

# MEMORANDUM

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To: Mike Geisel – City Administrator  
From: Matthew Haug – Director of Information Technology  
Date: 8/28/2023  
Re: Web Technology and Software Upgrade Proposal

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As detailed herein, the entire Department Head team enthusiastically recommends that the City overhaul our public website and multiple current independent software solutions, by engaging an external webhost and municipal software provider to provide a secure, superior suite of products to serve the Chesterfield Community. There is no additional budgetary impact for 2023. The implementation of this recommendation is fully funded by current appropriations and offsets created by elimination of the outdated solutions. The draft 2024 budget proposal includes ongoing funding, eliminating current annual expenses and incorporating all of the expenses relating to the proposed solution for future years.

In short, this proposal addresses the following areas:

- Website: provides a superior, secure, ADA compliant externally hosted solution.
- Parks and Recreation – Replaces RecTrac and provides a superior customer interface.
- City Clerk – Provides a superior agenda management system.
- Finance and Administration – Provides a superior licensing, P&Z permitting, Code Enforcement and GIS administration solution.
- Public Works – Provides a superior and integrated problem reporting\tracking system allowing for externally uploaded documents\photos. (See Click Fix)

The City Currently hosts our website internally, on servers that are set up and maintained by the City's Information Technology (I.T) Department. The Content Management Software (CMS) was initially purchased in 2008 and is also maintained by the I.T. Department. As you are also aware, we previously eliminated the City's webmaster position, absorbing and distributing that effort through intermittent contracts, de-centralization, and tertiary assignments to existing staff.

In reviewing our current technology solutions, and in looking at ways to improve our technology position and overall technology security, three areas that require drastic improvement are our public website, our current software, and our public communications offerings. To improve these functions, I engaged each of our departments and our MIS Citizens Advisory Committee.

## **Improved Security**

The obvious solution to reduce the risk associated with our website is to simply reduce our footprint by removing it from our network. The best solution to secure our network is to migrate our public website to an

externally hosted solution. Since our public website is hosted internally, cyber-attacks directly affect the website as our internal operations. A Denial of Service (DOS) attack will not only result in rendering our website inaccessible, but will also interfere with communications to our email, phones, and our PD systems like REJIS and Axon (body and in-car cameras). The easiest way to prevent a DOS attack from taking down our connection is to reduce our surface area for attacks. An externally hosted solution provides large scale data center redundancy to mitigate against attacks and disasters that localized networks simply cannot provide.

## **Improved Features and Functionality**

A hosted solution provides continuous improvements in CMS, communications offerings. A commercial, for-profit entity who relies on customer satisfaction for their very existence is motivated to continuously address product enhancement. Further, they have dedicated staff to stay on the forefront of technology and security. While the city may have the capability to develop solutions, it is obvious that commercial providers can do so more efficiently, more expediently, and integrate more fully. Currently our Content Management Software provides modules for News, Calendar Events, Documents, Photo Galleries, Web Forms, eNotifications, and Content Creation. As stated above, these modules are maintained in-house, but we simply do not have the time nor the expertise to constantly add new features and functionality to them as needed. A hosted CMS will provide new features and functionality automatically. Another area where improvements is required relates to ADA Compliance. Our website and method of posting news items, calendar events, meeting agendas, minutes, and our page content editor lacks proper checks for ADA-Compliance.

Another major function that is lacking from our public website and in-house software offerings is the ability of the public to upload documents. This functionality, if provided locally, creates security issues in that any file uploaded to our network poses a serious risk to the network itself. We haven't offered the ability to directly upload an applicant's resume or a business license renewals proof of payment of state sale tax for example. Often, residents desire to include a photo or sketch of a specific concern, but our reporting solution does not provide that capability. We have numerous situations where a document upload feature would be beneficial to the public. A hosted solution would provide this functionality in a secure manner and take the burden of ensuring security from our internal systems and staff.

## **Increased Time and Cost Savings**

The CMS contains several custom modules that allow staff to maintain our public website in the most efficient manner possible. The server is patched every few days and at least once a month a security patch will require code changes to one or more of these modules. This process consumes 240 staff hours annually to simply keep these modules updated and functioning. Additional functionality requires even more time from our developer.

