburban Area	500-1000 people per square mile	10	10
Rural Area	<500 people per square mile	6	14
Remote Area	Travel Distance + or - 8 miles	4	Dependent upon travel distance
Special Risks	To be determined by fire department	To be determined by fire department	Determined by authority having jurisdiction



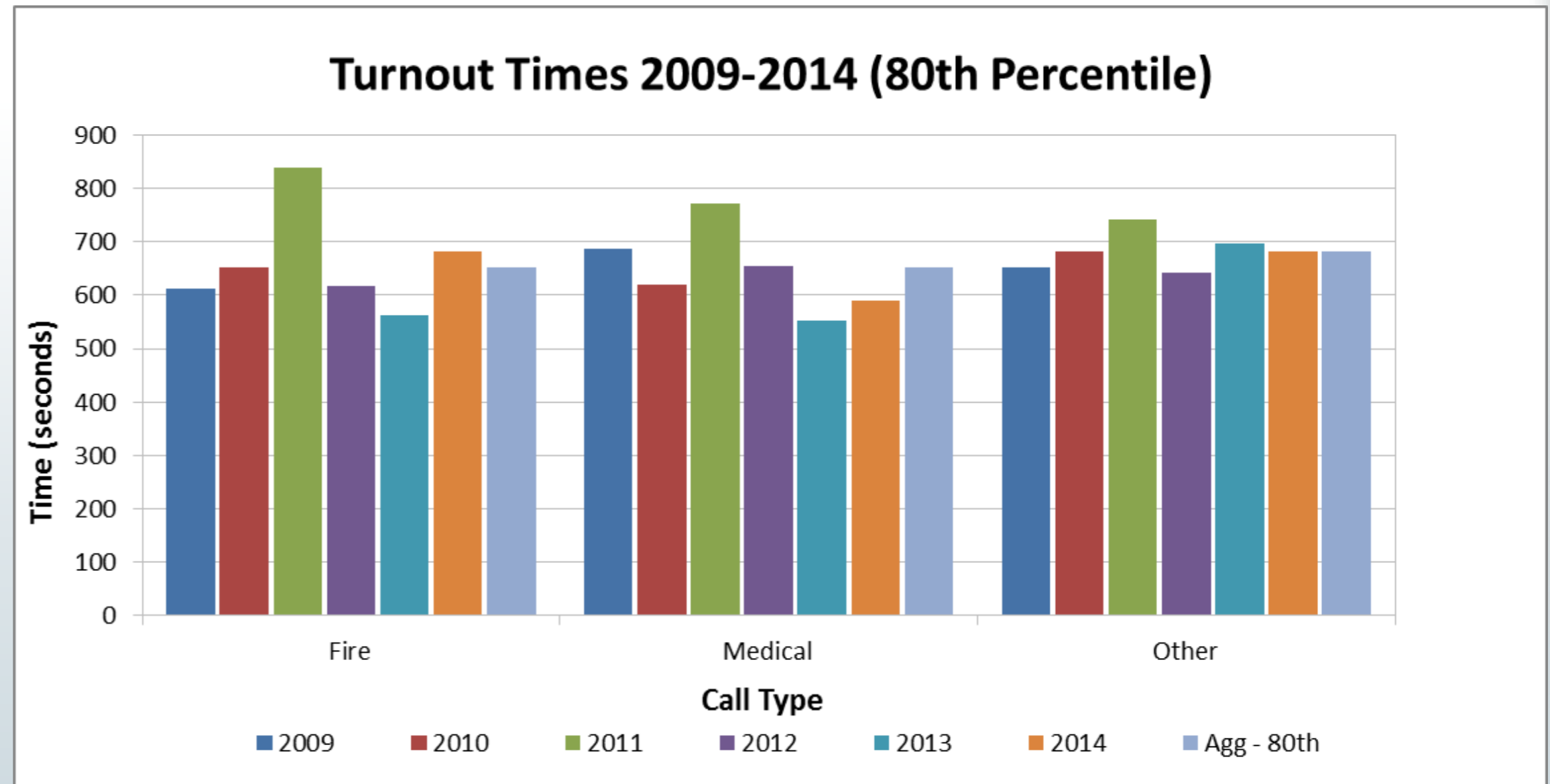
Fire Suppression

- Represents turnout time plus travel time
- The 6 year 80th percentile for fire calls is 1130 seconds (approximately 18.8 minutes).



