

Use of tabulators and Voter Assist Terminals	City Clerk's Office – Election Services
	Procedure No.: PRO-VTS-001

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1. Purpose

This document outlines the City of Toronto's procedures for the use of vote tabulators and Voter Assist Terminals (VATs) in the City's municipal elections.

2. Application

This procedure applies to election officials designated by the City Clerk, candidates and scrutineers during City of Toronto municipal elections and by-elections.

3. Authority/Legislative reference(s)

Section 42(1)(a) of the Municipal Elections Act, 1996 (MEA), authorizes the use of voting and vote-counting equipment such as voting machines, voting recorders or optical scanning vote tabulators.

City of Toronto Municipal Code, Chapter 53, Article 1, adopted by By-Law 79-2000, authorizes the use of voting and vote-counting equipment for municipal elections in the City of Toronto.

4. Voting hardware and software

The table in Appendix "A" identifies the integrated system of voting hardware and software used during an election.

5. Storage and Security

All tabulators, VATs, memory cards and election supplies shall be securely stored at the City Clerk's designated location before and after use at the voting places during the election.

6. Pre-election procedures

Preventative maintenance

- (1) The equipment vendor shall conduct full maintenance of all tabulators and VATs prior to voting days.

Appearance of ballots

- (2) A space for marking the ballot shall appear on the ballot to the right of the candidates' names or, in the case of a by-law or question, to the right of each answer.
- (3) The instruction on the ballot shall direct electors to vote by marking the space to the right of the candidate of choice and the answer to any by-law or question.

Programming of the tabulators and VATs

- (4) The tabulators shall be programmed so that:
 - (a) a printed record of the results can be produced indicating the number of votes cast for each candidate and for the answer to any by-law or question.
 - (b) a ballot is returned to the designated election official if the tabulator determines that the ballot:
 - i. has no votes in the designated voting spaces
 - ii. has more votes in the designated voting spaces than an elector is entitled to mark on a ballot
 - iii. is damaged or defective or has been marked in such a way that it cannot be properly processed
- (5) The VATs shall be programmed so that:
 - (a) the memory card contains all the ballot styles for the specific ward;
 - (b) each ballot inserted is recognized and a vote can be marked for the selected candidate for each office and for the answer to any by-law or question; and
 - (c) the elector is able to review and confirm their selected candidate for each office and for the answer to any by-law or question prior to marking the ballot.

Logic and accuracy testing

- (6) The City Clerk shall provide notice of the date and time of the logic and accuracy testing to candidates and the public.
- (7) Prior to voting days, the City Clerk shall:
 - (a) Test each tabulator to ensure it accurately counts the votes cast for all candidates and answers to any by-law or question; and
 - (b) Test each VAT to ensure it accurately marks the ballots for all candidates and answers to any by-law or question.
- (8) Adequate safeguards shall be taken when testing the tabulators and VATs to ensure that the system, as defined in Appendix "A", or any part of it used for tabulating and marking votes is isolated from all other applications or programs and that no remote devices are capable of gaining access to them.
- (9) The test for each tabulator shall be conducted by:
 - (a) loading the memory card into the tabulator designated for that voting subdivision;
 - (b) producing a zero tape before the test to confirm that no votes are stored in the memory card; and
 - (c) feeding and tabulating the ballots and comparing the results against the pre-determined results.
- (10) The test for each VAT shall be conducted by:
 - (a) loading the memory card into the VAT designated for that ward.
 - (b) inserting each ballot style for the ward to ensure they are accepted and will display them on the VAT touch screen.
 - (c) inserting blank ballots and marking each ballot according to a predetermined number of votes for each candidate and answers to any by-law or question, using each type of assistive device.
 - (d) preventing an elector from marking more designated voting spaces for an office and by-law or question on the ballot than the elector is entitled.

- (e) permitting an elector to decline marking a ballot;
 - (f) preparing the tabulator and producing a zero tape to confirm that no votes are stored in the memory card; and
 - (g) feeding the ballots marked by the VAT into the tabulator and ensuring that the results are consistent with the predetermined outcome.
- (11) Any errors detected in the testing of the tabulators and VATs shall be identified, corrected and the test repeated until the desired test results are achieved.