The server operating system is supported for five years, so every five years the I.T. Department must build a new server, copy our CMS code over to it and update the modules to work on the new server build. The time to complete a server migration is 300 hours for each the I.T. Director and the Developer. In short, we are spending a large amount of time just to provide security and maintenance.

## **Improved Civic Engagement/Communications**

A very large portion of our Strategic Plan revolves around Civic Engagement and improving communication and transparency to and for our citizens. Civic Engagement (CE) is not something that we can accomplish with in-house software development. CE is simply outside of the area of expertise of any I.T. Department. An externally hosted website solution provides Civic Engagement tools as part of the offering. Currently large-scale email notifications take considerable time and effort to send out. A hosted platform provides tools to notify a resident when content changes. For example: Parks creates an event page for the annual Turkey Trot. Whenever that page is updated, the content creator has the option to send out a notification to a list of subscribers with the changes. We currently have a subscription to two different providers to provide listserv/webmail notifications and a digital newsletter. Combining these into one platform and allowing for easier and more seamless distribution of information will help us meet the goals set forth by our Strategic Plan.

## **Increased Integration**

The city currently utilizes several software solutions purchased from a mix of vendors and developed in-house. While the I.T. Department manages and supports this hybrid model, we have not been able to achieve real integration between all these solutions. It is just not possible. Integration provides awareness between the departments about the day-to-day operations. For example, things like the review of a Business License request requires communication between several departments to determine if there are code violations on the parcel or at that address. When liquor licenses are reviewed, Staff must manually search multiple sources to provide City Council assurance that there are no pending code violations. Staff spends a substantial amount of time checking different systems to find answers to these types of questions. Integration addresses that problem, different software modules that are integrated will flag that license inquiry/request as having an open code violation for example.

## **Staff Recommendation**

To address these concerns, I engaged the Management and Information Systems Citizens Advisory Committee and as a result came up with an RFP that was sent to several vendors. We elected not to do a formal RFP as there is simply a finite pool of vendors that fit into the Municipal Government web hosting and software space, or that could provide the numerous integrated solution that we were looking for.

I also engaged the Executive Staff to review several paths that the city could take to improve our website with the goal of improving in the areas listed above. The Department Heads reviewed the offers from CivicPlus and Granicus, two of the vendors that were recommended by members of my Missouri Government Technology Managers Group. Additionally, the I.T. Department did an internal review of what steps and purchases we would need to make to modernize our internal systems and software.

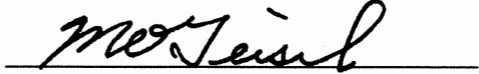
We collectively recommend that the City of Chesterfield enter into a partnership with CivicPlus for a technology overhaul for our public website and replacement of numerous software solutions. Staff recommends that the City Council authorize the City Administrator to execute agreements with CivicPlus to

implement. There is no additional 2023 funding requested, simply re-directing current appropriations to new, improved solutions. Ongoing funding will be included in annual budget submissions, as they are currently.




Matthew Haug  
Directory of Information Technology  
City of Chesterfield

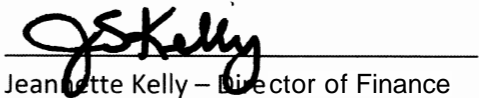
**CONCURRENCE**




Michale O. Geisel - City Administrator



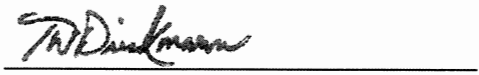
James Eckrich - Director of Public Works



