Town of Milton Massachusetts

REPORT OF THE

ELECTRONIC VOTING STUDY COMMITTEE

Introduction

In early 2019, the Milton Town Moderator appointed a committee to evaluate the adoption and use of electronic voting at Milton Town Meeting.

Electronic voting systems can be used to record accurately and instantly the vote counts at town meeting and record how individual members vote on particular articles. The results can be displayed at the time of the vote and be published for residents to review. These systems are used in approximately 30 towns across the Commonwealth. Chelmsford was the first to adopt the technology, and this past spring, Wellesley town meeting voted to use it.

Our charge was to review the technology-- the benefits and costs-- and, if appropriate, make a recommendation on acquisition and implementation.

In researching the issue, the committee:

- Reviewed videos of town meetings that use electronic voting
- Surveyed Town Moderators and Clerks in towns with representative town meeting that also use the technology, and followed up with phone discussions, and reviewed their reports and bylaw changes. (Arlington, Brookline, Belmont, and Natick)
- Consulted with Milton town officials, including but not limited to the Town Moderator, Town Counsel, and Town Administrator. We also met with the Town Government Study Committee and Bylaw Committee
- Conducted an online poll of Town Meeting Members and residents to understand their opinions, concerns, and questions regarding the technology and its costs
- Obtained preliminary bids from solution providers to understand the costs and benefits of lease versus buy models.

Research & Findings

How It Works

Town Meeting Members (TMMs) check in at the beginning of a session and are given a handset with a unique code associated with that member.

There are three active buttons: Yes, No, and Abstain. In some systems these buttons are numbered rather than labeled (e,g, 1 for Y, 2 for N, and 3 for Abstain)

After the discussion and debate of an article, the moderator will declare voting is open at which time TMMs will have an allotted time (typically 30 seconds) in which to record their vote. The device communicates with a base station computer equipped with a receiver (voting computer). The voting computer, which has been set up in advance with a set of TMMs names and assigned device ids, tabulates and records the votes. If connected to a projection system, the results can be

displayed on a screen in the hall. They can be displayed either as a total and percentage (e.g. 179 (64%) yes -- 100 (36%) no) or a list organized by precinct and displaying name and vote (e.g. Pct2 - Frank Schroth - Yes).

The time to collect, tabulate, and display the results takes one to two minutes. Should a device fail, it can be swapped out for another one.

The distribution and collection of handsets can be managed by volunteers, town meeting members assigned to task, or Town Clerk staff. Arlington for example uses high school students, who obtain credit for community service. Belmont uses Town Hall staff members. Some towns collect devices by having members drop them in bins on their way out. The devices are later checked in, tested, and refilled for the next session. The towns we consulted (Arlington, Belmont, Natick, and Brookline) all reported that distribution and collection was timely and smooth.

Benefits

Accuracy and efficiency of vote counts

The technology delivers an actual vote count. There is no question about the result as can happen with a voice vote. It obviates the need for requesting standing votes, saving the time spent organizing and counting them.

Note: Towns we surveyed have implemented the technology differently. Arlington uses the technology for every article, including the consent agenda, whereas Brookline uses it when standing votes are requested, 35 or more TMMs request an electronic vote, or at the discretion of the moderator (e.g. when s/he may be uncertain of the voice vote.)

Accountability

Electronic voting technology can capture and report how individual town meeting members vote on warrant articles, and those results can be published to the town's web site.

Residents can now know how their most local of representatives have voted on matters that affect daily their daily lives in Milton. It provides a level of transparency previously unavailable and improves the quality of democracy at the local level by providing Milton citizens with the opportunity to review their precinct representatives' voting record.

Note; Again, towns with electronic voting have also implemented the record keeping of town meeting votes differently. Natick records and publishes every vote count by town meeting member. You can view a list of Natick Spring 2019 Town Meeting Materials including links to voting records here. Brookline only records those votes when 35 or more TMMs request an e-vote (according to their report). You can find links to Brookline's Spring 2019 Town Meeting votes here.

Of the towns we consulted with and researched, all stated that improved transparency and accountability was the primary benefit to using the technology. None regret their decision or plan to return to voice only voting.

Issues and Concerns

The committee identified a number of questions and issues that informed the survey we circulated to towns that had adopted the technology. These related to security, implementation issues, concerns from their TMMs, vendor of choice, and overall level of satisfaction.

In the poll we conducted soliciting questions and concerns from Milton TMMs and residents, the questions echoed these concerns. The primary concerns, aside from "what's the problem we are trying to solve" were cost, security/hacking, potential abuse (e.g. proxy voting), and availability of smartphone-based apps.