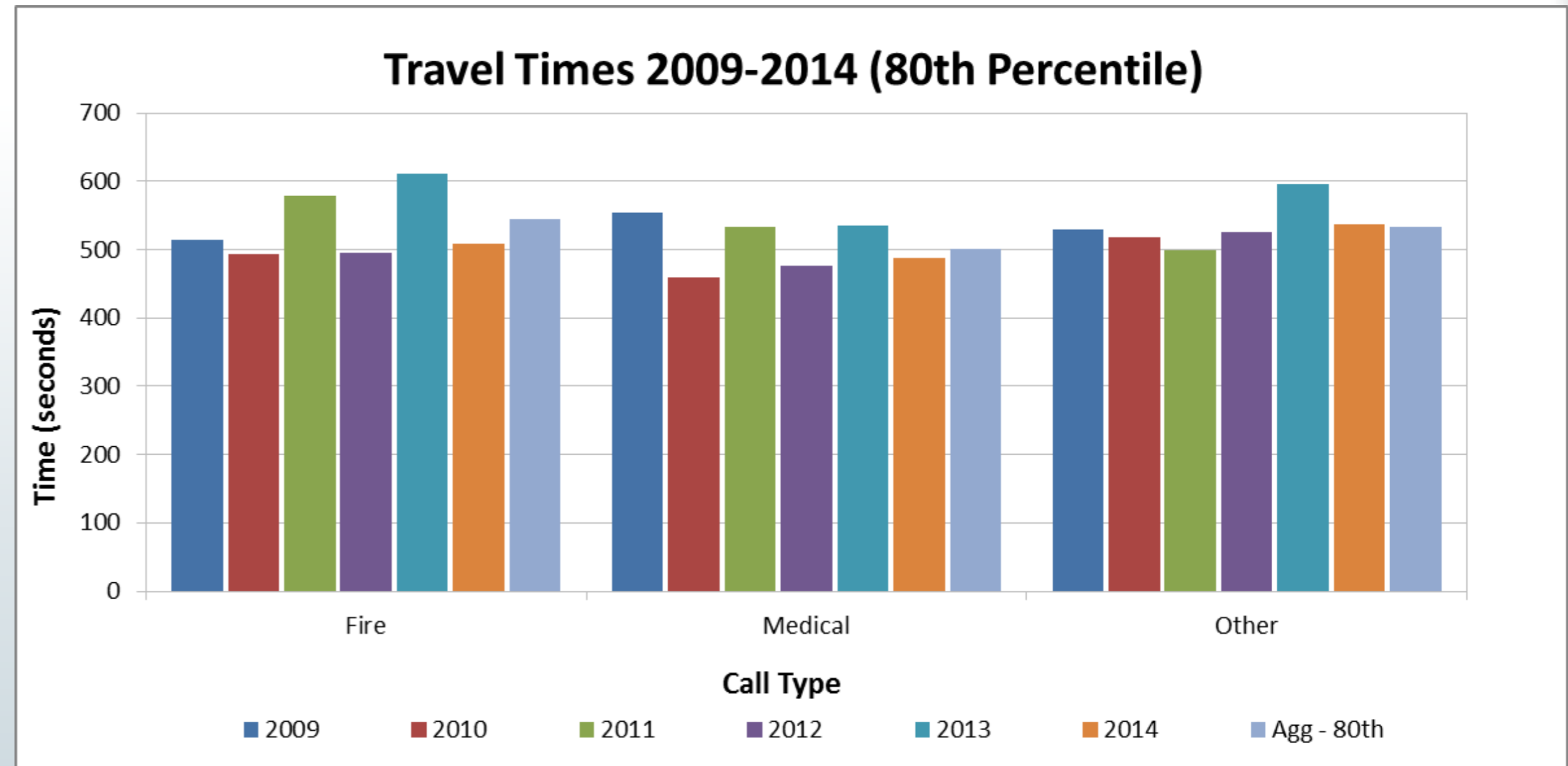
Fire Suppression

- The 6 year 80th percentile for fire calls is 652.2 seconds (approximately 10.9 minutes).



Fire Suppression

- The 6 year 80th percentile for fire calls is 544.4 seconds (approximately 9.1 minutes).

