

## 5.0 ONGOING ANNUAL SOFTWARE MAINTENANCE AND SUPPORT APPROACH

**Bidder shall provide an approach for ongoing software maintenance and change management (change control), as well as support services provided by the Bidder to maintain the proposed solution.**

Team BPro will provide software maintenance support services as part of this contract effort. The Software Maintenance will be provided to meet (or exceed) the requirements stated under this section. In addition to the standard maintenance and support contract, a mutually agreed SLA will be developed to suit WA OSOS requirements.

The following services are provided as a part of the standard maintenance and support:

- Unlimited Over-the Phone and Email End User Support
- Bug Fixes and Minor Product Enhancements for TotalVote that include unlimited reporting of bugs and 300 hours of minor enhancements at no charge. Major Product Enhancements, as determined by Team BPro, will be quoted as a separate, additional cost. Training, documentation updates and technical support in support of the releases due to bug fixes are also included at no charge.
- Bug fixes and patches for the Petitions Application are part of standard maintenance and support, any Major Product Enhancements, will be quoted as a separate, additional cost.
- Patches and Upgrades to support ongoing architectural changes and MS Windows, Browser updates and Microsoft SQL Server upgrades.
- Weekly status meetings/conference calls.

### *Maintenance Releases and Patches*

Team BPro classifies releases and patches in two categories:

- Standard
- Emergency

Standard releases and patches are provided on a monthly schedule. Each release and patch is tested and all necessary training and documentation is included. Emergency releases and patches are provided upon request for a designated Washington OSOS Representative and can be provided within 24 hours of request.

### *Major and Minor Release Cycles*

All major and minor release cycles are catered to Washington OSOS specific requirements.

### *Frequency for Major and Minor Upgrades*

Major and minor upgrades are handled on a mutually-agreed upon schedule, typically annual and monthly bases respectfully.

### *Typical Downtime for Major and Minor Upgrades*

The major and minor upgrades are conducted after-hours and usually require less than one hour of downtime. Any emergency upgrade that requires system downtime during regular business hours is only conducted upon request from designated personnel at Washington OSOS and upon communication to the User Group.

### *Effort Level for Upgrades*

The majority of upgrades are conducted utilizing automated scripts and are managed by Team BPro's senior support personnel to ensure minimum downtime and effort.

### *Upgrade and Patch Process*

During the warranty period, the EMP will receive all patches and upgrades free of charge. Patches and upgrades are also covered under the support and maintenance agreement after the warranty period.

### *Database Schema Extension and Upgrade/Patch Process*

All database schemas are conducted through automated scripts that shall update, add, or remove database objects. Any updates that require data transformation is also managed through automated scripts. Any external interfaces that are impacted due to any database changes are also updated.

### *Configuration and Customizations during Upgrades*

As mentioned above, all customization and configurations are handled through automated scripts.

### *Documentation – Administrator & End Users*

Team BPro provides documentation for system administrators as well as support for end users. End user support, including user manuals and guides, is available within the TotalVote application and accessible through any browser.

**Bidder shall describe, at a minimum, how the Bidder will support OSOS and the 39 Counties with the following items:**

#### *Tier 2 Help Desk support*

All tier 2 level support will be handled out of BPro's headquarters in South Dakota and performed by our in-house Technical Support Team. This team is co-located with our development and implementation teams. Technical support staff are technically-minded individuals who are intimately familiar with TotalVote. When you call, you WILL speak with someone who understands your issue. Our staff will make every effort to solve the reported issue as soon as possible. If a petition or electronic ballot remedy is needed it will be correctly addressed and routed to a subject matter expert at Democracy Live or Runbeck.

Normal hours of operation for the technical support team are from 8:00 a.m. thru 5:00 p.m. Pacific Time, Monday through Friday. During election periods, BPro will support extended hours of operation. The exact hours during election times will be mutually agreed upon as part of the contract. During non-election times, additional support hours are also available after 5:00 p.m. or on holidays and weekends via phone/email at additional costs.

