Tyler Technologies – City of Goodyear, AZ

Statement of Work

Table of Contents

Section A: Executive Summary

A.1 Project Overview

The City of Goodyear intends to replace its legacy HTE system with an integrated Financial and Human Resources solution that includes the following modules: General Ledger, Cashiering, Accounts Payable, Business Licenses, Fixed Assets, Accounts Receivable, Cash, Project/Grant Tracking, Employee Expense Reimbursement, Payroll/Human Resources, Procurement, Budget, and Utility Billing.

A.2 Project Criteria for Success

The City of Goodyear will consider this project to be successful when all in scope software and services have been fully implemented within budget and on schedule. The City of Goodyear is implementing technology to accomplish the following strategies:

- Allow for more access to multiple technologies
- Centralize data and reduce redundancies
- Improve inter-department workflows
- Improve processes
- Increase efficiencies
- Allow for more services to be online
- Increase timeliness of communications
- Provide for more transparency of government operations

A.3 Project Scope

The project scope is comprised of the following modules, data conversions, interfaces, reports, workflows, and deliverables defined in this section plus any related professional services described throughout this SOW. If any services, tasks, or responsibilities not specifically described in this SOW are inherent or necessary sub-activities of the tasks or are otherwise required for proper performance of the services or tasks they shall also be included within the scope.

Client and Tyler agree that 30% of all implementation and consulting service tasks will be delivered remotely. Tyler and Client will work together during project planning to mutually identify tasks for remote delivery.

A.3.1 Module Scope

The scope of modules included in this project includes the following Tyler and Third party software products listed in A.3.2

A.3.2 Project Phases

Implementation for the following functional areas and each of the modules related to the functional areas has been divided into the following major phases. Each phase will include all requirements as indicated in Exhibit F- Functional Requirements.

Phase	Functional Areas	Modules	Start Date	Go-Live Date
1a	**COA**	• COA/GL	November 2016	March 2017
1b	**Core Human Resources / Payroll**	• Payroll w/Employee Self Service • HR Management • Employee Expense Reimbursement	January 2017 or as defined in the Project Plan	January 2018 or as defined in the Project Plan
2	**Core Financials**	• Accounting General Ledger • Cash Management • Project & Grant Accounting • Budgeting • Requisitions • Purchase Orders • eProcurement • Accounts Payable • Accounts Receivable • General Billing • Fixed Assets •	July 2017 or as defined in the Project Plan	July 2018 or as defined in the Project Plan
	System Wide	• Tyler Reporting Services • Tyler Forms Processing • Munis Office • Role Tailored Dashboard • Tyler Content Manager SE		
3	**Revenue - UB**	• Utility Billing CIS • UB Interface • Maplink GIS Integration • Central Property File • Citizen Self Service • IVR Gateway • Tyler Cashiering •	January 2018 or as defined in the Project Plan	January 2019 or as defined in the Project Plan
4	**Revenue - BL**	• Business License • Central Property File • Citizen Self Service • Tyler Cashiering	July 2018 or as defined in the Project Plan	April 2019 or as defined in the

				Project Plan

A.4 Organizational Scope

Tyler will implement the functional scope and in-scope software modules for use across the entire Client including process considerations for all departments.

A.5 Data Conversion Scope

The following conversion options are a comprehensive list that represents the quoted modules included in the Tyler proposal and considered in scope. Requests to convert data outside of the contracted conversion options or failing to adhere to the noted conversion assumptions in section E.8.7 will be considered out of scope.

Conversion ID	Description
Accounting Opt 1 - Actuals	General ledger – actual account summary balances for up to 3 years, to be populated in the GL Master and GL Master Balance tables
Accounting Opt 2 - Budgets	General Ledger – budgeted account balances for up to 3 years, to be populated in the Munis GL Master and GL Master Balance tables. This can include the original budget, budget adjustments and revised budget
Accounting Standard COA	Chart of Accounts conversion from spreadsheet (to be provided during COA analysis)
Accounts Payable Opt 1 Checks	Check History
Accounts Payable Opt 2 - Invoice	Invoice History
Accounts Payable Standard Master	Vendor Master
Business License Opt 1 – Bills	Business License Bills
Business License Std Master	Business License Master
Fixed Assets Opt 1 - History	Fixed Assets transaction history
Fixed Assets Std Master	Fixed Assets Master
General Billing Opt 1 - Recurring Invoices	General Billing - Recurring bill templates
General Billing Opt 2 - Bills	General Bills
General Billing Std CID	Customer File
Payroll - Option 10 Certifications	Employee Certifications and Expirations
Payroll - Option 11 Education	Employee Education History
Payroll - Option 1 Deductions	Employee Deductions
Payroll - Option 2 Accrual Balances	Employee Accrual Balances
Payroll - Option 3 Accumulators	YTD, QTD, MTD Accumulators
Payroll - Option 4 Check History	Payroll Check History

