Williamson County VUEWorks®

Software Licensing and Implementation

Services Quote

Prepared for:
Williamson County, Texas
3101 SE Inner Loop
Georgetown, TX 78626

Prepared by:
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dts
MAKERS OF **VUE**Works.

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October 21, 2019

Williamson County, TX
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3101 SE Inner Loop
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VUEWorks Software Licensing and Implementation Quote

Data Transfer Solutions, LLC (DTS) respectfully presents a quote for VUEWorks software licensing and implementation services for the VUEWorks Asset Management software applications with the County's Facilities Maintenance Division.   This quote is for an upgrade from 25 to 75 concurrent users and includes a credit for existing license and maintenance/support.

DTS appreciates the opportunity to submit this budget quote for consideration. We look forward to hearing from you and trust this information will be responsive to your needs. Please feel free to contact me with any question.

Sincerely,

Todd A. Spangler, PE | *Sr. Client Solutions Engineer*

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Software Licensing and Implementation Quote:

Williamson County is in the process of implementing an Asset Management Program and to extend the use of VUEWorks already installed in its Streets Department to also cover the Facilities Maintenance function and has requested a software licensing and implementation quote for consideration.

DTS is pleased to present the following proposal for software based on Williamson County's request. DTS offers an extension of your current Enterprise License Agreement (ELA) that provides a set number of concurrent user licenses for all VUEWorks software modules. Per discussions with Williamson County staff, DTS offers the below software implementation services for the portions of the software delineated in the Professional Services section below.

VUEWorks ELA Software Licensing (50 Concurrent Users)	$100,000.00
Credit for existing VUEWorks ELA Software License	-$59,500.00
VUEWorks Maintenance & Support	$20,000.00
Credit for existing VUEWorks Maintenance & Support	-$14,800.00
VUEWorks Implementation Services	$56,300.00
Project Sub-Total (Phase I)	$102,000.00

*Please note that the software maintenance, technical support beginning at the date of go live requires additional fee for Maintenance and Support of $5,200.00. Future years of Maintenance & Support will be charged at the rate of $20,000.00. The annual fee includes unlimited access to annual toll-free technical support and software maintenance releases and upgrades.

Schedule of Costs & Invoicing

Invoicing and Project Milestone	Fee	Comments	Projected Milestone Completion Month
PHASE I			
Additional VUEWorks® Software Licenses	$40,500.00	Due at Contract Execution	**Month 1**
Additional VUEWorks Maintenance & Support	$5,200.00	Due at Contract Execution	**Month 1**
Service Request & Portal Configuration	$11,000.00	Including mapping to the Request Portal	**Month 2**
Work Order & MobileVUE Configuration	$15,000.00	Up to 5 unique forms	**Month 3**
Training - CMMS	$4,000.00	Initial CMMS Training	**Month 4**
Facility Templates Configuration	$20,000.00	Up to 2 Templates	**Month 5-8**
Training – Advanced Modules and Facilities	$6,300.00	Facilities, Condition, Projects, & Valuation Training	**Month 9**
PHASE II			
Optional (Phase II): Resource Manager Configuration	*$10,000.00*	*Initial set up and population from existing data*	***TBD***
Optional: Data Integration and/or Migration	*$15,000.00*	*Not to Exceed @ $300/hr.*	***TBD***

Professional Services:

- The above quote for Software Implementation services includes, set up and installation of the software, configuration to include:
    - VUEWorks Implementation
    - Standard configuration for Facilities Operations to include:
        - Core
        - Service Requests
        - Work Orders (up to 10)
        - Resource Manager
        - Facilities (up to 2 templates)
        - FacilityVUE
        - MobileVUE

- Integration/Data Migration
    - Data Migration and Integration is "unscoped" and a budget allowance of $15,000 has been included for this activity. Williamson County and DTS will discuss this activity and develop scope/schedule/fee against this allowance at a later date

- Training Service:
    - A comprehensive training plan will be developed in conjunction with the detailed Scope and Schedule development activities. Training will include access to VUEWorks standard training materials and User Portal.
    - Onsite training is limited to not more than three (3) days with up to five (5) days of additional remote training available as needed.

- Schedule
    - It is anticipated all services will be completed within nine (9) months from Notice to Proceed.

Project Management Approach

Responsiveness

- DTS recognizes the importance of committing staff to various roles and responsibilities as the need arises and our project director and project manager are ready to respond. To further extend our support of our technical experts, we often arrange conference calls with proactive agendas that allow us to get to the heart of the issues quickly and efficiently. The use of our internal SharePoint® site promotes collaboration, the transfer of documents to and from our clients, and enhances productivity.

