

Internet Voting

Guelph's Story

Presentation to Town of Newmarket Council

October 5, 2015

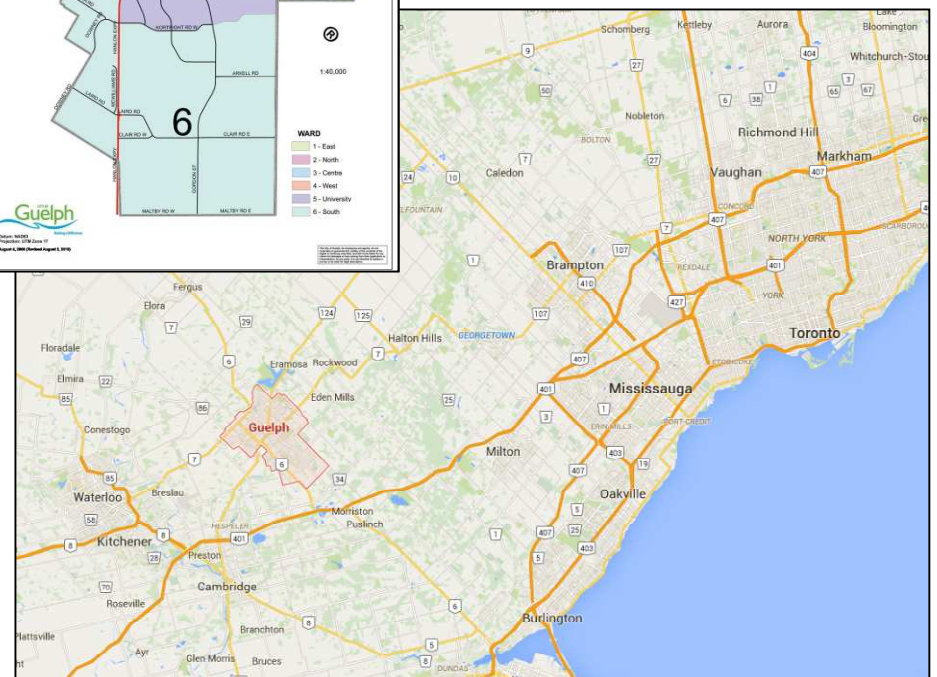
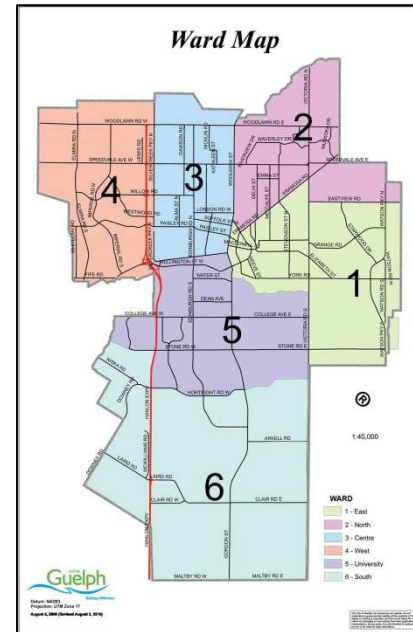


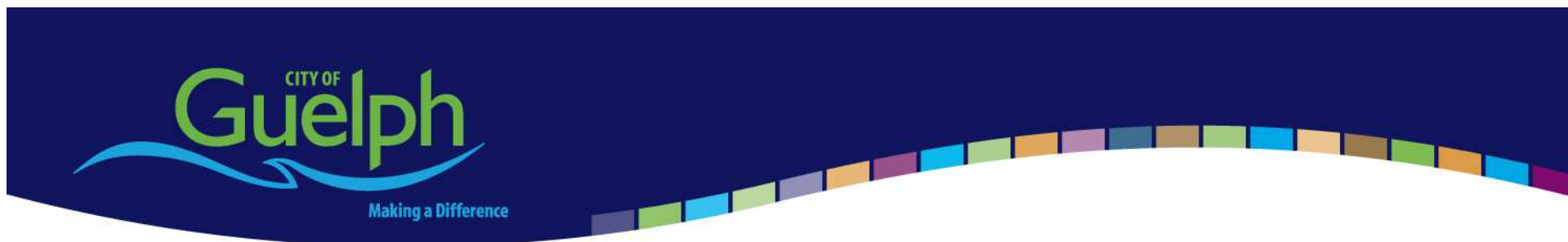
Agenda

- About Guelph
- Comparing Newmarket and Guelph
- Guelph's Internet Voting Journey
- Guelph's 2014 Election Model
- Pre-Election Community Survey
- Guelph Internet Voting Statistics
- Post-Election Survey
- Costs
- Addressing the Concerns