Payroll - Option 5 Earning/Deduction Hist	Payroll Earnings and Deductions History
Payroll - Option 6 Applicant Tracking	Applicants and Job Openings
Payroll - Option 7 PM Action History	Personnel Actions History
Payroll - Option 8 Position Control	Payroll Position Control and History
Payroll - Option 9 State Retirement Tables	Employee retirement
Payroll - Standard	Payroll Employee Master
Project Grant Accounting Opt 1 - Actuals	Project& Grants – actual account summary balances
Project Grant Accounting Opt 2 - Budgets	Project& Grants – budgeted account summary balances
Project Grant Accounting Standard	Conversion from Project & Grant spreadsheet (to be provided during COA analysis)
Purchase Orders - Standard	Open purchase orders with encumbrances
Utility Billing - Standard	
Utility Billing Opt 1 - Services	Utility Billing services
Utility Billing Opt 2 - Assessments	Utility Billing assessments
Utility Billing Opt 3 – Consumption History	Utility Billing consumption history
Utility Billing Opt 4 – Balance Forward AR	Utility Billing balance forward AR
Utility Billing Opt 5 – Service Orders	Utility Billing service orders
Utility Billing Opt 6 - Backflow	Utility Billing backflow

A.6 Import and Export Scope

The standard file layouts and methods will be used for each interface listed in Exhibit F. For each standard interface, Tyler encourages that Client has an active support agreement with the third party system and for Client to be on a current version actively supported by the manufacturer/developer of the product installed. Client understands that not being on the supported version may have an impact on the use. Any requests to modify standard file layouts will follow the Scope/Contract Change Process defined in this Statement of Work.

A.7 Reports

All in scope standard reports (those designated with a “SR” or “Standard Report” response in the functional requirements – Exhibit F are going to be met with the delivered report out of Munis. Any changes or customizations of these standard delivered reports requested by Client may result in a change order and additional cost.

The Tyler suite of programs contains hundreds of canned system reports, each utilizing configurable user-supplied parameters to provide hundreds of reporting variations. However, Tyler recognizes that its clients want the flexibility to create even more unique reports and queries to fit their own business needs. Tyler has included Report Writing training as part of our Proposal. Client will also have available a Report Library of over 200 reports via the Munis Support Website.

Tyler Reporting Services (TRS) utilizes an SQL report writing tool called Business Intelligence for Visual Studio 2013 (SSDT-BI) to extract data from the Munis system and create custom reports. Once trained, Client will have the ability to create its own custom reports and modify any report from the TRS Report Library.

A.8 Workflows

All of the available workflow functionality in the licensed modules shall be considered as in scope. Tyler consultants will work with Client resources to help identify, configure, and train on any and all existing workflow processes including preparation of the System Design Document – DED 5

A.9 Development Services

No Development Services have been identified at the time of this Statement of Work. If Development Services are necessary, an enhancement request must be submitted to Tyler Development and a quote will be provided.

A.10 Project Release Schedule

Tyler's implementation approach requires that the City will adhere to the following upgrade schedule. Tyler's Project Manager(s) will coordinate with the City project team to coordinate the upgrade activities as follows:

Version	Test Environment Deployment	Live Environment Deployment
Current Production Ver	Upon Installation	Upon Installation

A.11 Deliverables

Tyler will provide the Deliverables identified throughout this statement of work. Deliverables will be submitted as a work product for Client review and follow the Deliverable acceptance procedures defined in Section C.11.

Deliverable	Phase	Deliverable Number
Implementation Management Plans	Cross Phase	1-1
Phase 1		
Project Plan	1	1-2
User Manuals	1	1-3
Data Conversion Plan	1	1-4
System Design Document	1	1-5
Static Environment Test (SET) Plan	1	1-6
Modification Specifications	1	1-7
Pre-Live Checklist	1	1-8
Lessons Learned Document	1	1-9

Deliverable	Phase	Deliverable Number
Phase 2		
Project Plan	2	2-2
User Manual	2	2-3
Data Conversion Plan	2	2-4
System Design Document	2	2-5
SET Test Plan	2	2-6
Modification Specifications	2	2-7
Pre-Live Checklist	2	2-8
Lessons Learned Document	2	2-9
Phase 3		
Project Plan	3	3-2
User Manual	3	3-3
Data Conversion Plan	3	3-4
System Design Document	3	3-5
SET Test Plan	3	3-6
Modification Specifications	3	3-7
Pre-Live Checklist	3	3-8
Lessons Learned Document	3	3-9
Phase 4		
Project Plan	4	4-2
User Manual	4	4-3
Data Conversion Plan	4	4-4
System Design Document	4	4-5
SET Test Plan	4	4-6
Modification Specifications	4	4-7
Pre-Live Checklist	4	4-8
Lessons Learned Document	4	4-9