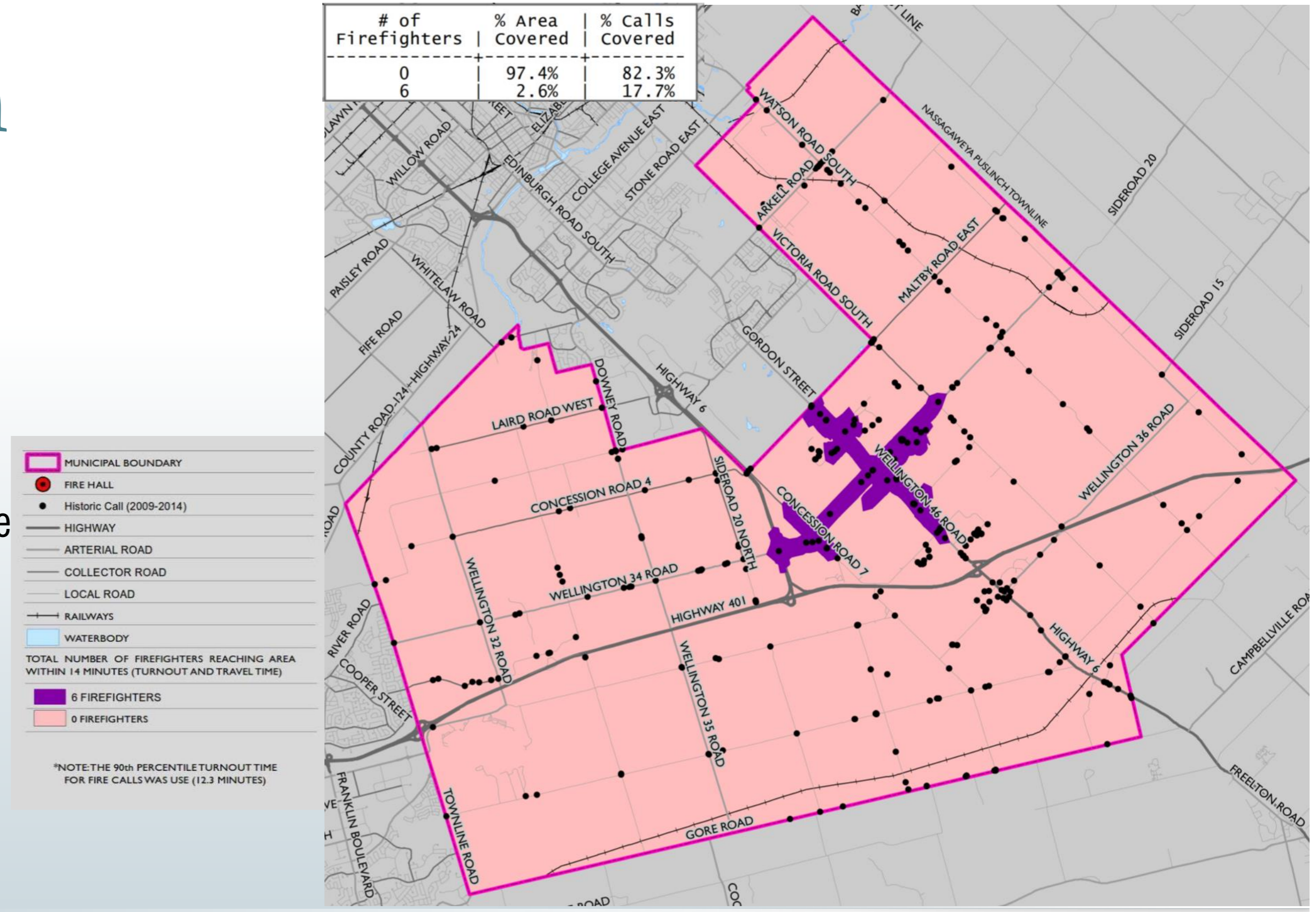


Fire Suppression

Response Capabilities






- The map shows Puslinch response in comparison to the NFPA 1720 Standard which requires 6 firefighters in 14 minutes of department response time (turnout and travel time)
- Rural standard – not being met in most of the Township

Calls that would generate a lights and sirens response were included (Medical, Alarm Activation, CO Readings, Smoke Investigation, Fire, Hydro, Hazmat Toxic, Water Rescue, High Angle, Plane Crash).