Completion of testing

- (12) At the completion of the testing, the City Clerk or designate shall:
- (a) in the case of the tabulator, clear the totals of each tabulator memory card and seal it inside the memory card slot of the tabulator.
 - (b) in the case of the VAT, seal the memory card in the memory card slot of the VAT.
 - (c) securely store the tabulators and VATs containing the memory cards until they are deployed to a voting place for use during the advance vote and on election day.

7. Voting place procedure

- (1) A tabulator shall be used in every voting place and other locations designated by the City Clerk during the advance vote and on election day.
- (2) A VAT shall be available at every voting place during the advance vote and at a minimum of one location per ward on election day.

Candidates and scrutineers

- (3) Candidates and scrutineers' roles and responsibilities at the voting place are outlined in the MEA.
- (4) To protect the secrecy of the vote, candidates or scrutineers are prohibited from accompanying and assisting electors at the VAT.
- (5) Candidates and scrutineers are prohibited from examining or objecting to a ballot while it is being fed into the tabulator.

Zero tape

- (6) Before the opening of the voting place during the advance vote and on election day, the designated election official shall produce a zero tape of all totals in the memory card of the tabulator.
- (7) The zero tape shall only be produced on the first day of the advance vote.
- (8) The zero tape shall remain affixed to the tabulator until the results are printed by the tabulator after the close of the voting place on election day.
- (9) Candidates or scrutineers may be present when the designated election official produces the zero tape.
- (10) If the zero tape total is not zero for all candidates or for answers to any by-laws or questions, the designated election official shall immediately notify the City Clerk or other designated election officials.

Marking the ballot

- (11) A designated election official shall issue a ballot to an elector in a secrecy folder.
- (12) An elector can mark a ballot manually or use the VAT to mark a ballot.
- (13) To mark a ballot manually, the elector shall proceed to a voting screen and vote by marking the space to the right of the candidate of their choice or for the answer to any by-law or question.
 - (a) After marking the ballot, the elector shall place the ballot into the secrecy folder and proceed to the designated election official.
 - (b) The designated election official shall feed the ballot into the tabulator while the elector is still in the voting place.
- (14) To mark the ballot using the VAT, the designated election official shall, in consultation with the elector, determine the type of assistive device(s) the elector requires to mark the ballot.
 - (a) The designated election official shall attach the device(s) to the VAT.
 - (b) After listening to or viewing the instructions on the VAT, the elector shall mark the ballot using the assistive device(s) to mark the space

to the right of the candidate of their choice or for the answer to any by-law or question.

- (c) After marking the ballot, the elector shall place the ballot into the secrecy folder.
- (d) The elector shall proceed to the designated election official who shall feed the ballot into the tabulator while the elector is still in the voting place.

Malfunctioning tabulator

- (15) If the tabulator fails to operate during voting, the designated election official shall contact the designated contact centre for instructions.
- (16) In full view of the elector, the designated election official shall insert the ballot from the secrecy folder directly into the auxiliary compartment.
- (17) When the tabulator is operational again, the designated election official shall insert the ballots from the auxiliary compartment into the tabulator.
- (18) If a tabulator is replaced during voting and the original memory card is still being used, the designated election official shall feed the ballots from the auxiliary compartment into the replacement tabulator.
- (19) If the memory card must be replaced during voting, the designated election official shall feed all ballots, including any from the auxiliary compartment, into the replacement tabulator.

Ballots where the tabulator detects less votes than an elector is entitled to mark

- (20) The tabulator shall accept ballots where the tabulator has detected less votes in the designated voting spaces than an elector is entitled to mark on a ballot, providing that a mark has been detected for at least one office.

Ballots where the tabulator detects no votes

- (21) The tabulator shall return a ballot if it detects no votes in the designated voting spaces.
- (22) The designated election official shall:
 - (a) press the button under "Return Ballot" and advise the elector that the tabulator does not recognize any marks made on the ballot.

- (b) return the ballot to the elector and instruct the elector how to mark the ballot.
- (23) If the elector does not want to re-mark the ballot, the designated election official shall re-feed the ballot and press the button under "Count as Marked" until the ballot is accepted into the tabulator.
- (24) If the elector is not present and the tabulator returns the ballot because it does not detect any votes in the designated voting spaces, the designated election official shall press the "Count as Marked" button so that the ballot is accepted into the tabulator.