A.12 Tyler Forms

Tyler's Form Library prices are based on delivering the specific form quantities listed below. Additional formats of forms listed below are extra. Custom forms, where custom designs are not required to meet any of Client's functional requirements, would require a change order. Please note that Tyler Forms requires the use of approved printers only.

- Payroll Library includes: 1 Payroll Check, 1 Direct Deposit, 1 Vendor from Payroll Check, 1 Vendor from Payroll Direct Deposit, W2, W2c, 1099R, 1095B and 1095C.
- Financial Library includes: 1 A/P Check, 1 EFT/ACH, 1 Purchase Order, 1099M, 1099INT, 1099S and 1099G.
- General Billing Library includes: 1 Invoice, 1 Statement, 1 General Billing Receipt and 1 Miscellaneous Receipt.
- Personnel Action Library includes: 1 Personnel Action form for new hires and 1 Personnel Action form for employee changes.
- Utility Billing Library includes: 1 Design of each – Building Permit, Trades Permit, Zoning Permit and Certificate of Occupancy or Certificate of Completion.

- Business License Library includes: 1 Business License, 1 Business License Renewal

Section B: Project Governance

B.1 Client Project Roles and Responsibilities

This section presents the anticipated roles and responsibilities for the key staff positions for the project. The joint team of Client and Tyler will ultimately be responsible for designing, developing and delivering the final products of this project.

B.2 Client Decision Making

Decisions will be made in a timely fashion in order to achieve scheduled due dates on tasks and prepare for subsequent training sessions. Decisions left unmade may affect the project schedule as each analysis and implementation session builds on the decisions made in prior sessions. The following table identifies the type of decisions and project team members with decision authority:

Type of Decision	Client Decision Making Responsibility
Changes to SOW affecting project budget and/or timing and/or project goals	Executive Steering Committee
Client Policy Decisions	Executive Steering Committee
Changes to SOW not affecting project budget and/or timing and/or project goals	Client Project Manager
Acceptance of Control Points / Deliverables	Client Contract Manager
Configuration Decisions	Client Project Team

B.3 Executive Project Sponsors:

The Client Executive Project Sponsors provide support to the project by allocating resources, providing strategic direction, communicating key issues about the project and the project's overall importance to the organization; and when called upon acting as the final authorities on all project decisions. The project sponsors will be involved in the project as needed to provide necessary support, oversight, guidance, and escalation, but will not participate in day-to-day activities. The project sponsors will empower the steering committee and project team to make critical business decisions for Client.

Resource	**Title**
Wynette Reed	Deputy City Manager

B.4 Executive Steering Committee:

The Executive Steering Committee oversees the project team and the project as a whole. Through participation in regular internal meetings the Executive Steering Committee will remain updated on all project progress, project decisions, and achievement of project Control Points. The Executive Steering Committee will also provide support to the project team by communicating the importance of the project to each member's department along with other department managers in Client. The Executive Steering Committee is responsible for ensuring that the project has appropriate resources, providing strategic direction to the project team, and is responsible for making timely decisions on critical project or policy issues. The Executive Steering Committee also serves as primary level of issue resolution for the project.

Resource	Title
Wynette Reed	Deputy City Manager
Dan Cotterman	Deputy City Manager
Doug Sandstrom	Finance Director
Lyman Lockett	HR Director
TBD	IT Director
Sherine Zaya	Communications Manager
Lena Dixon	Organizational Strategy Manager
Christian Williams	Executive Management Assistant
Khala Stanfield	Management Assistant

B.5 Project Manager:

Client's Project Manager will coordinate project team members, subject matter experts, and the overall implementation schedule and serve as the primary point of contact with Tyler. The Project Manager will be responsible for reporting to the Executive Steering Committee and providing the majority of Client's change management communications and coaching.

Resource	Title
Cindy Sheldon	Applications & Business Manager

B.6 Contract Manager:

Client's Contract Manager will serve as a point of escalation for the Project Manager on issues related to the contract. The Contract Manager will also be responsible for accepting or rejecting Control Points and Deliverables.

Resource	Title
Dan Cotterman	Deputy City Manager

B.7 Project Team:

The assigned Project Team will have detailed subject matter expertise and be empowered to make appropriate business process and configuration decisions in their respective areas.