Project Administration

- DTS will provide a complete suite of project administration services necessary for contract administration, project controls, schedule management, and document control. The project manager serves as a single point of responsibility for all project administration activities. Project administration activities will initiate immediately upon issuance of the notice to proceed (NTP) and will employ administrative best practices for the effective tracking and reporting of critical project information.

Project Execution Plan

- In order to clearly outline our management approach, once the project commences, we will develop a project execution plan (PEP). The PEP generally documents the overall project scope, individual roles and responsibilities, project team contact information, reporting protocols, document control guidelines, communication protocols, invoicing procedures, stakeholder involvement, and schedule administration. In addition, the PEP will incorporate the baseline project schedule. A copy of the PEP will be made available for Williamson County to review and will serve as a "living" document to be updated throughout the life of the project. The PEP will be available to all pertinent parties involved with the project.

Schedule

- As part of the PEP, DTS will prepare an overall project schedule, using Microsoft Project, for review and approval by the City. Our project manager will assume the coordination of major and supporting tasks in a manner that synchronizes with the desired completion timeframe. The PEP will map the basis for control of the project resources, schedule, and deliverables. Should challenges arise, we will collect information and be available to collaborate and resolve schedule delays in a timely manner.
- The project schedule will be prepared using the critical path method (CPM) linking the network of tasks, incorporated into the WBS, and events to a specific outcome or milestone. The CPM is a very effective scheduling method due to its focus on project results. Upon project initiation, each task will be assigned the following data inputs:
    - Anticipated timeframe
    - Start/finish dates
    - Latest allowable completion date to achieve schedule goals
- Using this approach provides the project team the necessary tools to control the schedule rather than simply monitor activities.

- DTS will compare schedule updates to the baseline to determine variances and to allow for timely corrective action. We will also monitor the project for baseline variance and float. This information will be included in our monthly progress report for you to review.

Document Control
- DTS will provide an organized project filing system for storage and retrieval of project documents, typically using Microsoft SharePoint® software. The software promotes the management, sharing, collaboration, and distribution of project elements on a single platform. Our organized and accessible approach to document control will provide you with a concise and timely method of accessing key project information and transferring files.

Resource Management
- Having the right people at the right time is one of the keys to delivering a successful project. DTS is committed to providing Williamson County with a core team of full-time, dedicated staff. It is the responsibility of our project manager and core team to continually monitor and forecast technical resource needs to ensure on-time delivery.
- Staff Retention & Training
    - We recognize the importance of staff retention to the success of any project. Training and career planning and development opportunities are just some of the tools DTS uses to increase staff retention. Training is an important investment for building a quality organization and supporting employee growth. DTS is committed to a culture of learning and sharing knowledge across the firm. We continuously encourage training for our employees through on-the-job training, as well as internal or external educational courses.
- Replacement of Key Staff
    - DTS' approach to succession planning is built upon our depth of experience. Our staff are cross trained and have served in various roles on projects so that if the need arises, a task leader could be replaced by someone with similar experience. We have sufficient staff in each area of expertise that could augment critical tasks if the schedule dictates. We continuously foster an environment of information sharing so that if staff changes, other team members are aware of current project statuses, schedule modifications, staffing needs, and budget updates. By managing staff involvement, maintaining team communications, and providing a deep staffing plan, DTS will continually mitigate any risk for key personnel who leave the project.

Implementation Approach

Collaboration
- DTS believes that continuous, collaborative interaction with Williamson County is the critical to project success. This software implementation project will require consistent effort from both Williamson County and DTS staff. Upon a prospective NTP, DTS will schedule and prepare an agenda for a project kick-off meeting. The goal of this meeting will be to introduce team members, present the draft project schedule, define the implementation tasks, and provide a free exchange platform for project ideas and project concerns.

- Throughout the project, DTS Project Manager will work with the Williamson County Project Manager to communicate to the team members when their support will be needed throughout the process. This will both encourage and help to plan for their involvement ahead of major and minor deadlines. This transparency is crucial to the success of the project and to mitigate risk related to resource constraints among other commitments.

Stakeholders Involvement

- DTS understands that large software implementation projects can have multiple stakeholders that need to be considered. The project sponsor, steering committee, business unit leaders, and financial managers all play a pivotal role so their support, influence, and/or understanding of the project is imperative. DTS provides you with the experienced professionals that allows us to identify stakeholders that have a vested interest in the project and develop a corresponding strategy to communicate project objectives and to manage various competing interests.