Ballots where the tabulator detects more votes than the elector is entitled to mark

- (25) The tabulator shall return a ballot if it detects more votes in the designated voting spaces than an elector is entitled to mark on a ballot.
- (26) The designated election official shall:
 - (a) press the button under "Return Ballot", return the ballot to the elector and advise that the tabulator detects more than one vote for an office or for an answer to a by-law or question.
 - (b) instruct the elector that only one vote is permitted per office or for any answer to a by-law or question.
 - (c) ask the elector if they wish to obtain a new ballot.
 - (i) If the elector does not wish to obtain a new ballot, re-feed the ballot and press the button under "Count as Marked" until the ballot is accepted into the tabulator.
 - (ii) If the elector wishes to obtain another ballot, the designated election official shall fold the original ballot in half, write "cancelled" across the back of the ballot and place it in the designated envelope. The designated election official shall issue a replacement ballot to the elector for marking.
- (27) If the elector is not present and the tabulator returns the ballot because it has detected more votes in the designated voting spaces than an elector is entitled to mark, the designated election official shall press the "Count as Marked" button so that the ballot is accepted into the tabulator.

- (28) If, at any point the elector does not wish to obtain a replacement ballot, the designated election official shall press the "Count as Marked" button so that the ballot is accepted into the tabulator.

Damaged or Defective Ballots

- (29) If the tabulator does not accept a ballot because it is damaged or defective, the designated election official shall:
- (a) remove the ballot and advise the elector that the tabulator did not accept ballot.
 - (b) re-insert the ballot, trying different orientations (face-down/head-first/last).
 - (c) if rejected again, return the ballot to the elector and direct them to obtain a new ballot.
 - (d) fold the original ballot in half, and write "cancelled" across the back of the ballot.
 - (e) place the "cancelled" ballot in the designated envelope.
 - (f) issue a replacement ballot to the elector for marking.
- (30) If the elector refuses to accept a replacement ballot and the tabulator still does not accept the ballot, the designated election official shall fold the ballot in half and write "declined" on the back and place it in the designated envelope.
- (31) If the elector is not present and the tabulator returns the ballot because it is damaged, defective or has been marked in such a way that the tabulator does not accept it, the designated election official shall:
- (a) fold the original ballot in half and write "cancelled – replaced" across the back.
 - (b) prepare a replacement ballot in full view of any candidates or scrutineers present by marking the replacement ballot with the same mark(s) contained in the designated voting space(s) as the original ballot.
 - (c) feed the replacement ballot into the tabulator.

8. Closing of the voting place during the advance vote

- (1) Each night of the advance vote, after the close of voting, the designated election official shall:
 - (a) Ensure any ballots in the auxiliary compartment are fed into the tabulator.
 - (b) ensure that the election results are not generated.
 - (c) unplug the tabulator and VAT and place them in the appropriate carrying cases.
 - (d) ensure the tabulator and VAT are securely stored.
- (2) On the last night of the advance vote, after the close of voting, the designated election official shall repeat steps 9(1)(a) to (c) and deliver the tabulator and VAT and other election supplies to the City Clerk's designated location.
- (3) The City Clerk shall provide notice to candidates of the location.
- (4) At the City Clerk's designated location:
 - (a) the memory card and zero tape shall be removed from each tabulator and shall be placed in an envelope which shall be sealed and stored in a secure place until election day.
 - (b) the designated election official shall generate advance vote results after the close of voting on election day.

9. Closing of the voting place on election day

- (1) After the close of voting on election day, the designated election official shall:
 - (a) feed any ballots from the auxiliary compartment into the tabulator.
 - (b) turn the tabulator key to the "Open/Close Poll" position and press the button under "Close Polls" to produce the results tape.
 - (i) the tabulator shall print two copies of the results tape and transmit the results to the City's results system.
 - (c) deliver the tabulator and other election supplies to the City Clerk's designated location.