The Project Team is tasked with carrying out all project tasks described in the Statement of Work including planning, business process analysis, configuration, documentation, testing, training, and all other required Client tasks. Tyler will train City on all configuration functionality. The Project Team will be responsible for and empowered to implement the new system in the best interests of Client consistent with the project goals, project vision, and direction from the Project Manager and Executive Steering Committee. Project Team Leads are identified below.

Client's project team is responsible for maintaining regular and effective project communications between project stakeholders and supporting overall change efforts in Client.

Function	Primary	Secondary
Human Resources	Vicki Lackey	
Accounting/GL/BG/AP	Chris Goeman	Rebecca Chitwood
Cash Management	Chris Goeman	Rebecca Chitwood
Employee Expense Reimbursement	Chris Goeman	Rebecca Chitwood
Fixed Assets	Chris Goeman	Rebecca Chitwood
Project & Grant Accounting	Lauri Wigenroth	Doug Sandstrom
Purchasing	Jacque Behrens	Victoria Jackson
Payroll/HR:	Chris Goeman	Rebecca Chitwood
Payroll w/ESS	Chris Goeman	Rebecca Chitwood
Accounts Receivable	Chris Goeman	Rebecca Chitwood
Business License	Chris Goeman	Rebecca Chitwood
General Billing	Chris Goeman	Rebecca Chitwood
Tyler Cashiering	John Gaio	Rebecca Chitwood
Utility Billing CIS	John Gaio	Rebecca Chitwood
IVR Gateway	John Gaio	Rebecca Chitwood
eProcurement	Jacque Behrens	Victoria Jackson
Citizen Self Service	John Gaio	Rebecca Chitwood
Business Process Consulting - Accounts Payable	Chris Goeman	Rebecca Chitwood
Business Process Consulting - Budget	Lauri Wigenroth	Doug Sandstrom
Business Process Consulting - Employee Expense Reimbursement	Chris Goeman	Rebecca Chitwood
Business Process Consulting - General Billing	Chris Goeman	Rebecca Chitwood
Business Process Consulting - General Ledger	Chris Goeman	Rebecca Chitwood
Business Process Consulting - Miscellaneous Cash	Chris Goeman	Rebecca Chitwood
Business Process Consulting - Project/Grant Accounting	Lauri Wigenroth	Doug Sandstrom
Business Process Consulting - Purchasing & Requisitions	Jacque Behrens	Victoria Jackson
Business Process Consulting - Payroll	Chris Goeman	Rebecca Chitwood
Business Process Consulting - Cash Management	Chris Goeman	Rebecca Chitwood
Business Process Consulting - Utility Billing	John Gaio	Rebecca Chitwood

B.8 Subject Matter Experts (SMEs)

Subject Matter Experts (SME's) will play an important role in the project to provide necessary expertise not found on the project team and to support project team activities. However, subject matter experts will have a primary responsibility to their "home" department and not be available for significant periods of time on the project.

SMEs will be Client's primary interface to all other users of the system throughout Client (the End Users). Client's End Users will ultimately be the users of the system in all areas through Client. SME proactive adoption of the system is vital to Client realizing success in this project. SMEs will be consulted throughout the process to provide feedback on business processes decisions, configuration decisions, training, documentation, and testing.

Function	Primary	Secondary
Human Resources - Benefits	Jeanni Ruddy	
Human Resources - Payroll	Lisa Adams	
Accounting/GL/BG/AP	Carla Williamson	Kathy Painter
Cash Management	Christine Wilcox	
Employee Expense Reimbursement	Kathy Cheff	Kathy Painter
Fixed Assets	Christine Wilcox	
Project & Grant Accounting	MaryKae Struck	
Purchasing		
Payroll/HR:	Erika Dunn	
Payroll w/ESS	Erika Dunn	
Accounts Receivable	Carla Williamson	
Business License	Joe Lewandowski	
General Billing	Carla Williamson	
Tyler Cashiering	Jocelyn Boehme	
Utility Billing CIS	Arlene Gyder	
IVR Gateway		
eProcurement		
Citizen Self Service		
Business Process Consulting - Accounts Payable	Carla Williamson	Kathy Painter
Business Process Consulting - Budget	MaryKae Struck	
Business Process Consulting - Employee Expense Reimbursement	Kathy Cheff	Kathy Painter
Business Process Consulting - General Billing	Carla Williamson	
Business Process Consulting - General Ledger	Carla Williamson	Christine Wilcox
Business Process Consulting - Miscellaneous Cash	Christine Wilcox	
Business Process Consulting - Project/Grant Accounting	MaryKae Struck	
Business Process Consulting - Purchasing & Requisitions		
Business Process Consulting - Payroll	Carla Williamson	Erika Dunn
Business Process Consulting - Cash Management	Christine Wilcox	
Business Process Consulting - Utility Billing	Arlene Gyder	

B.9 Technical Team:

Client's Technical Team may be primarily responsible for overall system administration, security, and workflow. The Technical Team will also handle all data conversions, interfaces, and SSRS reporting for Client. Tyler will provide System Administrator, security, workflow and SSRS training. It is expected that the Technical team will be responsible for system administration post go-live.