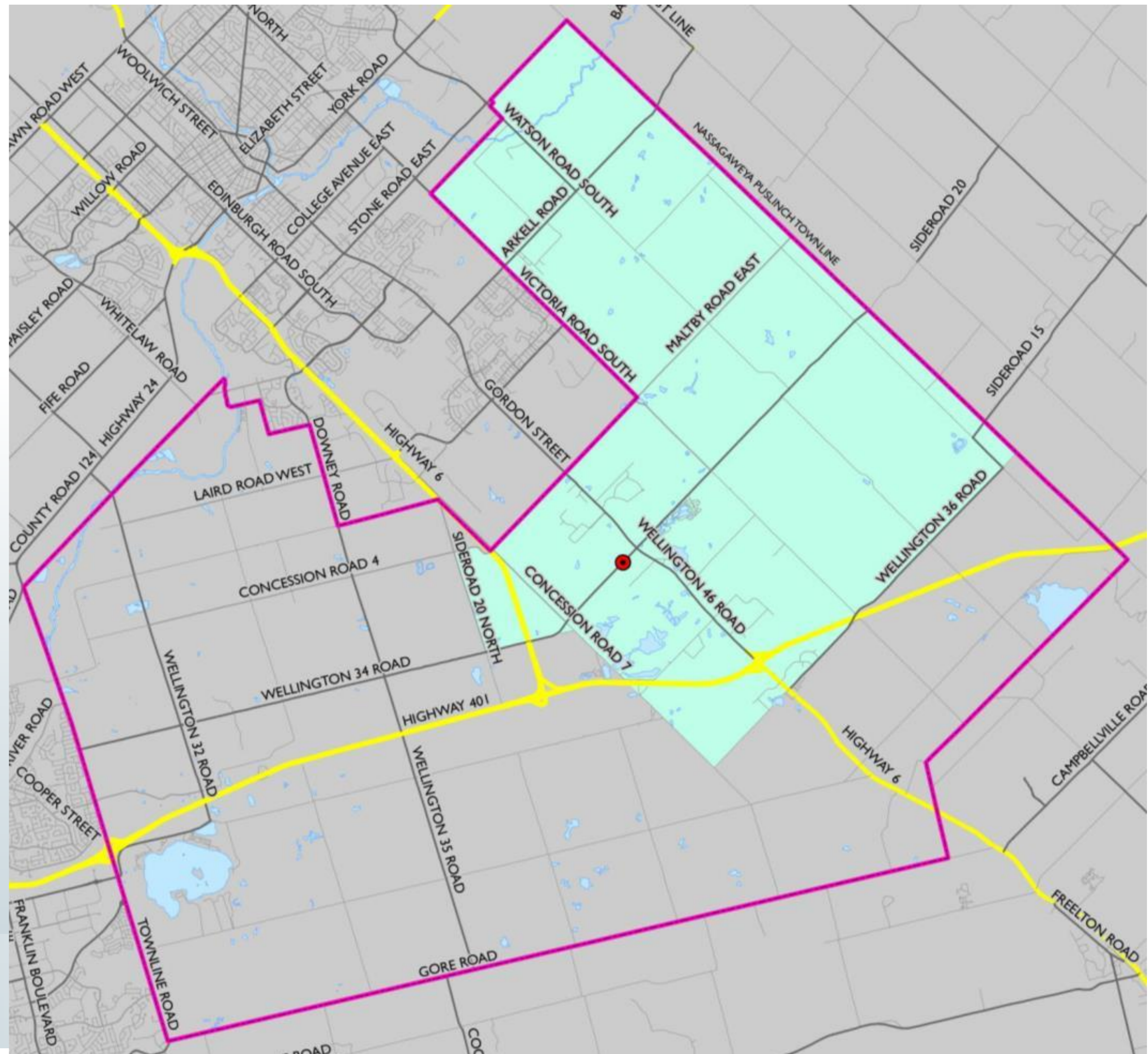


Township of Guelph Eramosa Automatic Aid Agreement

The map shows the area Guelph Eramosa has agreed to provide automatic aid to. This is also known as the Rockwood Automatic Aid area.