### Application Monitoring and Management

TotalVote is monitored through extensive error reporting and Microsoft’s Application Insights. Error reporting allows BPro to track and resolve system and application errors. Users can also add comments about what they were doing when the error occurred. Application Insights provides real-time monitoring of the system and applications for every user. Server and database performance are also monitored in real-time.

For BPro's existing clients in other states, monitoring tools have been installed on the servers to monitor server and database performance. Similar tools could be used by OSOS IT and may already be in place.

### Incident Management

#### *Problem Resolution Process*

Team BPro follows the Issue Escalation Diagram (pictured) in resolving and escalating issues.

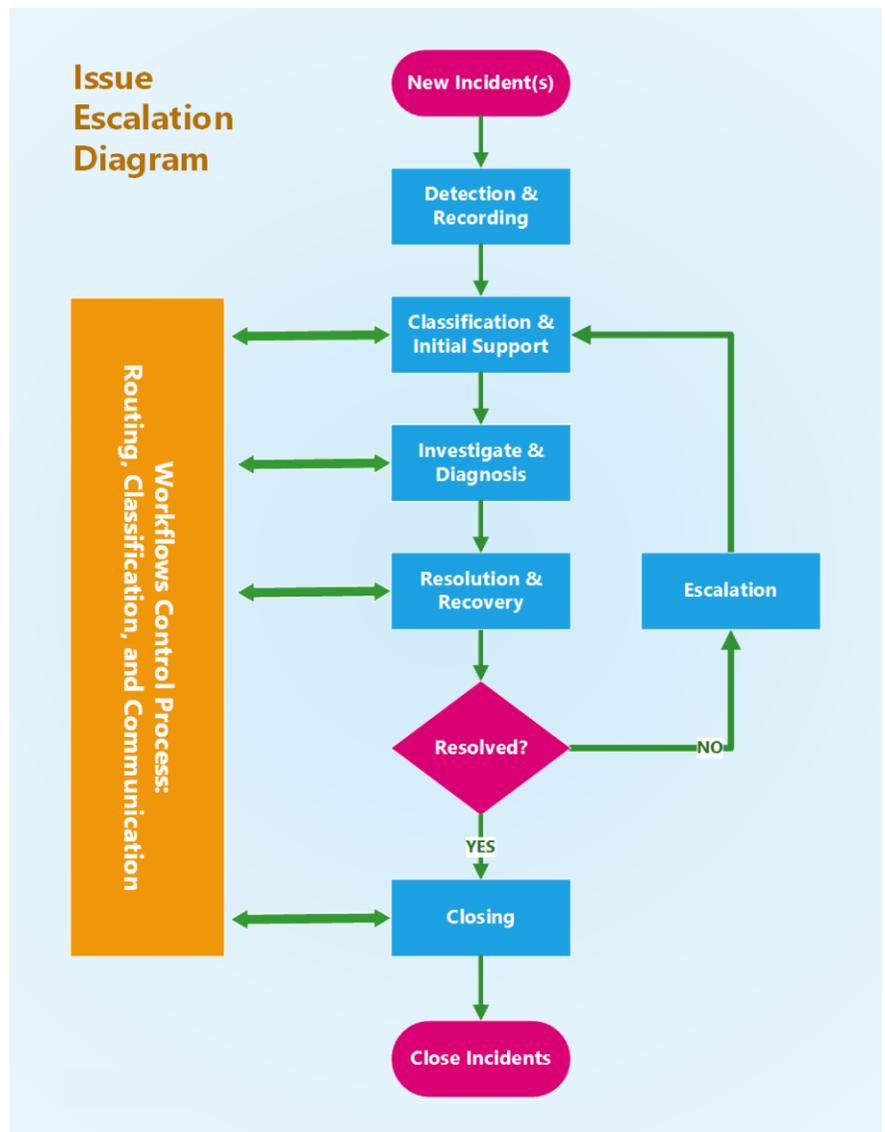
#### *Issue Criticality, Escalation, and Response Time Goals*

Team BPro will respond to issues based on the criticality of the issue. When a problem is reported, a Team BPro support engineer will work closely with Washington OSOS staff to ensure the issue is prioritized correctly according to the following criticality scale.