About Guelph

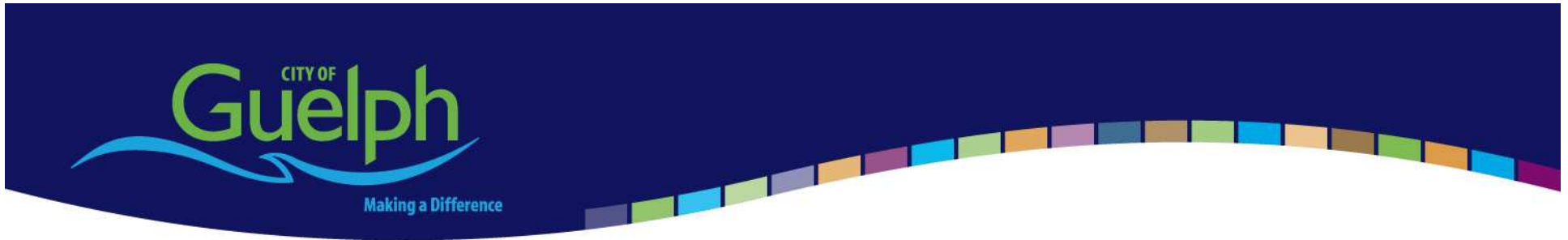
- 122,000 population (89,968 eligible electors)
- Single-tier, separated city (within Wellington County)
- Ward structure (6 wards)
- 13 member Council (2 Ward Councillors per Ward plus the Mayor)
- 87.2 KM²





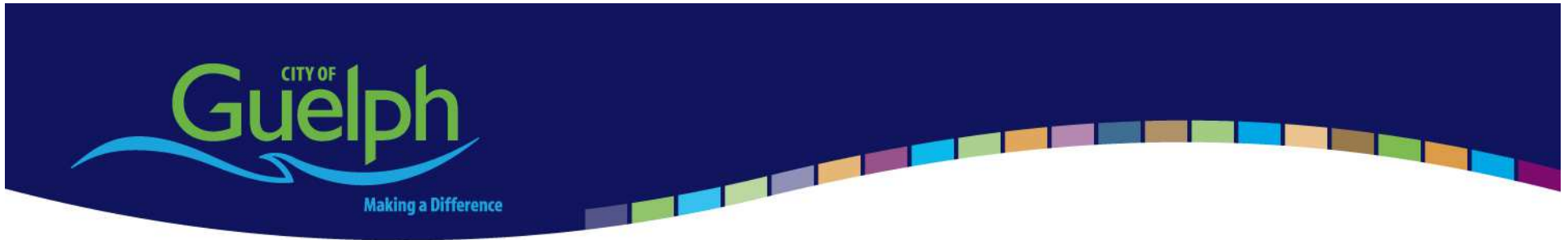
Comparing Newmarket and Guelph

	Newmarket	Guelph
Population (based on 2011 Census)	79,978	121,688
Size	38.3 KM ²	87.2 KM ²
Structure	Lower-tier	Single-tier (separated city)
Wards	7	6
Size of Council	9	13



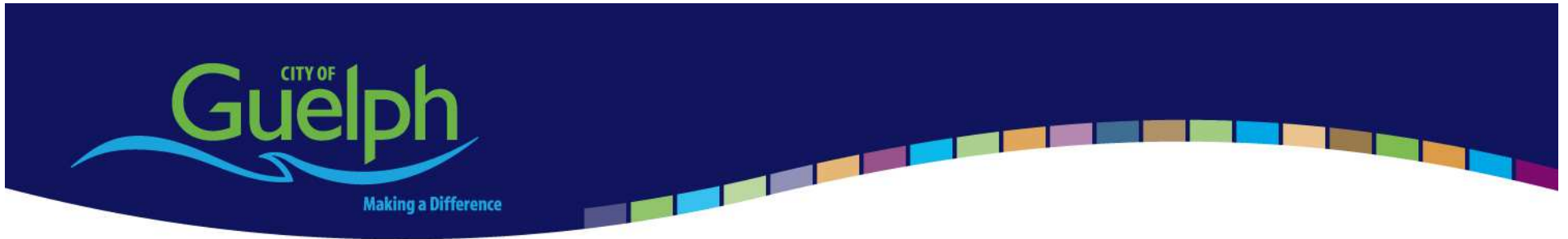
Guelph's Internet Voting Journey

- 1994 – Central count tabulators implemented
- 2006 – Poll based tabulators implemented
- June 2013 – Community survey (Oraclepoll)
- June 2013 – Committee/Council report re: alternative voting options
- July 2013 – Council approval of internet voting
- October 2014 – Implementation of internet voting during advance vote period (17 days)