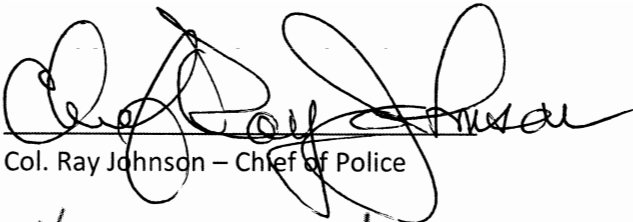
Jeanette Kelly - Director of Finance




Justin Wyse - Director of Planning



T.W. Dieckman - Director of Parks, Recreation & Arts



Col. Ray Johnson - Chief of Police



Vickie McGownd - City Clerk

## CivicPlus Software Solution Breakout

### Website – Evolve

- Evolve offers top-of-the-line websites that are managed through a fully customizable Content as a Solution (CaaS) content management system (CMS).
- Evolve is easy for non-technical users to make page updates, yet functional and flexible enough for technical teams to take advantage of its full capabilities and API-first architecture.
- Every edit can follow an approval process so that there are several checks and balances to ensure the information is accurate.
- Evolve's APIs have instant API documentation for endless integration options, allowing your organization to connect to disparate systems, automate processes and be more efficient and accurate.
- With Evolve live editing has never been easier to use with its drag-and-drop functionality and real-time, live preview while you're editing.
- Evolve is powered by a headless content management system (HCMS – the only government vendor to supply this product!) The HCMS treats content in a flexible manner that allows delivery to any channel accessible via its built-in APIs.
- Evolve is a customizable solution that will be tailored to meet your specific needs.
- CivicPlus is the only government technology company exclusively committed to powering and empowering governments to efficiently operate, serve, and govern using our innovative and integrated technology solutions built and supported by former municipal leaders and award-winning support teams.
- Stevie Awards – Recognized with multiple, global awards for sales and customer service excellence.

### Civic Clerk Solution

- Effortless Agenda Creation: Seamlessly craft professional meeting agendas with user-friendly tools, ensuring all critical information is presented clearly.
- Streamlined Collaboration: Facilitate smooth teamwork among departments by allowing simultaneous agenda creation, revisions, and approvals.
- Secure Document Management: Safeguard sensitive documents through advanced security features, ensuring only authorized personnel have access.
- Accessible Anywhere: Access the software from any device with an internet connection, enabling council members to stay updated on the go.
- Transparent Communication: Enhance public transparency by easily sharing agendas, minutes, and supporting documents online.
- User-Friendly Interface: Designed for ease of use, the software doesn't require extensive technical knowledge, making it ideal for all team members.
- Effective Meeting and Minutes Management: Improve meeting efficiency by organizing discussions, votes, and decisions in a structured manner.

- **Reliable Customer Support:** Receive timely assistance from our dedicated support team for any inquiries or technical help you may need.
- **Customization Options:** Tailor the software to match your city's unique processes and preferences, ensuring a perfect fit.
- **Comprehensive Training:** Ensure a smooth transition with comprehensive training sessions, making sure everyone is comfortable using the software.
- **Regular Updates:** Benefit from the latest features and security enhancements through regular software updates.

## **Community Development – Licensing Software**

Currently we utilize the Tyler New World ERP Community Development module to process our licenses for business, liquor, vending, alarms, etc. Prior to Andrea Majoros leaving the City of Chesterfield we were working to resolve several issues in the Tyler software.

We began the process in June 2022 and just completed resolution of the issues.

in August 2023. The project was supposed to include migrating to an online platform and identifying better processes and setup in the system; however, since the resolution of the issues took an entire year, we did not proceed with the next steps. In addition, during this process we determined the online system only offers a payment solution online and does not offer a portal for businesses to upload documents or to provide a workflow. Instead, the system remains as a manual process which includes the cost of printing applications, business licenses, and mailing documents which has proven to be slow and inconsistent as the postal service returns mail that is addressed correctly. Our desire is to transition to online / electronic storage of licensing files instead of storing physical documents.

The CivicPlus Community Development product provides the following:

- Online application and payment portal for business owners
- Improved relations with business owners as they will be able to access an online portal and submit their documents and payment 24/7
- Provides a dashboard and reporting system.
- Allows us the opportunity to properly setup the tracking of our licenses which would include GIS mapping, tracking by location/district (i.e.: Valley, Regional TIF, NAICS codes, etc. which provides additional tools and reporting capabilities
- Reduces mailing issues including undelivered mail, slow delivery, rising postage costs, and costs of envelopes and printing documents (costs of paper, toner, and time)
- Although there would be an increase in credit card processing fees, this would be offset by reductions previously stated, and we would receive payments faster as we do not need to wait for the mail to arrive.
- We anticipate less time would be required to process the applications and renewals which would allow us time to investigate businesses to ensure they have a valid license which allows us to be more pro-active instead of reactive.