Client's technical team will be responsible for all technical aspects of the project.

Resource	Title
Veronica Holguin	IT Business Analyst
Rick Foxx	Developer
Kevin Brake	Developer-DBA

B.10 Upgrade Coordinator

The Client Upgrade Coordinator is the individual that is responsible for the coordination of activities related to upgrading Tyler's application during the project (if required). Additionally, this role is responsible for managing the upgrade process post go-live.

- Become familiar with the upgrade process and required steps
- Become familiar with Tyler's Release Life-cycle policy
- Utilize Tyler Community to stay abreast of the latest Tyler Release Life Cycle updates as well as the latest helpful tools to manage your upgrade process
- Assist with the upgrade process, if required, during implementation
- Manage upgrade activities post-implementation
- Manage upgrade plan activities
- Coordinate upgrade plan activities with Tyler and Client resources
- Communicate changes that will affect users and department stakeholders
- Obtain department stakeholder sign-offs to upgrade Live/Production environment
- Create and publish your site's multi-year, forward projection upgrade plan

Resource	Title
Veronica Holguin	IT Business Analyst

B.11 Client Tyler University Manager

To assist with the knowledge transfer of Tyler's products, Tyler provides a Learning Management System, or LMS, known as Tyler University. Tyler University is loaded with course curriculum and corresponding courses for users of all types. Client Tyler University Manager is responsible for the following roles:

- Work with the Tyler Project Manager(s) to map out standard curricula for users
- Communicate registration and enrollment requirements to Client users
- Monitor the progress of user's prerequisite courses
- Act as a Tyler University resource for users
- Work with Tyler Project Manager to import users

Resource	Title
Veronica Holguin	IT Business Analyst

B.12 Tyler Roles and Responsibilities

Tyler plans to leverage the strengths, skills and knowledge of its blended team members. In the tables that follow, a description of the various roles associated with the overall project team is provided.

B.13 Tyler Executive Oversight

The Tyler Vice President of Implementation has indirect involvement with the project and is part of the Tyler escalation process. This team member offers additional support to the project team and is able to work with other Tyler department managers in order to escalate and facilitate implementation project tasks and decisions. The Tyler Project Manager or Regional Manager will apprise the Vice President of Implementation of known issues that may require assistance or impede project performance.

Resource	Title	Key Personnel
Chris Webster	Vice President - Implementation	No

B.14 Tyler Regional Manager

This team member has indirect involvement with the project and is part of the Tyler escalation process. Tyler Project Managers may consult the Regional Manager with issues and decisions regarding the project. The Tyler Regional Manager is responsible for:

Assignment of consultants and ensuring that availability, or lack of availability for consultants assigned to the Client project does not negatively impact the Client timeline.

- Assisting the Tyler Project Manager with resolution of issues Monitoring progress of the implementation and ensuring the project is on target to meet the desired objectives
- Monitoring overall quality of the project including quality of consulting deliverables
- Providing proactive personal communication with Client's Executive Sponsors, Client's Steering Committee, and/or Client's Project Manager

B.15 Tyler Project Manager

Tyler will assign the role of "Tyler Project Manager" by Module/Phase and that individual will be responsible for the following.

- Serve as primary point of contact for Client
- Coordination of all Tyler resources across activities including development, conversions, forms, installation, reporting, implementation, and billing.
- Monitor and manage overall project risks
- Communicate regularly with the Client project manager
- Track completion of project tasks
- Escalate outstanding issues for approval within Tyler or coordinate change order process.
- Monitor project quality
- Identify and communicate any Client risks that may negatively impact the project.

B.16 Tyler Implementation Consultants

Tyler's Implementation Consultants will bring to the project Tyler Munis knowledge as well as industry knowledge of public sector practices and processes that will enable each consultant to advise Client on the most appropriate way of configuring Munis and overall achievement of the Client project scope and goals.