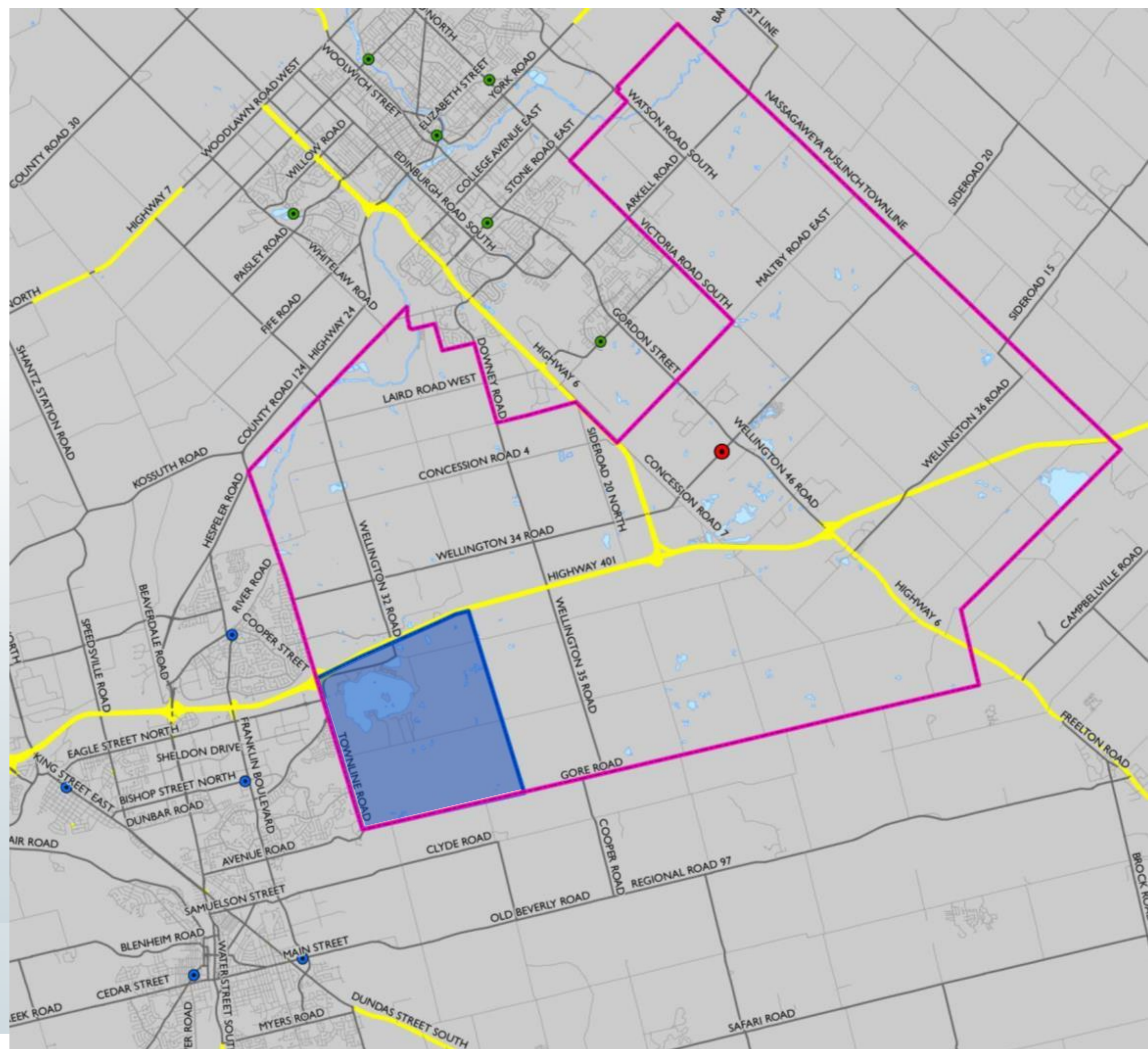
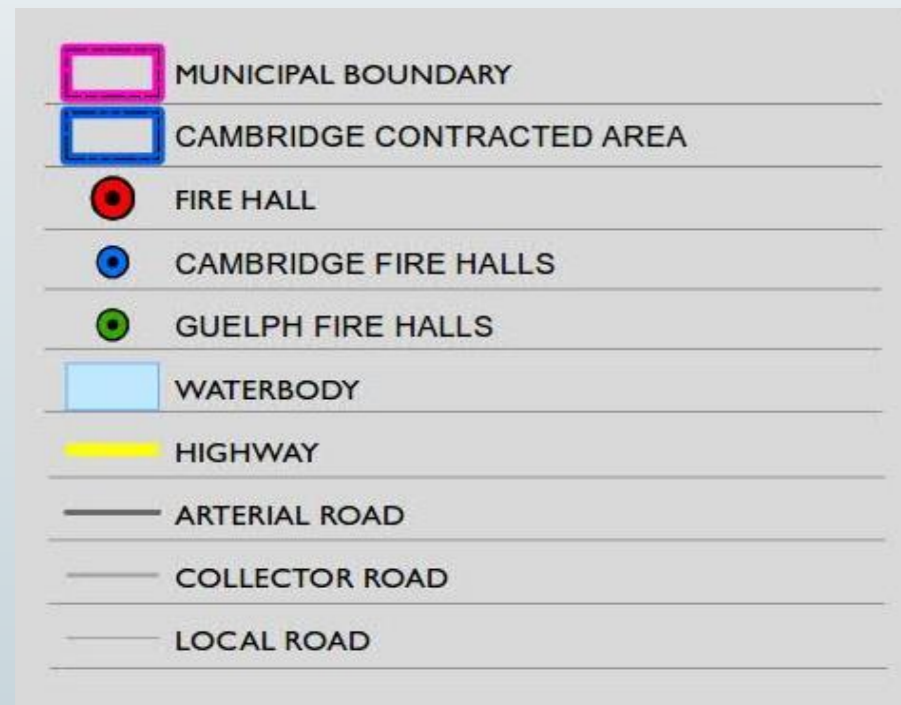
-  MUNICIPAL BOUNDARY
 -  Rockwood Automatic Aid
 -  FIRE HALL
 -  HIGHWAY
 -  ARTERIAL ROAD
 -  COLLECTOR ROAD
 -  LOCAL ROAD
 -  WATERBODY
- TRAVEL TIME**

*NOTE: THE ROCKWOOD AUTOMATIC AID AREA INCLUDES BOTH SIDES OF THE STREET



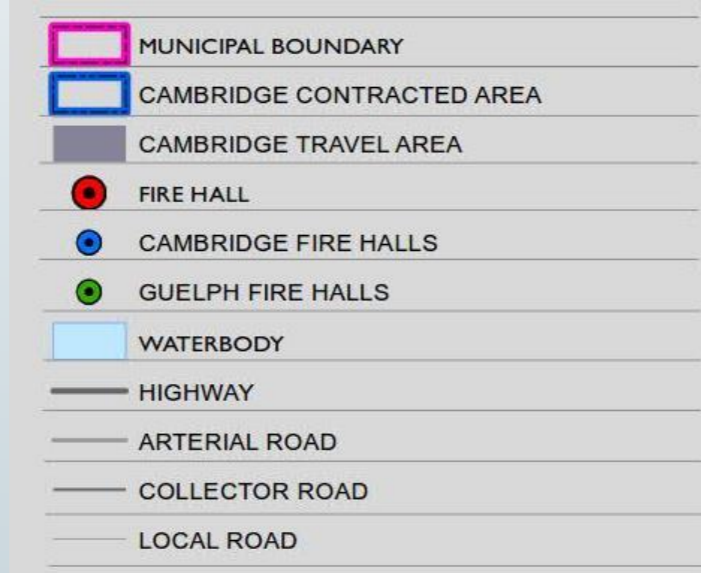
City of Cambridge Servicing Agreement

The map shows the area contracted to Cambridge.