System security

None of the towns surveyed have experienced security issues; nor in our online research did we find any evidence of security breaches of electronic voting in towns with either representative or open town meeting.

The specific applied technology differs from system to system. As an example, Option Technologies employs encrypted radio signals using a special proprietary algorithm. Every transmission is a two way

communication between the wireless handset and the base station. Each unit is sending an encrypted command and receiving an encrypted response within seconds. The systems are difficult to hack.

There are smartphone based apps such as the one available from Voatz. The committee is not in favor of a smartphone-based system for a couple of reasons: voting integrity (e.g. people could potentially vote off site) and logistic and implementation issues (installing of app, app availability on iOS and Android, assumption that all TMMs have smartphones vs. flip phones)

Voting Integrity

As with device security, the towns we spoke with did not experience issues with proxy voting. "We just tell members, 'Don't do it and if you see it, report it,'" said one Town Moderator. It has also been noted in various town reports that having devices improves integrity and reduces abuse: Having devices dispensed to members formalizes the check in procedure; members cannot sign other members in. Also, there is no issue with non-members sitting in the hall and participating in voice votes.

A member could give their device to another member and have them make their vote. In fact, this is used in instances where there may be an ADA issue with dexterity or sight.

Voter Validation

When the Moderator opens the voting on an article there is a voting window of a predetermined length (e.g. 30 seconds) in which to register a vote. Members can change their vote during that window. Some vendor devices send a communication back to the handset confirming the vote and, depending on connection to a display, the vote is displayed on a screen with the member's name. Systems which deliver this kind of vote feedback are more costly.

There are occasions when units fail. These units are replaced (standard practice is to test all units ahead of the meeting and also to purchase or lease more units than you have members). If a member takes exception to how their vote was registered, they can inform the moderator and the vote will be manually adjusted. The instances of this in the experience of towns surveyed are very rare.

Two more commonly encountered issues are a) members inadvertently turning off their devices, which can result in a vote not being counted as the devices take several minutes to cycle on and connect to the base station, and b) members leaving the hall with a device either in their purse or pocket. Because the

devices are keyed to a member, the member can be called and the device retrieved. Arlington which has been using electronic voting since 2015 has lost only one unit.

System Costs

An electronic voting technology platform can either be leased or purchased. We contacted three vendors. Of the towns we surveyed 3 use Option Technologies (Brookline, Natick, and Arlington) and 1 uses Turning Point (Belmont). Belmont and Brookline have purchased their systems; Natick and Arlington have leased theirs. All are satisfied with their systems.

The rental prices below are based on 279 devices for a 3-session Town Meeting and include on-site vendor support for the 3 nights. The purchase price is based on 300 units.

Company	**Rental**	**Purchase**
Merida	none provided	$8,865.00
Option Technologies	$6,964.72	$35,949.16
Turning Point	$6,415.00	$15,500.00

These figures are preliminary. There are a number of factors that influence the cost, and vendor business models are not consistent. For example, Option Technologies leases its software, which would need to be renewed after a specified term (e.g. 5 years); a Turning Point purchase is a one-time cost. The rental costs are driven by the number of nights town meeting takes place. If Town Meeting only went 2 sessions, the cost of the rentals would go down (or up if it went to 4). The Option Technologies rental price given includes their higher end devices that have a feedback feature that sends a text message back to the member confirming the vote they made. Less full featured devices are available at a lower cost. Also, a longer term lease can realize a discount.

The primary benefit to renting the system is that it is essentially a turnkey solution. On-site support deals with any malfunctions of the system and does the setup and device validation. However, town resources would still be required to assign systems at the start of a session. The primary benefit to purchasing is cost savings over time. Town Hall resources would need to be allocated for set up and to provide technical support.

Recommendation

The committee recognizes the merit of this technology in improving transparency in our legislative process and accountability of those elected to Town Meeting. However, Milton's finances are currently stressed. The town has a number of significant capital improvements on the horizon (e.g. new school building, fire stations, DPW yard improvements) and has also experienced high, unexpected costs (e.g. trash collection). The majority of respondents to our poll support this technology; however, they also expressed concerns the cost and questioned the priority. The committee shares that opinion.

We believe that this is not the time to introduce new costs, even modest ones.

The committee unanimously recommends that the town defer pursuing adoption of this technology until such time as the financial health of the town improves or a clear source of funding can be identified that will not adversely affect other services.

Susan Galvin, Secretary

Kathleen Lavery

Rob Mallet

John Michael Shields

Frank Schroth, Chair