## Planning and Zoning

- Allows for migration toward paperless permitting which will align more closely with St. Louis County's recent transition to paperless. This will provide a significant benefit to our residents and businesses who will no longer need to coordinate having paper copies delivered and picked up from City Hall.
- Integration within City Hall to avoid routing of physical paper will reduce transmittal errors and allow for a reduction in administrative functions.
- Allows for integration of GIS functionality into the module to take advantage of both systems within one application.
- More sophisticated tracking and monitoring of escrows associated with development.
- Streamlines many portions of the procedure into one area, reducing administrative burden.
- Allows for online payments that, if implemented, reduces human error that may hinder the project.
- More seamless cross departmental collaboration into one procedure.
- Mobile use for inspections and record keeping.

## Code Enforcement

The code enforcement module provides a compliance system as well as a case management system. It has status tracking features to include follow up dates. It can add pictures and upload documents to the system. It has a built-in code library where you enter a keyword, and it will pull up codes for you to select the correct one. It can create the notices for us to send out. The mobile feature is ideal for us to use while we are out observing the violations. All the features of this module will be very beneficial. It is designed for our specific use as opposed to adapting the current work order system for multiple departments.

## Civic Recreation

Current situation with Rec Trac

Rec Trac is adequate for programs, pool passes, and rentals. We can run reports, rosters, and financials. But functionality is limited to mostly database storage and set up on the back end can be cumbersome. Especially when trying to add documents. Patrons have the most difficult time. Rec Trac is not mobile friendly or easy to navigate for customers. Setting up households or signing up for a program can be frustrating. Seniors have a very difficult time with the software. Rec Trac will save email addresses for marketing purposes, but only as a database. Staff use Rec Trac to schedule field usage at CVAC. We print daily reports for maintenance, so they know what setup is needed in each field. But it is paper based, and park staff cannot access the information. It must be provided by other staff. Rec Trac allows users to submit CVAC field rental requests and pay their balances, but the process is difficult and hard to navigate for customers.

## Civic Rec benefits

- Ability for anyone to access Civic Rec, anywhere, from any device - phone, laptop, tablet.
- Can access CVAC field schedules from mobile device when out on the 176-acre complex.
- Mobile friendly on back end (staff, internal users).

- Cloud solution – no download
- GIS integration
- Single login for website and Civic Rec
- Calendar integration (website and Civic Rec)
- Calendar tags
- Calendar function will be easy to update as we create each event (one stop shop)
- Can register from the calendar.
- Calendar can go to a personal calendar.
- Can reserve pavilion in program creation.
- Pavilion registration map
- Waivers can be set for one time, every time, quarterly – whatever we need.
- Ticket function could save money for events (instead of incurring fees by using Event Brite)
- Tickets are scannable from a mobile device.
- Can put links in receipts.
- Can create custom links to drive residents to specific activities or available facilities.
- POS included and can be different by location/facility.
- Can start with clean with data or import from Rec Trac (only household info).
- Special event check-in feature
- Survey tools are automatic at end of a program. Meets CAPRA standard. Very important.
- Can prorate memberships.
- SMS text messaging is included, free & unlimited.
- Can duplicate programs in creation phase.
- Program forms are easier to fill out. Can keep them all together per household.
- Bulk CVAC changes and adding multiple fields at one time to schedule is easier than Rec Trac.
- CVAC field setup sheet will always be accessible, even from mobile devices.
- The ability to check the city work order system from mobile devices will improve response times.
- Events and rentals in the parks system will be accessible to view in one place, for all staff.
- Includes marketing abilities for targeted eblasts and brochure links. Rec Trac does not.
- Training cheat sheets have already been established.
- Has the same capabilities as Rec Trac plus a lot more.
- Civic Rec gives staff the ability to design the look and feel like we want.
- User friendly appearance, easy to read/understand when submitting field requests.

## **See Click Fix – Report a Problem/Work Orders**

Our Existing Work Order System / Problem Reporting System was developed by in-house staff in the late 1990's. The system has been expanded beyond its original intent and is now used as primary electronic means for residents to report problems. The system is also used by every department as the primary location for tracking work and work requests.

Our in-house system has the following deficiencies.