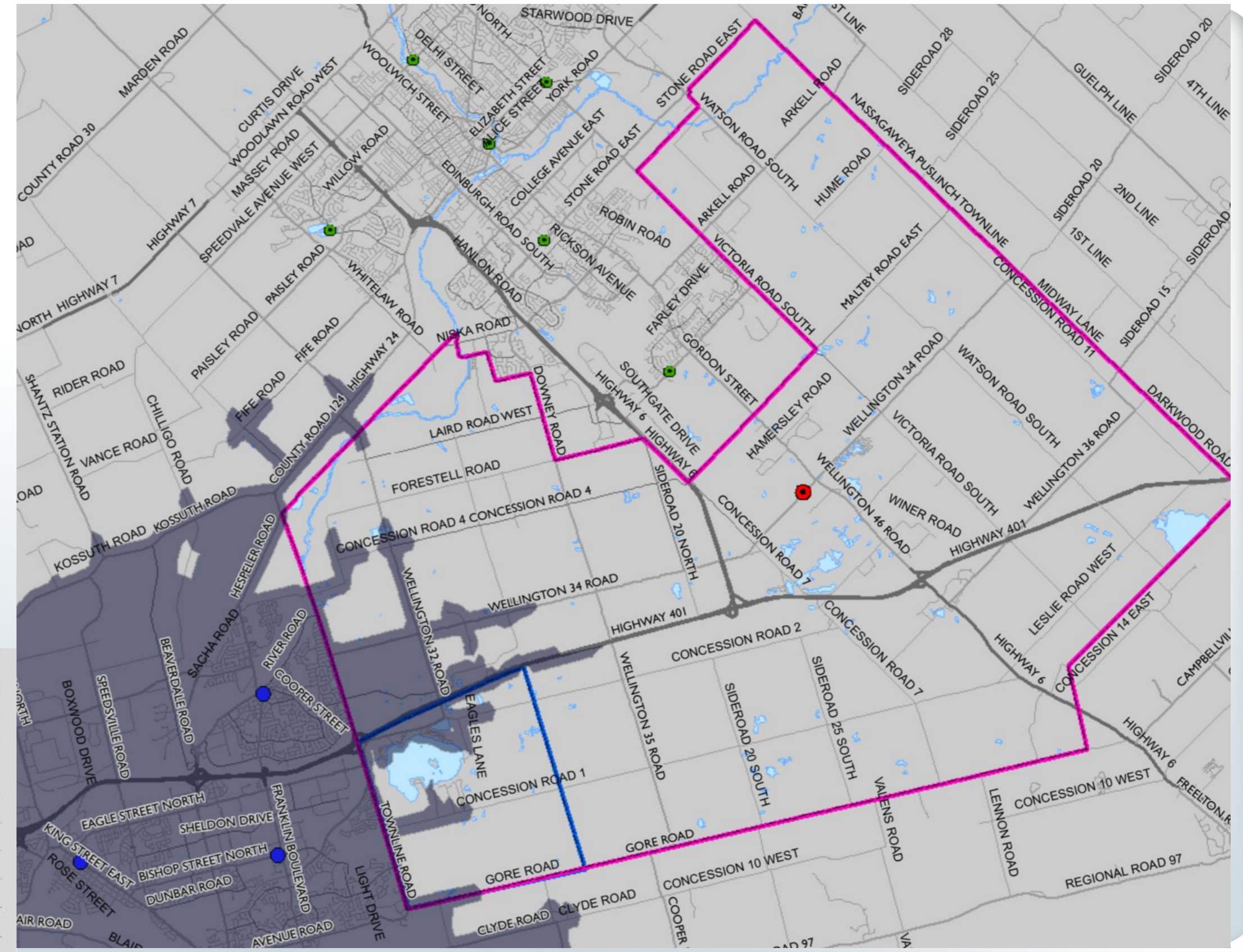


Potential Automatic Aid – Cambridge

The map shows the distance Cambridge can travel, including a turnout time of 90 seconds, during Puslinch’s turnout time.