Malfunctioning tabulator at the close of election day

- (2) If the tabulator fails to operate at the voting place at the close of the voting period, the designated election official shall contact the designated contact centre for instructions.
- (3) The designated election official shall:
 - (a) remove the ballots from the tabulator stand and place them into a designated ballot box along with the envelope containing the cancelled and declined ballots.
 - (b) remove any ballots from the auxiliary compartment, place them into a separate box, write on the box "Auxiliary compartment ballots" and seal it.
 - (c) advise all candidates and scrutineers present of the City Clerk's designated location where a backup tabulator is located and their right to be present at that location.
 - (d) deliver all the election supplies from the voting place to the City Clerk's designated location.
- (4) At the City Clerk's designated location, in the presence of all candidates or scrutineers present, the designated election official shall:
 - (a) remove the memory card from the malfunctioning tabulator and insert it into the backup tabulator.
 - (b) feed any the ballots from the "Auxiliary compartment ballots" box into the backup tabulator.
 - (c) turn the tabulator key to the "Open/Close Poll" position and press the button under "Close Polls" to produce the results' tape.
 - (d) the tabulator shall print two copies of the results' tape and shall transmit the results to the City's results' system.
 - (e) deliver the tabulator and other election supplies to the City Clerk's designated location, if required.
- (5) If the tabulator memory card has malfunctioned at the close of voting, the designated election official shall:
 - (a) obtain a replacement tabulator memory card and insert it into the original or replacement tabulator.

- (b) produce a zero tape of all totals in the memory card.
- (c) feed all ballots, including those from the auxiliary compartment, into the tabulator.

10. Production of election results from the advance vote

- (1) At the City Clerk's designated location, a designated election official shall generate the advance vote results for each voting place by:
 - (a) inserting the memory card into a tabulator.
 - (b) turning the tabulator key to the "Open/Close Poll" position and pressing the button under "Close Polls" to produce the results tape.
 - (c) the tabulator shall print two copies of the results' tape.
 - (d) removing the memory card from the tabulator and inserting it into a memory card reader that transmits the results to the City's results system.

11. Election Results

- (1) Election results will be generated by:
 - (a) by producing a results tape on each tabulator.
 - (b) a secure internal system that receives vote counts from tabulators, ensures all results are accounted for, and digitally processes them into overall election results.

12. Post-election testing

- (2) A post-election test shall be conducted by inserting memory cards with zero votes into the tabulators and tabulating a pre-determined group of ballots.
- (3) The tabulated results shall be compared against the pre-determined results.
- (4) Any errors detected in the testing of the tabulators shall be identified, corrected and the test repeated until the desired results are achieved.

13. Retention of election documents

- (1) The City Clerk shall retain and have access to the memory cards, ballots, results tapes and other materials that were produced during the pre- and post-election tests.
- (2) The City Clerk shall not alter these materials and shall retain them in the same manner as is provided for in the MEA for the keeping of election records.

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Appendix "A"

The following tables identify the integrated system of voting hardware and software that the equipment vendor, Election Systems & Software (ES&S), supplies during an election.

#	Hardware	Description
1	Vote Tabulators	Vote tabulator models include, but are not limited to the following: 1. Model 100® (M100) 2. DS 200 3. Model 650 (M650)
2	Voter Assist Terminal AutoMARK® (VAT)	The AutoMARK® Voter Assist Terminal uses ballot marking technology to give voters with disabilities and other special needs the ability to mark a ballot privately and independently.

#	Software	Description
1	AutoMARK® Information Management System (AIMS)	Configures the AutoMARK® to accept ballots specific to the election.
2	Unity™	Unity™ is a suite of integrated software modules (listed below) that enable the creation and maintenance of a central election management database.
3	Unity™ Ballot Image Manager™ (BIM)	A design tool that creates the image of an optical scan ballot populated by information from the Unity™ Data Acquisition Manager™ (DAM) application.
4	Unity™ Data Acquisition Manager™ (DAM)	An application that collects and transmits voting data to the host election server for the accumulation of election results.
5	Unity™ Election Data Manager™ (EDM)	A software application that enters, maintains and stores election-related information (e.g. candidates, wards) in one database.
6	Unity™ Election Reporting Manager™ (ERM)	A software application that manages election results and generates paper and electronic reports.
7	Unity™ Hardware Programming Manager™ (HPM)	A software application that programs election tabulation hardware.