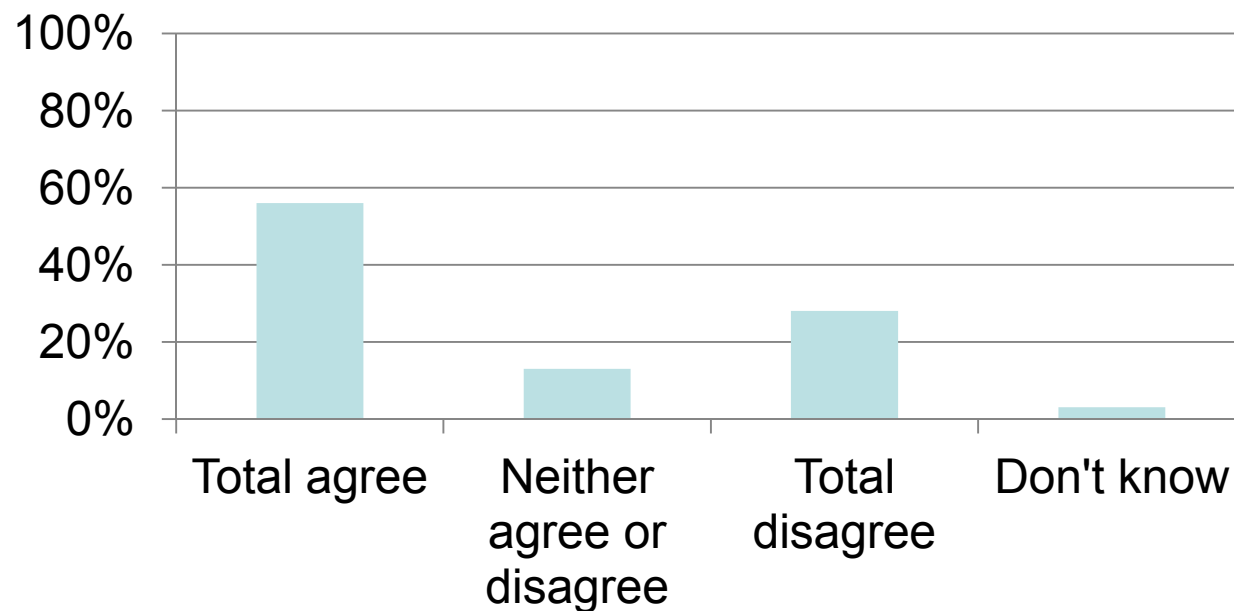
Guelph's 2014 Election Model

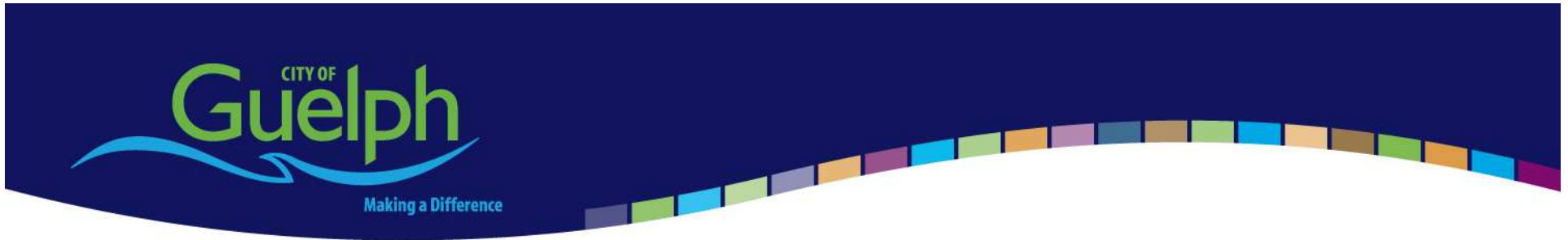
- Dual channel (paper and internet)
 - Paper during both advance voting and on election day (5 days in total)
 - Internet only during advance voting period (17 days in total)
- Electronic voter strike off
- Vote anywhere in the City during advance (3 locations)
- Vote anywhere in the Ward on Election Day



Pre-Election Community Survey (June 2013)

- 56% of respondents would vote in municipal election if internet voting was available

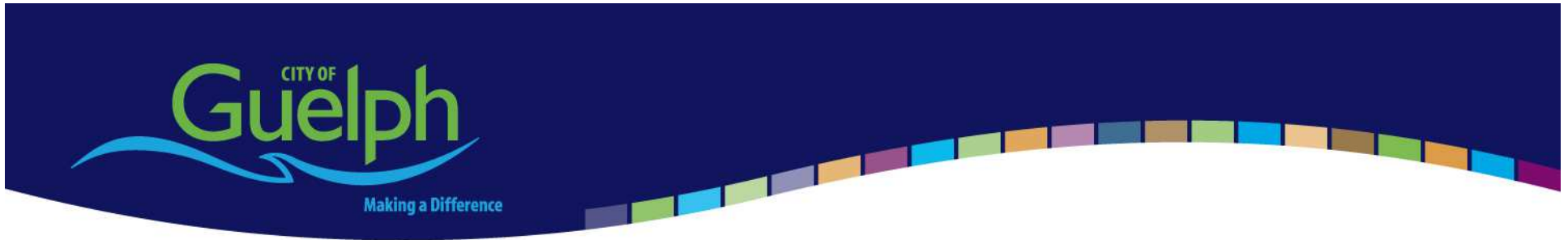




Pre-Election Community Survey (June 2013)