- The ability to allow the addition of photos.
- The ability for residents to “drop a pin” for a problem location.
- Residents often complain of difficulties using the system and will instead send emails.



See Click Fix will benefit the residents by providing:

- See Click Fix is integrated with CivicPlus.
- It is used by several cities throughout the US and is much more user friendly.
- Residents can see existing problems, easily report problems, and check the status of previously reported problems.
- Residents can “drop a pin” to show a specific location.
- Residents can attach photos as part of their submittal.
- The See Click Fix system provides superior workflow as action is taken on a problem.
- Staff can enter work order data “real time” and upload photos.
- Data from the existing work order system would not be lost but can be accessed internally via an archive.
- Staff can maintain our tracking for most metrics (hours, supplies, equipment, duration, etc.)

The primary internal users of the work order system have reviewed See Click Fix and we believe this will be a superior service to residents.

- Easier reporting
- Allows for residents to check problem status.
- Better internal workflow
- Superior reporting function

*See Click Fix hits the mark on every improvement I'd noted – photos, geolocation, gis/map integration, workflow/assignment tools, different internal and external comments. Seems like we can maintain our tracking for most metrics (hours, supplies, equipment, duration, etc.). This looks like a solid option to me. Really like the auto-messaging for categories of items the city doesn't handle so residents would be directed to the appropriate agency (i.e. leaking hydrant, traffic signal outage, sewer smell, street light, etc.)*

*The only item I didn't specially see in the demo was integration with some sort of customer satisfaction survey/reporting but given its integration with e-mail I expect a post-work order survey, even if it's a link to a third part survey, could be integrated and sent out once a work order is closed, quite easily.*

*Zachary S. Wolff, PE*

*Assistant City Engineer | City of Chesterfield*

# MEMORANDUM



To: Mike Geisel – City Administrator  
From: Matthew Haug – Directory of Information Technology  
Date: 9/18/2023  
Re: CivicPlus Expense Summary

The proposed CivicPlus suite solution is comprised of five modules. A price breakdown and expense summary is provided below. This summary also identifies the estimated savings or cost re-appropriations for future budgeting that result from eliminating the current solutions.

### CivicPlus Modules

1. **CivicPlus** - EVOLVE Website - Year 1 - \$47,859.52 / Recurring \$28,000
2. **CivicRec** – Parks & Rec - Year 1 - \$24,871.50 / Recurring \$13,500
3. **CivicClerk** - Agenda Management - Year 1 - \$10,566 / Recurring \$6,006
4. **CivicGov** - Licensing, Planning/Zoning, Permitting, Code Enforcement, and GIS Integration Year 1 - \$35,326 / Recurring \$18,326K.
5. **See Click Fix** - Work Orders - Year 1 \$20,452.66 / Recurring \$20,452.66

### Total Solution Cost - Year 1 - \$154,893.68 / Recurring annual- \$88,734.66

- No price increase on recurring for 3 years, 3% increase in recurring starting in year 4
- 2023 initial implementation - \$66,159.02
- IT portion - \$58,238 in Document Management Purchase Order #2017-0103
- Finance - \$10,000 in Data processing for Tyler Implementation PO# 2022-0102

### Remaining unfunded for Implementation in 2023 - \$0

### Annual Budget Savings due to re-appropriation of current services.

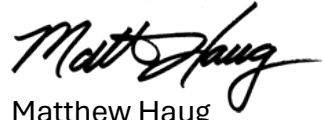
- Tyler/LOGOS Suite - \$22,060.59
- RecTrac – Parks and Rec Suite – \$6,000
- Vertical Response – ListServ for Public website - \$2,000
- Professional Services – Website Maintenance - \$3,000
- Mail Chimp – eNews Letter Subscription - \$3,000 (likely not 100%)

### Total reduction in the FY2024 = \$36,060.59

The annual recurring cost starting in FGY 2024 is \$88,734.66  
By utilizing the integrated suite of products proposed, we will save \$36,060.59 annually.

The estimated annual cost for CivicPlus, taking into account what we should be able to remove from our budget going forward is \$52,674.07

Respectfully

A handwritten signature in black ink that reads "Matt Haug". The signature is written in a cursive, flowing style.

Matthew Haug  
Director of Information Technology