**Criticality 1:** The production environment is seriously impacted by some issue or is out of service. There is no work-around available for this criticality status. Team BPro support engineers will use their best judgement to escalate the issue and work on a resolution.

**Criticality 2:** Production is operable, but a serious issue has occurred. Production is functioning at a sub-standard level. Team BPro support engineers will use their best judgement to escalate the issue and work to find resolution.

**Criticality 3:** Minor problem or small enhancement request. These issues will be resolved according to the routine build schedule.



The following tables describes Team BPro’s response time goals in responding to issues reported by TotalVote users:

| Criticality          | Initial Phone Response | Begin Resolution | Expected Status Response Times |
|----------------------|------------------------|------------------|--------------------------------|
| <b>Criticality 1</b> | Within the hour        | Within the hour  | Every hour                     |
| <b>Criticality 2</b> | Within 4 hours         | Within 8 hours   | Once a Day                     |
| <b>Criticality 3</b> | Within 8 hours         | As prioritized   | Once a Week                    |

#### Change Management for fixes (Change Control)

Fixes take an elevated priority, as any bugs in the system may need to be corrected expeditiously. Internally, there is a simple error reporting screen built into the site if the user encounters a system error. This screen should be filled out and submitted by the end user to immediately report the error to BPro development staff. These system errors and any other discovered bugs (that may not prompt an error screen) need to be reported by end users (both OSOS and County staff) to the OSOS Project Manager. All system changes should go through the OSOS Project Manager, who in turn, reports it to BPro for analysis. Bugs should be recreated by the user before being reported to BPro. An error reporting ticket template will be used to submit issues to BPro. Details shall include which user reported the error, when it was reported, and how the error was created, along with information about the “before” step and what was the expected outcome (that did not occur). OSOS staff will create an online job ticket for BPro, including the error reporting template along with any additional details and screenshots. Enough detail should be provided from OSOS that BPro can recreate the issue. BPro will fix the issue in the Sandbox environment and test it before letting the OSOS know it has been resolved and is available to be tested on their end. With approval, the change will be ready for the next time code is updated in the Production Environment. For fixes, BPro can provide updates as requested by the OSOS Project Manager on an as-needed basis. Each software release will be recorded by BPro with release number and documented with itemized fixes included in the update.

#### Change Management for system enhancements (Change Control)

System enhancements involve planning and therefore may be scheduled releases. Enhancements must be fully specified by the OSOS and submitted to BPro through the OSOS Project Manager before BPro begins development. The development effort will take place in a staging environment and, when BPro has completed the enhancements, the enhancements will be posted to the Sandbox environment for QA testing by the BPro QA manager and OSOS staff. If necessary, BPro may offer webinar demonstrations of the enhancements to OSOS staff. When the Sandbox code is approved as complete and ready for rollout to Production, the update may be scheduled for release. Each software release will be recorded by BPro with release number and documented with enhancements included in the update.

#### Change Management for new releases of the proposed solution including any changes due to technology changes

If new releases of the proposed solution (including any changes due to technology changes) are deemed necessary, the OSOS Project Manager will work with BPro to provide information about the requested

changes. BPro understands that a statewide Election Management and Voter Registration system is subject to technological changes due to changes in federal, state, and local laws, as well as other governing administrative rules, etc. For all requests, the OSOS Project Manager is to instruct BPro on the changes, and BPro will work with OSOS to ensure the system meets compliancy. The development effort will take place in a staging environment, and when BPro has completed the changes, the changes will be posted to the Sandbox environment for QA testing by the BPro QA manager and OSOS staff. If necessary, BPro may offer webinar demonstrations of the changes for OSOS acceptance. When the Sandbox code is approved as complete and ready for rollout to Production, the update may be scheduled for release. Each software release will be recorded by BPro with release number and documented with changes included in the update.