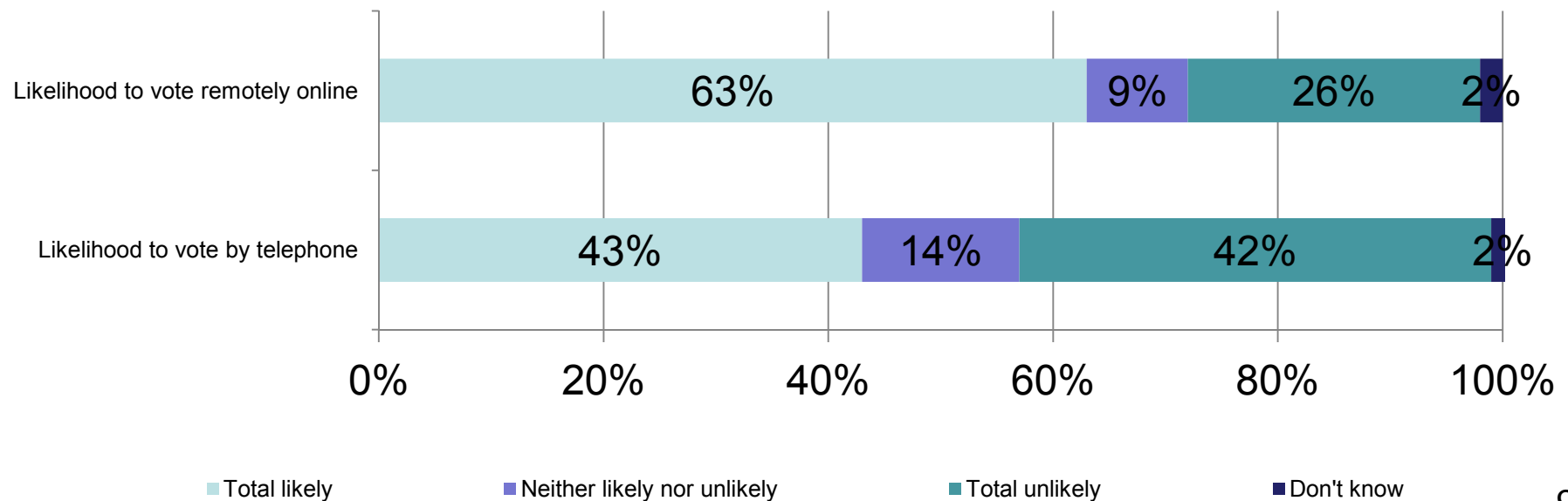
- Among respondents with an opinion, online or telephone voting was named as a way to increase the number of voters

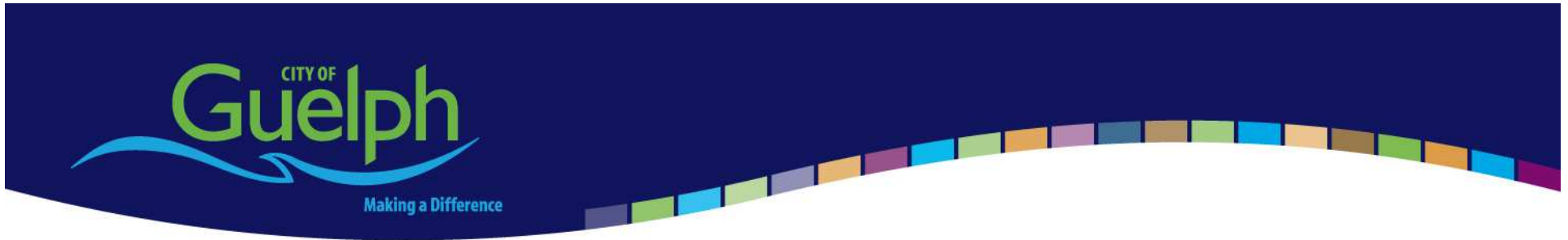
How do you feel the City can increase the number of Municipal voters that cast a ballot in the next election	Percent
Don't know	30%
Online/Telephone voting	20%
None/Nothing	14%
Have to reach young people	7%
More awareness/advertising	7%
More accessible locations	3%
Having good candidates	3%



Pre-Election Community Survey (June 2013)