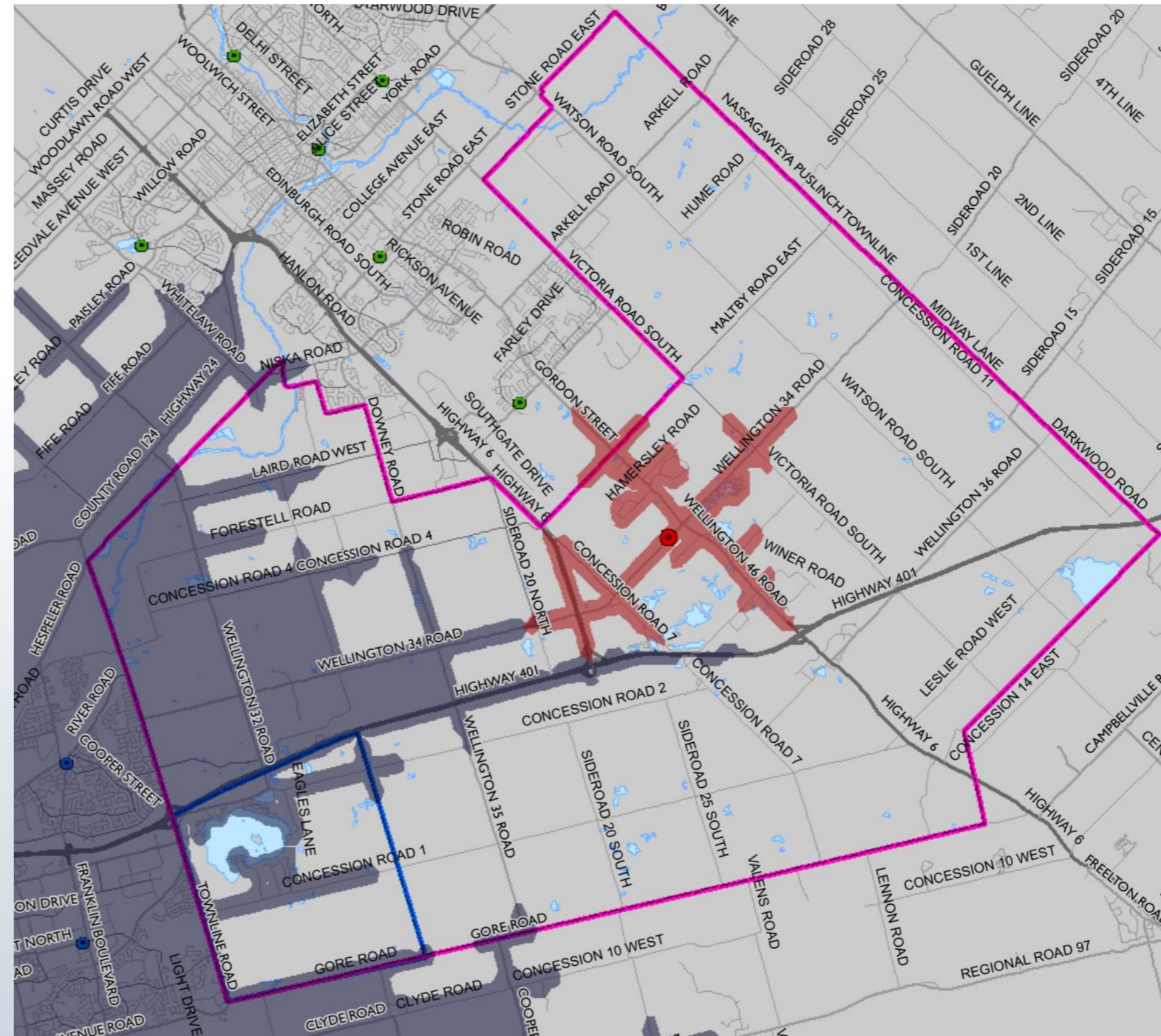


*NOTE: CAMBRIDGE TRAVEL AREA IS THE AREA CAMBRIDGE CAN TRAVEL TO BEFORE PUSLINCH LEAVES THE STATION (WITHIN 11.18 MINUTES).