#### All system design as well as documentation and traceability to requirements

BPro will provide system design for any changes to TotalVote during the M&O phase. With our experience in building Election Management and Voter Registration systems, we have a strong existing architectural foundation in place that we will use as a baseline for Washington's needs for the duration of the project. For newly required enhancements to TotalVote during M&O (i.e.: changes after go-live), BPro will use a design that matches the existing design of TotalVote in order to promote uniformity and familiarity for end users throughout the entire system. This will maximize expected outcomes, ease future training, and result in a better overall user experience. Changes identified during M&O will be designed and presented to the OSOS, but BPro will try to accommodate any other special design requests from the OSOS. The OSOS is responsible for defining new requirements during the M&O phase, and BPro will work with the OSOS to trace M&O changes to these requirements. Also, BPro will work with the OSOS to keep internal project documentation as up-to-date as possible, both during implementation and M&O.

#### Service Level Monitoring and Reporting

BPro will have development staff that monitors the performance of the site as well as servers during the M&O phase. Additionally, we can help monitor interfaces for data feeds for errors, and that information is shared directly with the OSOS staff for follow-up to the respective agency. BPro developers also monitor any errors reported through end users through the error-reporting screen in TotalVote. Lastly, BPro developers will monitor the database to check for any errors that weren't reported by end users. BPro will run an output/report of all service level instances for submittal to the OSOS on a regular (i.e.: monthly) basis during the M&O phase.

#### User Training during Maintenance and Support Period

During M&O, if newly defined requirements result in a brand-new feature or a change to user experience, BPro will conduct internal training to the OSOS staff. This will continue to be the same Train-the-Trainer method as deployed during the earlier project phases. BPro training will be conducted in the Sandbox environment, in which the OSOS can conduct UAT and approve the changes for the Production environment. It will be the responsibility of the OSOS to train the end-users (i.e.: Counties) on new features during M&O. For continual user training on existing system features that were in place prior to Go-Live and Close-Out, it will be the responsibility of the OSOS to conduct annual refresher trainings or specialized training sessions for County users during M&O. Alternatively, BPro can conduct annual refresher trainings during the annual Elections Conference at an additional cost.

## Hardware Maintenance and Support

Standard hardware support for products purchased will be included for 1 year starting at the time of install. Software support is included with active Software license.

### A. Maintenance

- i. Address hardware or scanner software issues.
- ii. Support for scanner software environment.
- iii. Best Practices will be provided.

## Upgrades

Newly discovered requirements that are identified after completion of a module may be analyzed and placed in a Parking Lot to be re-examined after the project's Go-Live and Close-Out phases. After those times, focus will be shifted back to the items in the Parking Lot to determine which enhancements will be included as an upgrade to the system. These upgrades will be handled as per the Change Management/Change Control process described above. BPro expects there to be development for future processes during M&O and TotalVote is already adaptable to handle future statutory, regulatory, policy, or technology changes to meet ongoing changes to State and County needs. BPro also expects there to be future interfaces with proposed other systems during M&O, which we will work with the OSOS to modify TotalVote to provide these interfaces. Lastly, we understand that there may be necessary upgrades for security enhancements, security requirements, and security policies.

In addition to changes and upgrades requested by Washington, the state will be able to take advantage of the fact that BPro has multiple statewide VR system deployments in states that share election similarities with Washington. Anytime BPro completes an upgrade for one customer, every customer has access to that upgrade. This often decreases the development costs associated with upgrades that have already been implemented in another state and provides all BPro customers with optional system enhancements throughout the life of their contract.