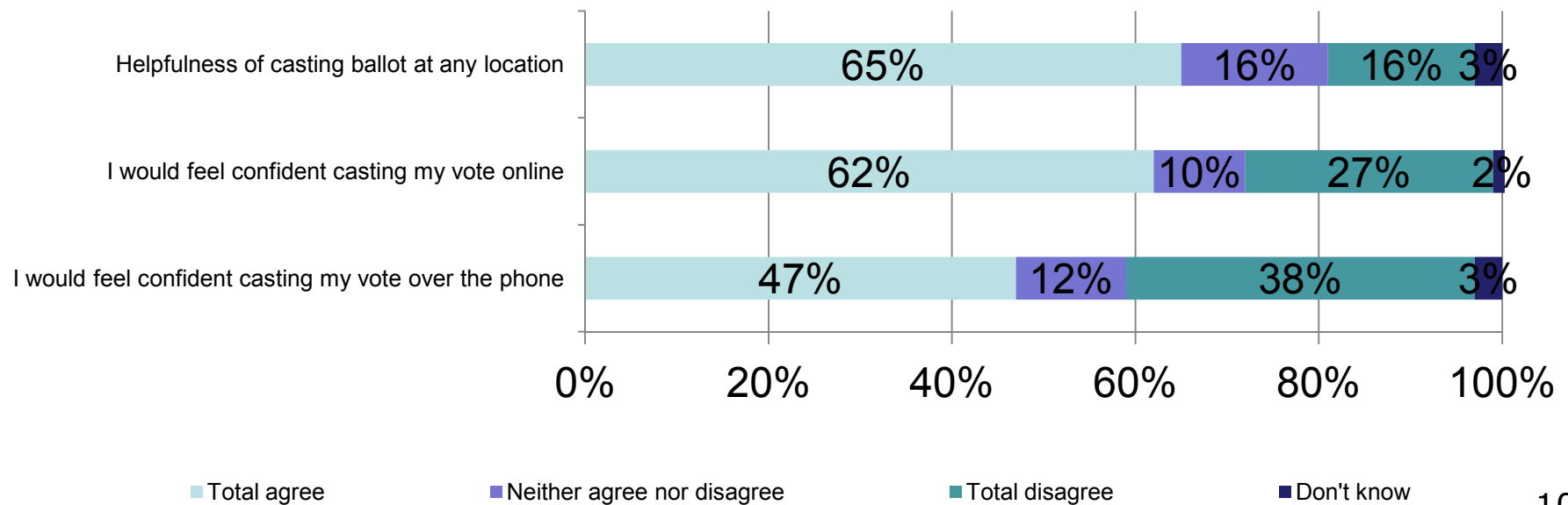
- Online voting preferred choice of 63% of respondents when asked about two scenarios for alternative voting.





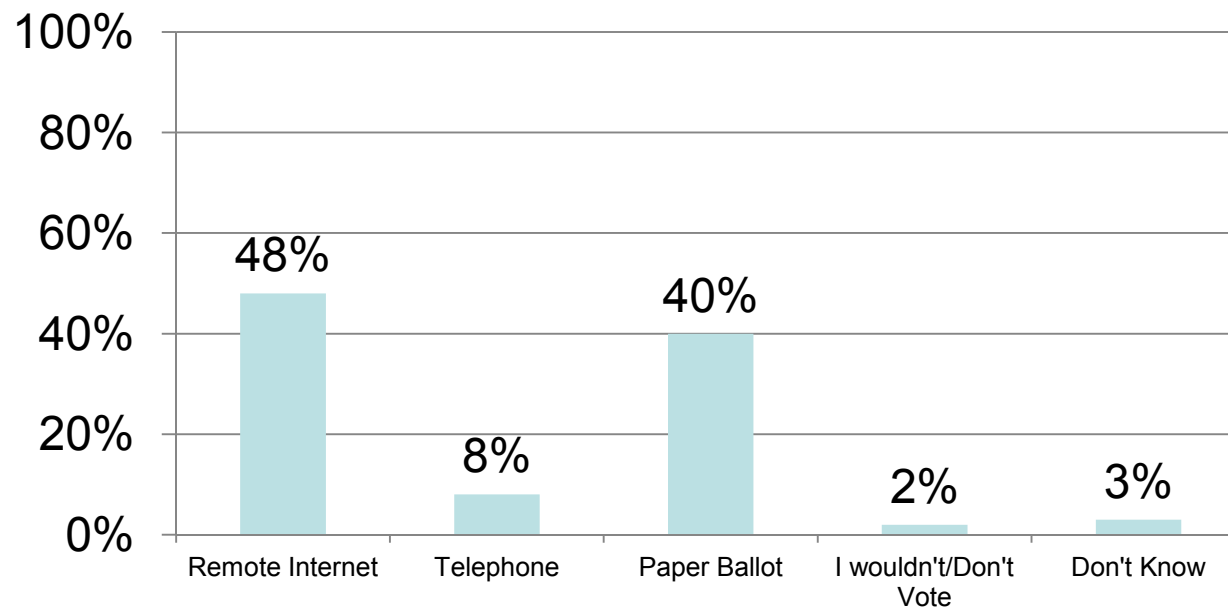
Pre-Election Community Survey (June 2013)

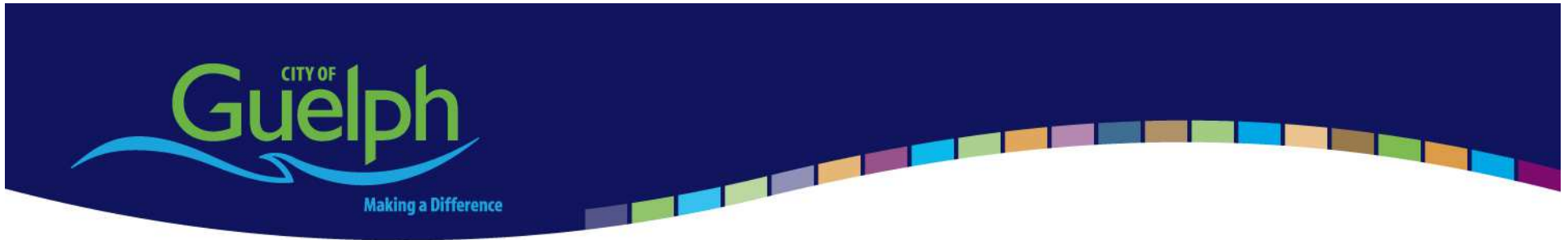
- Residents asked to rate their level of agreement with each statement.