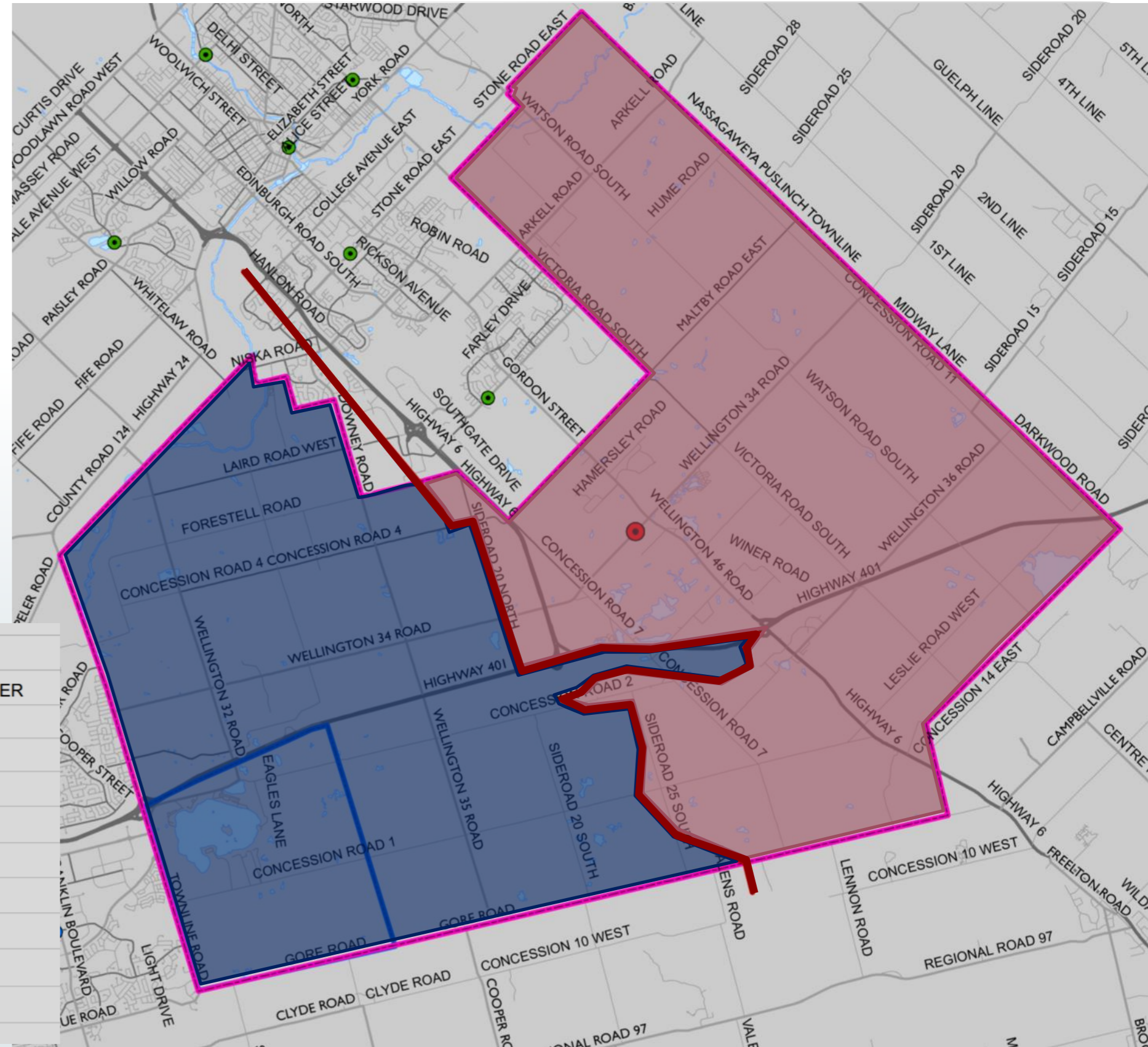
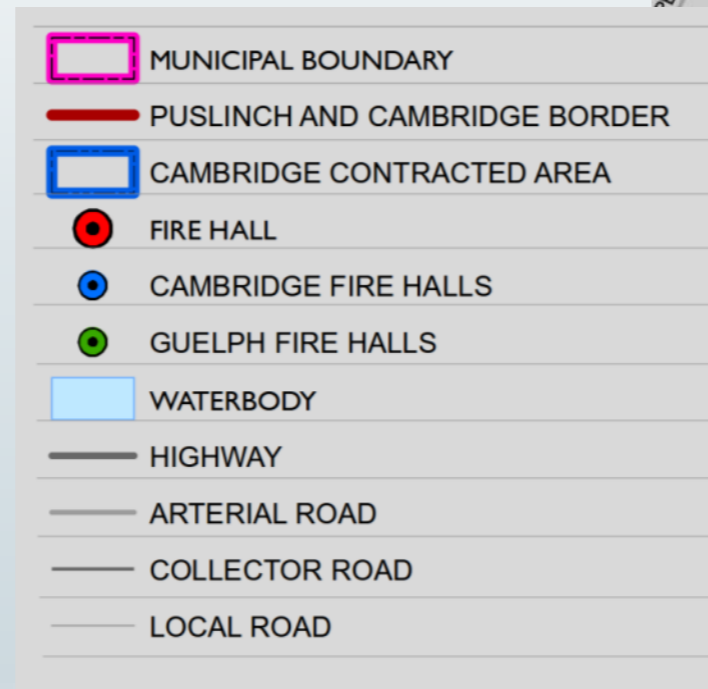
Potential Automatic Aid – Puslinch and Cambridge Departmental Response

- The map shows where Puslinch and Cambridge would meet if they both received a call at the same time.
- The two departments would meet at two locations after 15 minutes of turnout and travel time.















Potential Automatic Aid – Puslinch and Cambridge Departmental Response

- The border (dark red line) is where the two departments would continue to meet.



Potential Automatic Aid – Cambridge and Guelph

The map shows the distance Cambridge and Guelph can travel, including a turnout time of 90 seconds, during Puslinch’s turnout time.

	MUNICIPAL BOUNDARY
	CAMBRIDGE CONTRACTED AREA
	FIRE HALL
	CAMBRIDGE FIRE HALLS
	GUELPH FIRE HALLS
	9.4
	GUELPH TRAVEL AREA
	HIGHWAY
	ARTERIAL ROAD
	COLLECTOR ROAD
	LOCAL ROAD
	WATERBODY

*NOTE: GUELPH AND CAMBRIDGE TRAVEL AREA IS THE AREA GUELPH AND CAMBRIDGE CAN TRAVEL TO BEFORE PUSLINCH LEAVES THE STATION (WITHIN 10.9 MINUTES).



Next Steps

- **Targeted Stakeholder Telephone Consultation**
- **Finalize non-suppression & suppression reviews**
- **Finalize Community Risk / Emergency Response Model**
- **Draft Recommendations / Draft Report**
- **Final Report**
- **Present Final Report to Council**



Questions & Discussion