  The overall goal of our stakeholder involvement strategy will be to earn support from project stakeholders to achieve project objectives. Our initial effort will be to review the current level of stakeholder involvement and understand the organization's objectives. Typical goals include building support for the investment, communicating a clear and concise strategic direction, ensuring that business unit leaders "are on board" (they understand the importance and the user adoption criticality), avoiding project delays, and providing opportunities for input from those affected by the project. Once the objectives are identified, DTS will develop a stakeholder involvement plan to be integrated through the various project stages. The plan will consider the need for regular communications, workshops, scheduled updates, and escalation paths needed around the health of the project. Our experience shows that early, continuous, and upfront communication with key stakeholders promotes an inclusive environment that benefits the overall success of the project.

Communication

- Regular Progress Meetings
    - The PM and appropriate team members will also participate in regular progress meetings with Williamson County to present work completed, receive input from Williamson County staff, discuss upcoming work, arrange subsequent meetings, and make collaborative decisions. Progress meetings will provide continuous updates to ensure all team members are able to participate in the decision-making process and promote the timely convergence of ideas necessary to maintain the project schedule.
    - Meeting agendas will be prepared and emailed to prospective attendees in advance of the meeting for review. Within two days of the conclusion of each formal meeting, the PM will prepare meeting minutes or notes and distribute to the project team for review and approval.
    - The PM will work collaboratively with Williamson County to identify appropriate meeting intervals outside of scheduled workshops and reviews. Our flexibility provides for a natural partnership allowing informal meetings and/or site visits to be conducted as dictated by the needs of the project.
- Workshops
    - In addition to kick-off and regular project meetings, DTS will schedule and facilitate details business process review workshops to better understand important project elements.

These workshops will be used to ensure that the software is configured with the utmost accuracy and with input from Williamson County ideas, comments, and suggestions. This information is integrated throughout the planning and design stages.

- Monthly Progress Reports
  - o As a component of our communication strategy, DTS will submit monthly progress reports indicating the status of project deliverables, work completed during the subsequent reporting period, anticipated work for the next period, and schedule adherence. Should an issue be encountered, the PM will immediately notify Williamson County and bring project team members together to resolve the issue. Through the implementation of our communications strategy, our organizations will be able to identify, prioritize, and successfully address key project issues in a timely manner necessary to drive schedule compliance.

Delivery Approach

- While no two implementation projects are identical, DTS follows a standard delivery approach that has produced successful projects resulting in the adoption and long-term productive use of a new software.

Planning and Design

- During the planning and design phase of the project, DTS works in collaboration with the project team to conduct needs assessment interviews of the departments that will implement, support, or use the system. Understanding each department's goals and priorities, desired business processes, and state of existing data are key to establishing the foundation of the software design. During the configuration design sessions, DTS uses the opportunity to educate participants on the standard tools and functionality of the software and may do software demonstrations to help the team visualize options. The Williamson County team will be asked to gather data and make decisions during this phase. DTS Project Manager ensures that the request for information is provided with advanced notice to give the project team adequate time to gather required information. A commitment to timelines from Williamson County is crucial to ensuring the project remains on track.
- A configuration design plan will be prepared and presented to the project team for review and input. The intent for the configuration design plan is to formalize the discussed design and obtain input and feedback from the project team. Major adjustments that are easily incorporated during the design phase introduce project risk if introduced during the configuration phase. The configuration design plan provides a recipe for the configuration phase and ensures all project participants are able to validate that the configuration meets the intended design.
- The integration planning and design will occur in parallel with the configuration design sessions. Working sessions will be held with the application administrator, business users, and supporting IT professionals to identify the business need for the desired integrations, assess the viability, and identify the tasks needed to accomplish the integration. A system integration plan will document the outcome of the assessment. Each desired integration will be classified in the following way:
  - o possible with COTS built-in tools
  - o possible with COTS provided APIs
  - o requires custom development
  - o handled through a manual process
  - o no longer needed