B.17 Tyler Developers

The Tyler Developers are offsite resources responsible for:

- Performing detailed requirement gathering for contracted modifications (in scope enhancements, custom reports and custom interfaces)
- Reviewing the existing development queue and existing product offerings to determine if the desired functionality can be provided in a less expensive fashion
- Creating and delivering functional specifications for contracted modifications
- Programming and incorporating modifications per the specifications into the base product
- Performing internal quality assurance and developing technical and help documentation
- Providing custom development packages to be loaded into the Tyler system via the Munis Internet Update (MIU) utility
- Performing and providing any necessary modification defect corrections

B.18 Tyler Implementation Programmers

The Tyler Implementation Programmers are offsite resources responsible for:

- Validating customer data files are readable
- Developing customized conversion programs to convert legacy data into the Tyler database for production use according to defined mapping.
- Providing custom conversion packages to be loaded into Tyler's system via the Munis Internet Update (MIU) utility.
- Providing error reports on unsupported data conditions and the merging or normalization of data fields. Assisting Client with understanding and interpreting those reports.
- Perform modifications and corrections to customized conversion programs as data anomalies and exception conditions are discovered

B.19 Tyler Forms Designers

The Tyler Forms Designers are offsite resources responsible for:

- Providing specifications, or Forms Kits, for all forms in scope
- Reviewing requirements for equipment and supplies
- Developing and provide form mock-up designs
- Conducting review of client's form mock-up sheets
- Developing final form designs
- Testing forms and modifying as appropriate based on on-site test results
- Working with Client team members on the results of functional testing and making changes to address issues from testing
- Configuring and installing forms software and approved forms
- Producing design and troubleshooting documentation for forms

B.20 Tyler Support Account Manager

Tyler Support Account Managers are offsite resources responsible for the following the first year after each phase go-live:

- Providing post-implementation client management and planning services
- Planning and preparing for key first year processes such as year-end and W-2 processing

- Assisting Client plan release upgrades

B.21 Tyler Technical Support Specialist

Tyler Support Specialists are offsite resources responsible for:

- Managing incoming customer issues via phone, email and online customer incident portal
- Documenting and prioritizing issues in Tyler's Customer Relationship Management (CRM) system
- Providing issue analysis and general product guidance
- Tracking issues and tickets to timely and effective resolution
- Identifying options for resolving the reported issue
- Reporting and escalating defects to Tyler Development
- Communicating with customers on the status and resolution of reported issues

Section C: Project Management

This section outlines key project management tasks that are to occur throughout the project.

C.1 Project Plan Development and Management

Tyler will work with Client's Project Manager to create the project plan for phase one within (thirty) 30 calendar days from the first project planning call, which is to occur after the contract signing and will help Tyler get the information necessary to complete the project plan. Project plans for phase 2, 3, and 4 shall be completed at least sixty (60) calendar days prior to the start of any Phase 2, 3, or 4 activities. All project plans will be in Microsoft Project clearly outlining task ownership and critical tasks. Once the project plan is approved by Client, Tyler's project manager will edit and update as necessary as part of regularly scheduled project management meetings with Client's project manager(s).

All project tasks will be assigned owners and due dates which correspond with the overall project schedule. Project Tasks that are not completed by the due date may adversely affect the project schedule and live dates.

	Client Role	Tyler Role
Steering Committee/Regional Manager	• Review project plan	• Review project plan for compliance with SOW
Project Manager	• Work with Tyler project manager to develop project plan	• Take lead in developing project plan
Project Team / Implementation Consultant	• Review project plan	• Review and become familiar with full project plan
Subject Matter Expert / Other	• Identify applicable meetings/deadlines on project plan and plan accordingly	• Identify applicable meetings/deadlines on project plan and plan accordingly

C.1.1 Requirements/Notes

The Project Work Plan will contain:

- Project's activities and tasks
- Dates of project activities and tasks
- Specific resources assigned to project tasks
- Detailed Project schedule / Work Breakdown Structure (WBS) featuring phases, deliverables, and work packages
- Control Points and Deliverables
- Client Review Periods for Control Points and Deliverables
- Project Acceptance of Implementation Control Points
- Decisions will be made in a timely fashion in order to achieve scheduled due dates on tasks and prepare for subsequent training sessions. Decisions left unmade may affect the project schedule as each analysis and implementation session builds on the decisions made in prior sessions

- The project plan will be consistent with the SOW
- All homework and other activities required of either the Client Project Team or Tyler consultants will be included on the project plan.

C.2 Project Status Reports

Tyler will prepare project status reports every month throughout the project. Project reports are intended for the Client Executive Sponsor, Client Steering Committee, Tyler Executive Oversight, and Tyler Regional Manager and provide the following key elements:

- Project Status
- Summary of accomplishments
- Status of Control Points and Deliverables
- Upcoming tasks and schedule
- Assist with Identification Issues/Risks (including issues/risk that may impact project goals)
- Planned risk mitigation strategy
- Summary of change requests.