Pre-Election Community Survey (June 2013)

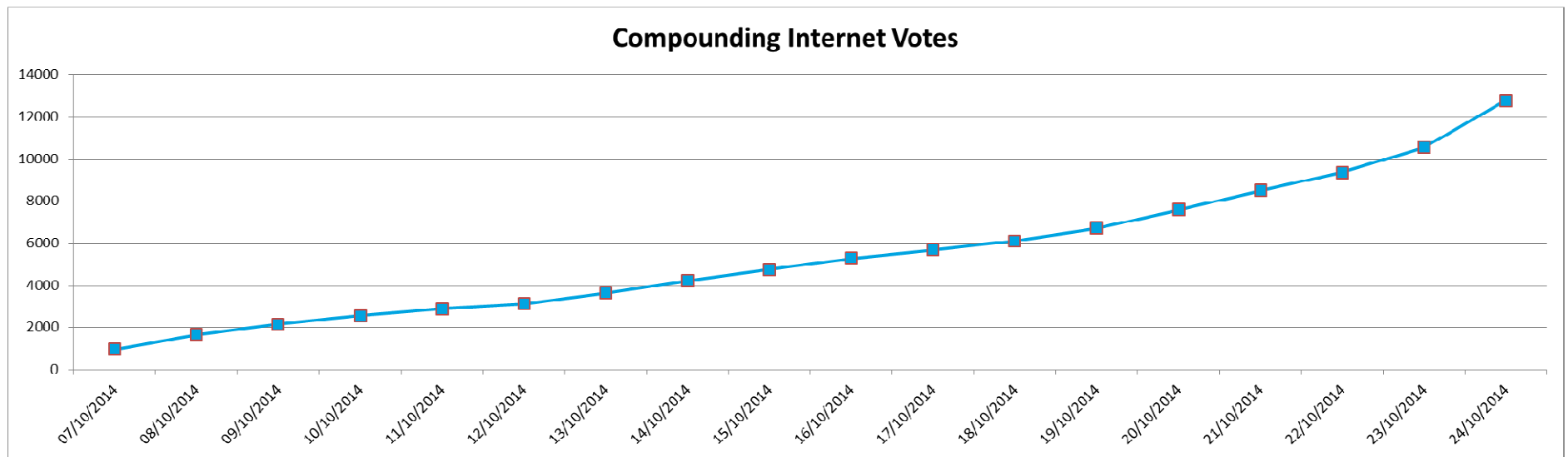
- Citizens were asked about their preferred method of voting (traditional versus alternative)