- Upon review and approval of the integration plan, integration tasks and timelines will be incorporated into the overall project schedule.
- The VUEWorks software installation process runs concurrently with the planning phase in order to mitigate against project schedule impacts should a delay in hardware/software requisition or processing network access paperwork occur. The installation of the VUEWorks software will be scheduled with the VUEWorks product support team and Williamson County IT professionals. Installation sets up the framework from which all configuration activities occur. As part of the installation process, VUEWorks will integrate with the Williamson County's enterprise GIS services and email server. Williamson County will be provided with a pre-installation checklist, platform requirements, and GIS integration documentation in advance.
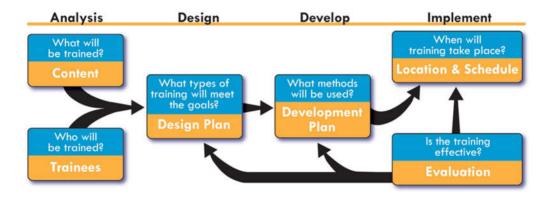
Configuration and Validation
- Utilizing the planning documents as our recipe book, the DTS team will begin working on the configuration of the VUEWorks software platform. This work includes tasks such as establishing global system settings, form creation, module-based configuration, set up of mobile app connectors, report template creation, and establishing role-based permissions. As the DTS team completes a reviewable component, the technical lead will present a software demonstration of the functionality to the project team. The incremental review process ensures gaps or misunderstandings are captured as early as possible so a resolution can be discussed. The demonstration also serves as an opportunity for informal training on usage of the system.
- As the components are configured and finalized, the system will be ready for data migration and import. DTS will provide the data formatting requirements and templates to Williamson County. DTS will review the provided data and identify any concerns over field type conflicts or potential data integrity issues. Williamson County will have an opportunity to address data quality issues prior to import. DTS believes that migration to a new system is the ideal time to assess and clean-up existing data so the new system begins with high quality and accurate information. Data modification is often easier performed outside of the system with a tool that business units are familiar with like Microsoft Excel, rather than attempting to correct individual records once loaded into the new system. DTS understands the data imported during this phase may need to be refreshed during final system cut-over. Final data migration steps will be incorporated in the production deployment planning.
- With the components configured and data loaded, the integration tasks will be completed to wrap up the configuration. DTS will provide a detailed demonstration of the site's configuration, highlighting integration points and imported data. Williamson County users will be loaded into a testable environment for the validation process to commence.
- During the testing and validation process, Williamson County testers will be provided with Microsoft Excel test cases consisting of business scenarios and integration tasks to validate the configuration meets the configuration design plan and system integration plan. At the conclusion of the testing period, Williamson County's consolidated comments will be assessed and classified by DTS as:
  - o Working as designed – address through training
  - o Configuration adjustment
  - o Defect - report to product maintenance team
- Each item will be assessed by the Project Manager and prioritized according to Williamson County project goals.

Training

- DTS' philosophy is to train early and often throughout the implementation process. DTS' training team is experienced in providing tailored training courses for organizations of all sizes, industries, and regions. In fact, DTS received an award from the American Planning Association and FHWA for its development of the Sociocultural Effects Evaluation training program, delivered throughout Florida.

- DTS recognizes that training and support is one of the most critical of the project phases. DTS will work with the project team to develop a training plan that defines training format, curriculum, number of sessions, and anticipated scheduled that is best suited for Williamson County. For the size and complexity of this implementation, DTS proposes [3, three] on-site instructor led training days and [5, five] of instructor led remote web sessions. The best approach to balance cost versus effectiveness will be discussed with Williamson County and documented in the training plan. Details regarding training location, equipment needs, and attendee lists will also be coordinated.

- DTS trainers employ strategies to assist with user adoption of the software including partnering with Williamson County Facilities Management Division lead during the training session. The business lead can vocalize the importance of the training, show support for the program, and address any fears or operational specific questions that arise during training.

- Instructor led training sessions will be supplemented with standard VUEWorks training material, including report view definitions, provided in electronic format to attendees. Templates for quick guides can be provided to Williamson County if the it desires to customize training material.

- The DTS team is dedicated to our client's long-term success in using our VUEWorks solution. In addition to our end-user training offerings, we perform knowledge transfer with the team of VUEWorks application and business administrators that will be responsible for managing the system. This usually equates to a few focused web sessions following the roll-out support period.

- DTS has an extensive background in training curriculum development. We understand that not every user learns a system in the same way. Additional training types/delivery methods, shown in the training catalog graphic below, can be discussed as an alternative or as supplemental services to the proposed training approach.

Training Catalog
"Blended Training"

Production Deployment and Support Transition
- In preparation for software roll-out to users, DTS will promote all site configurations and integrations to the final Production environment. DTS will work with Williamson County to ensure all users are loaded and final data is imported.
- DTS understands the challenges that System Administrators face when transitioning staff to a new software. To ease with the transition, the DTS project team will provide roll-out support for the Williamson County during the first 30 days. Roll-out support includes weekly pre-set call in time for System Administrators to ask questions or discuss issues that users have reported during the week. The VUEWorks Support team will continue to provide support to administrators beyond the initial roll-out period. DTS will introduce Williamson County administrators to the Support Manager and explain the customer support process as well as the product resources available through the VUEWorks Customer Support Portal. All users will have access to the Customer Support Portal to access the knowledge base, past webinars, and community forum.