Tyler Project Managers will also review project progress and status with the project leads and team members for both Tyler and Client on a bi-weekly basis, or more often if deemed necessary by either the Tyler Project Manager or Client Project Managers.

	Client Role	Tyler Role
Steering Committee/Regional Manager	• Review status reports	• Review status reports
Project Manager	• Provide any necessary updates for status reports • Participate in bi-weekly status meetings • Review status reports	• Prepare status reports • Post status report to project SharePoint • Facilitate bi-weekly status meeting
Project Team / Implementation Consultant	• Review status reports • Participate in bi-weekly status meeting if necessary	• Participate in bi-weekly status meeting if necessary
Subject Matter Expert / Other		

C.2.1 Requirements/Notes

The format for the status reports will be mutually agreed as part of the project planning phase of the project.

Client will cooperate and provide information for inclusion on the status report.

Tyler will submit one status report that identifies issues related to the entire project. In the event that Tyler has multiple resources working on the project at one time, the Tyler project manager will coordinate issues and submit one status report.

The Status report will be delivered at least two (2) business days prior to any scheduled Executive Sponsor, Steering Committee, or Project Manager meeting at which the status report is being discussed.

C.3 SharePoint

Tyler will provide a SharePoint site that will serve as the primary collaboration tool for use on the project. The SharePoint site will contain the project plan, all Tyler project documents, any Client project documents, any deliverables, sign offs, change orders or other documents that will be shared with the project team.

	Client Role	Tyler Role
Steering Committee	• Review SharePoint site as necessary	• Review SharePoint site as necessary
Project Manager	• Manage Client information on SharePoint Site	• Manage overall SharePoint site include set up of SharePoint folders
Project Team / Implementation Consultant	• Utilize SharePoint site for project documents (both posting and downloading)	• Utilize SharePoint site for project documents (both posting and downloading)
Subject Matter Expert / Other	• Review SharePoint as necessary	• Post trip reports and other documents as necessary.

C.3.1 Requirements/Notes

As part of the Project Kick Off, The Tyler Project Manager will provide an overview of the SharePoint Site, its organization, included documents and policies for use.

The Client and Tyler will mutually agree upon SharePoint use for the project.

Tyler performs a daily routine backup for all Client SharePoint sites using industry standard backup techniques and processes. Site-specific backup files can be provided as a billable service with a minimum of 4 hours charged for each backup file using the contracted Tyler rate for implementation services. Tyler does not provide SharePoint consulting services to restore provided backup files in client-hosted environment.

C.4 Agendas

Tyler's project manager will provide agendas at least 2 weeks prior to any on-site meeting. Agendas will include:

- Session Title
- Required Attendees
- Prerequisites (eLearning and documents)
- Session Topics
- Requirements (classroom)
- Known homework tasks to be assigned

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Review Agenda • Distribute to Meeting Participants	• Develop agendas • Post agendas to SharePoint

Project Team / Implementation Consultant	• Review Agendas prior to meeting	• Review agendas prior to meeting
Subject Matter Expert / Other	• Review agendas prior to meeting	• Review agendas prior to meeting

C.4.1 Requirements/Notes

- Upon submission of the agenda, Client shall review and provide comments or questions on the agenda within five (5) business days. Tyler shall make any required revisions promptly to allow for appropriate meeting preparation.
- All meeting participants will review meeting agendas prior to the meeting.

C.5 Executive Steering Committee Meetings

The Project Communications Plan developed at the beginning of the project (as part of the implementation management plan) will identify a meeting schedule for the Client Executive Steering Committee. It is expected that the Executive Steering Committee will meet weekly and Client project managers, will prepare the Executive Steering Committee Agenda prior to all scheduled Executive Steering Committee meetings. The Executive Steering Committee agenda will include any issues that require approval at the next meeting. If necessary, Tyler's Project Manager, or Regional Manager may participate in the Executive Steering Committee meeting either in person or by phone.

	Client Role	Tyler Role
Steering Committee / Tyler Regional Manager or Tyler Executive Oversight	• Participate in meetings at least once per every 2 weeks	• Participate in Steering Committees as necessary
Project Manager	• Develop agenda for steering committee meeting	• Participate in Steering Committees as necessary
Project Team / Implementation Consultant		
Subject Matter Expert / Other		

C.5.1 Requirements/Notes

In the event that there are project issues that require Tyler's on-site participation, Client will not be required to reimburse the costs of travel for Tyler's Project Manager, Regional Project Manager, or Tyler Executive Sponsor's on-site participation Client may cancel Executive Steering Committee Meetings if there are not a sufficient number of items to discuss or if items can be deferred until the following meeting.