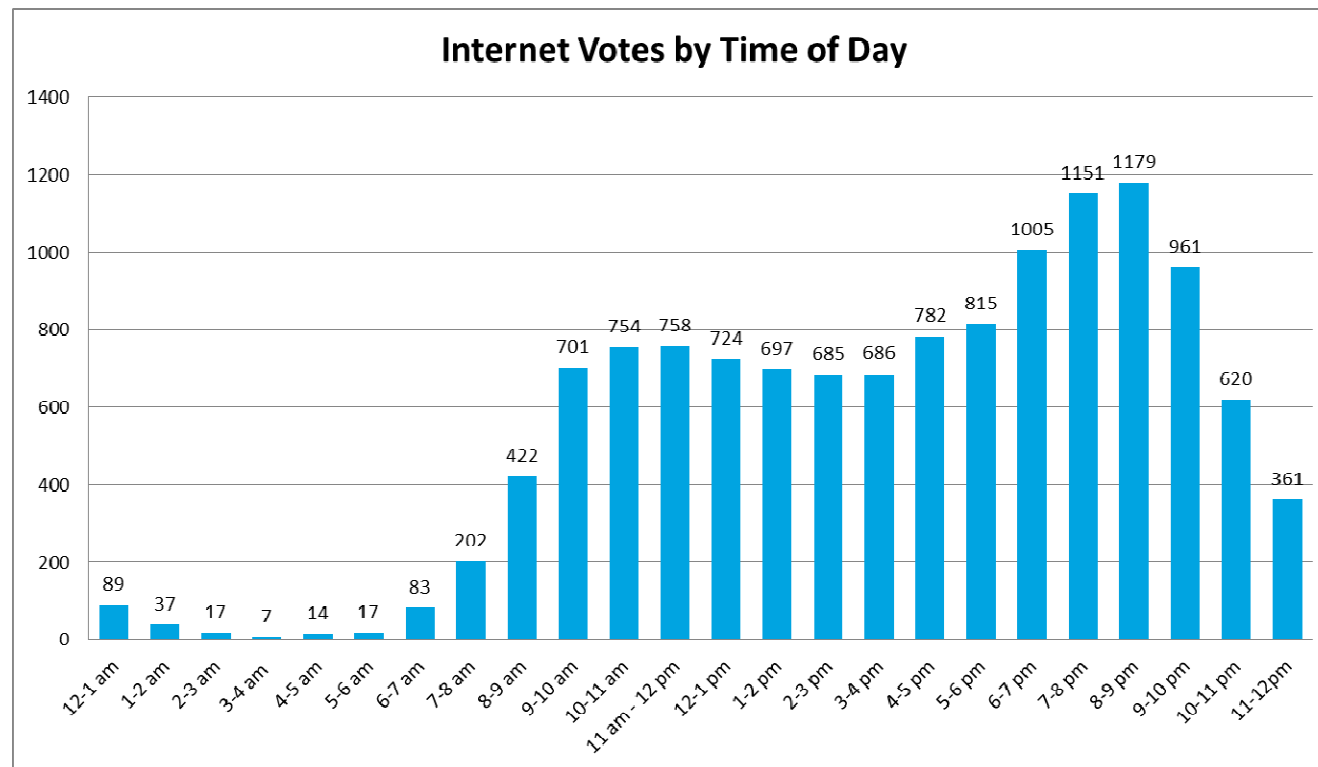
Guelph Internet Voting Statistics

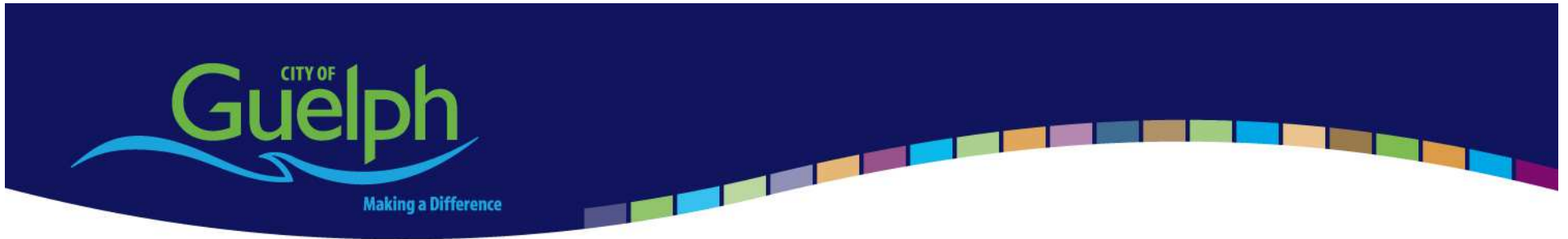
- With 432 hours of internet voting, 12,767 votes were cast online. The following charts the volume of votes over that period of time.



Guelph Internet Voting Statistics

- Internet voting provided flexibility to electors allowing them to vote at times they see fit





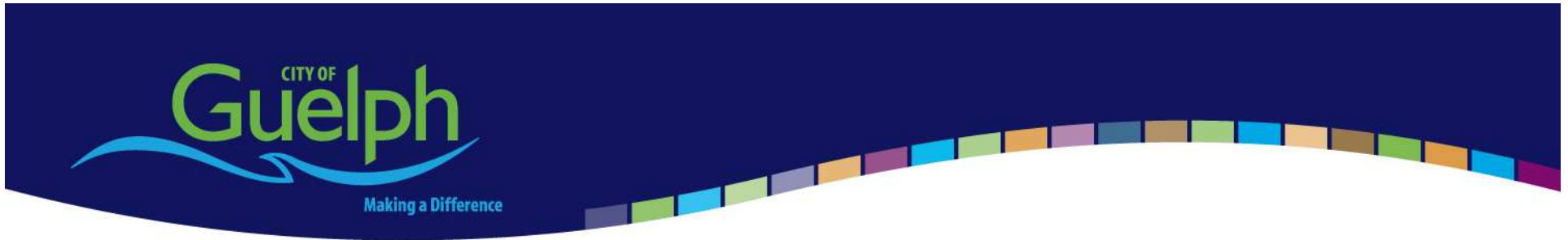
Post-Election Survey (November 2014)

- 84% of those who voted online were confident in the security surrounding the voting process, with 64% being very confident
- 58% of voters would vote online in 2018 if it was offered
- 54% found the 2014 municipal election easier, more accessible and convenient than the 2010 municipal election.