Attachment 2 – VUEWorks Software Overview

VUEWorks is a commercial off-the-shelf (COTS) software solution. VUEWorks was initially developed in 1999 as a web-based solution for the development of asset management plans based on performance-based asset management philosophies. Performance-based asset management is a holistic approach to operational and life-cycle asset management of networks. It is extremely critical to employ a holistic approach to managing aging infrastructure as populations and asset inventory counts continue to grow while budgets and staff continue to shrink or stagnate. Over the years VUEWorks has evolved into an asset management platform with a continued strong grounding in performance-based asset management.

Performance-based asset management breaks the asset management life-cycle down into five primary categories:

- Core assets
- Work management
- Resource management
- Risk-based asset management
- Plan management

Each of these categories are equally important in assessing, evaluating, planning and maintaining alignment between organizational goals and the efficient, cost-effective utilization of limited resources. This is critical in order to effectively maintain an organization's infrastructure and assets in a sustainable state of good repair. Following is a deeper dive into the five primary categories.

Core Assets is the GIS-centric listing of all the individual infrastructure assets that make up an asset, system or network that requires periodic reactive or routine maintenance to keep it in a state of good repair. Core Assets consists of a real-time integration with Esri's ArcGIS Server REST end-point services to allow your registry of assets mapped in GIS to be used as your asset inventory against which Service Requests and Work Orders, Resources, Risk-based Asset Management and Budget Forecasting can be applied. For non-spatial assets and information that also requires management, VUEWorks offers a Facilities application that can be tailored to manage information related to assets such as assets within a building or fleet.

Work Management is the timely coordination and efficient execution of activities that are in alignment with organizational goals for maintaining infrastructure in a state of good repair. Work management consists of Service Requests and Work Orders. Service Requests encompass requests made upon an organization for information or for action, typically in way of a defined work activity. Requests can be internal or external. They can come from departments internal to the organization or from citizens and stakeholders external to the organization. Work Orders encompass reactive, proactive, capital and preventative maintenance work orders to organize and execute work. Work Management is integrated with or may be used separately from Resource Management.

Resource Management allows you to efficiently manage work activities by managing the limited resources required to execute those activities. These resources include detailed information about labor, equipment and material inventory as well as contracted labor, equipment and/or inventory provided by vendors. Log resources against a Work Order for tracking and Activity Based Costing. Track stock materials, quantities on hand, locations and trigger re-ordering.

Risk-Based Asset Management is the process of maintaining infrastructure in a sustainable state of good repair based on how a particular asset performs or deteriorates over time. Risk-based asset management includes the routine inspection and condition assessment of assets within an infrastructure network in order to compare a single asset's performance against the general performance of all like assets. In risk-based asset management, each asset is also assessed for risk related to the likelihood and consequence of failure of that specific asset. These risk factors are used in prioritization when creating work plans and budgets. Other considerations in risk-based asset management are the valuation of an asset and "cost of ownership" through an asset's life-cycle, as well as replacement costs.

Plan Management brings together budgets and plans for annual programs, capital improvement plans and master plans. This allows organizations to analyze the impacts of annual programs to determine what the next set of projects and budgets should be to align master plans and organizational goals. An important step within Plan Management is the analysis of different routines, capital and long-term programs and plans using "what-if" scenarios. Organizations can create, for instance, capital improvement plans that model out both "budget" and "impact on asset condition" and include additional useful life of the asset based on plan scenarios. The capability to run multiple plan scenarios to get the right mix of "budget" and "impact" to maintain infrastructure networks in a state of good repair is a critical function of a performance-based asset management system.

ABOVE: VUEWorks® applications and how they relate to the five primary areas of performance-based asset management.

Below is a textual representation of how the VUEWorks modules relate to the four primary areas of performance-based asset management.

- Core Assets
  - Esri ArcGIS Server Services
  - Core
  - Facilities
- Work Management
  - Citizen Request Portal
  - Service Request
  - Work Order
- Resource Management
  - Personnel sub-module of Resource Manager
  - Equipment sub-module of Resource Manager
  - Inventories sub-module of Resource Manager
- Risk-Based Asset Management
  - Condition
  - Risk
  - Valuation
- Plan Management
  - Projects
  - Budget Forecasting
  - Reporting & Dashboards

VUEWorks applications can integrate with infrastructure inventories for non-spatial assets like fleet or assets within a facility as well as spatial assets contained in a geographic information system (GIS). VUEWorks is built upon and integrated with the Esri ArcGIS platform.