Costs

- \$62,250 spent on internet voting component (approx. \$0.75/elector)
- Same vendor for both paper and internet voting components
- Contract included consumables, results reporting system, accessible voting equipment and support

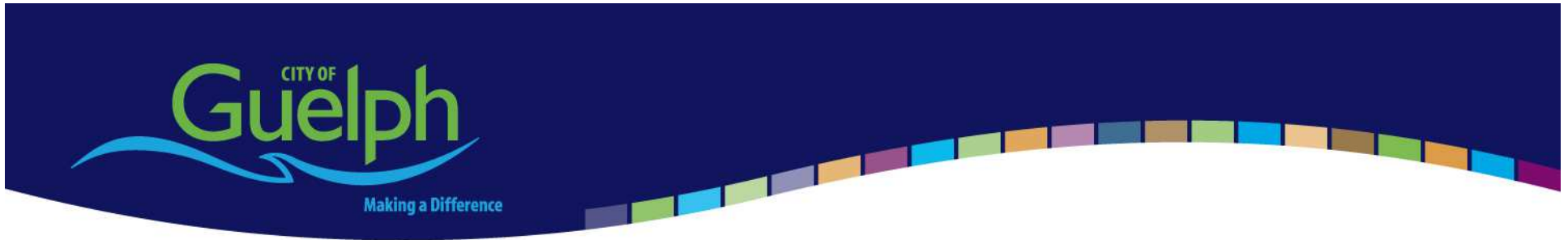


Addressing the Concerns: Security

- DDoS attacks, trojans, viruses and spoofing all identified as potential threats.
- Procedures to address potential risks by employing technical and process related measures to support system administration and control user access.

How Guelph Addressed the Concern

- Firewalling, user authentication (two-step PIN), failover connectivity and server redundancy.
- Same access methodologies and encryption principles that protect internet banking and electronic medical records systems.
- Participated with Burlington, Kingston, Cambridge, Peterborough, Belleville, Port Hope, Prince Edward County and Chatham-Kent in securing a third-part (Digital Boundary Group) to conduct security audit of the system.

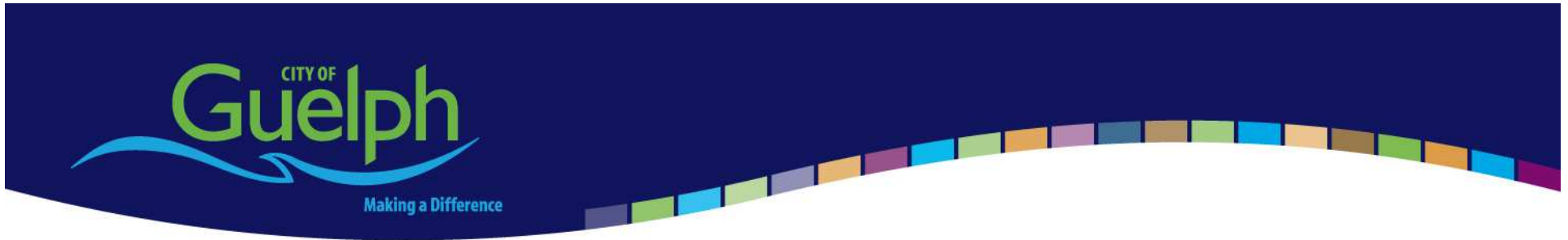


Addressing the Concerns: Coercion

- In theory, unsupervised voting enhances accessibility at the expense of oversight in relation to verification of voter identity and behaviour
- Impersonation, coercion and fraud are mitigated through the design of any voting system, regardless of whether it is a supervised or unsupervised model

How Guelph Addressed the Concern

- Individual voter notification cards (not one combined mailing)
- Two step verification (register online to vote with DOB information)
- Staff had the ability to cancel and/or re-issue PINs, flag voter IDs and we spent time educating electors on process and what to expect
- Section 89 of the MEA places responsibility with voter to ensure they are entitled to vote and that they do not vote more times than allowable – onus is on the voter from a legal perspective

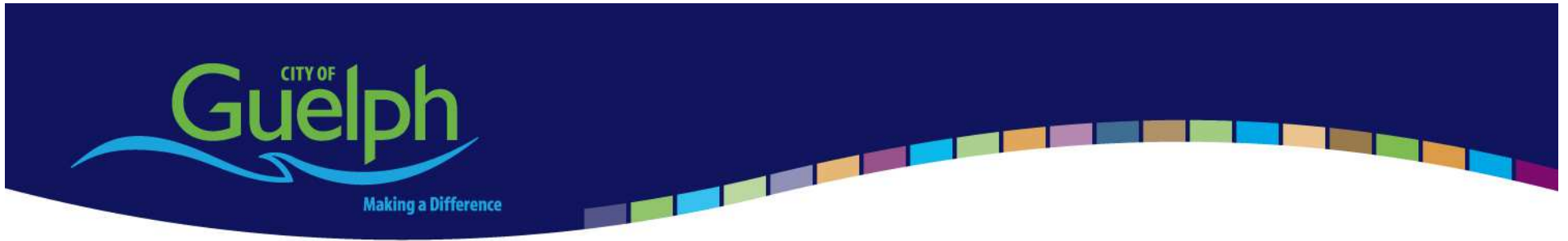


Addressing the Concerns: Role of Candidate & Scrutineers

- Candidate role remains similar, however more emphasis should be placed on assisting with elector education
- Role of scrutineer necessarily changes – no ability to observe at the voting location

How Guelph Addressed the Concern

- Candidate information session that focused on usual topics but also a significant portion on the on-line voting process (mock vote)
- Provided, upon request, weekly reports on on-line voting statistics
- Invited scrutineers to be present during final tabulation, including uploading of internet voting file



Questions?