C.6 Site Reports

Each Tyler resource that is on-site for project activities with Client will provide a site-report and post to the Tyler SharePoint site. All site reports will contain meeting notes, issues, and documentation of any decisions during the visit. Site reports will be completed within one week for each visit. Tyler will be responsible for taking any issues or risks identified in the site reports and adding it to the Issues Log.

	Client Role	Tyler Role
Steering Committee		

Project Manager	• Review site reports	• Review site reports
Project Team / Implementation Consultant	• Review site reports	• Complete site reports
Subject Matter Expert / Other		• Complete site reports

C.6.1 Requirements/Notes

- Any issues identified on the site report will also be identified on the Project Issues Log
- All site reports will be completed no later than one week after completion of a site visit.
- All site reports will be reviewed and edited for quality by the Tyler project manager prior to posting to SharePoint for Client review.
- The Tyler Project Manager will be responsible for ensuring that site reports are complete and accurate.
- Completion of site reports will be part of acceptance criteria for each phase.

C.7 Issues Log and Issue Tracking

Tyler will maintain a list of issues (both open and closed) that have been identified for the project on the SharePoint site. Any project risks, key decisions, issues, disputes, or late tasks shall be identified on the Issues Log.

Upon identification of project issues, risks, and key project decisions both Tyler and Client team members are responsible for adding the issue to the Issues Log. For each identified issue, the following information will be captured:

- Issue Number
- Reported by/date
- Status (i.e. new, open, closed, pending)
- Module/Business Process
- Priority
- Issue
- Comments
- Findings
- Recommendations
- Resolution Assignment
- Date Tested
- Date Closed

Client and Tyler Project Managers will review the Issues Log during project status meetings, or in individual meetings as needed. Client and Tyler Project Managers will collaboratively assign a priority to each issue and identify the individual(s) responsible for facilitating its resolution. During the critical phases of the project, Client and Tyler Project Managers will review the issues log on a daily basis.

Issues identified through the Issues Log will be resolved by the implementation team or the Tyler implementation team will coordinate as necessary with Tyler's internal resources.

	Client Role	Tyler Role

Steering Committee / Tyler Regional Manager	• Serve as point of escalation of issues	• Serve as point of escalation of issues
Project Manager	• Document and review issues	• Document and review issues
Project Team / Implementation Consultant	• Document issues	• Document issues
Subject Matter Expert / Other	• Report issues to Project Manager or Project Team Lead	• Report issues to Project Manager

C.7.1 Requirements/Notes

- At any time during the project, if Client is not satisfied with the level of response from the Tyler Project Managers or Tyler Regional Manager, or if the Tyler Project Manager or Tyler Regional Manager do not have the ability to make key decisions or resolve potential issues, Client will reserve the right to escalate the issue to the Tyler Executive Oversight Team. Tyler's Executive Oversight Team will have responsibility for overall project delivery.

C.8 Risk Management

Client and Tyler will jointly work to identify and communicate risks and identify strategies for mitigating the impacts of project risks.

	Client Role	Tyler Role
Steering Committee	• Address any issues escalated to the Steering Committee level	• Address any issues escalated to the Steering Committee level
Project Manager	• Monitor risks and communicate any identified risks to the Tyler project manager and Steering Committee	• Monitor risks and work with Client project manager to develop risk mitigation plans
Project Team / Implementation Consultant	• Communicate any risks to the Client project manager	• Communicate any risks to the Tyler project manager
Subject Matter Expert / Other		

C.8.1 Requirements/Notes

- Risks will be monitored, recorded, and assessed using an agreed upon methodology in the Tyler Risk Plan. All risks will be actively monitored by both Tyler and Client
- Tyler will have responsibility for maintaining the project risk plan.

C.9 Scope/Contract Change Process

Tyler acknowledges that any scope change proposal that affects the total cost of the project is subject to the Client's policies and must provide adequate time for consideration. Client acknowledges that such scope change proposals may affect the implementation costs, schedule and go-live dates, which will be changed by mutual agreement. All scope change proposals shall be governed by the terms and conditions of the Master Agreement.

C.9.1 Implementation Services Change Process

If Client requires the performance of services, including any implementation, consulting, training, or conversion services that are not then being performed, or requires a change to the existing services, Client's Project Manager shall deliver to the Tyler's Project Managers an implementation services scope change request specifying the proposed work with sufficient detail to enable Tyler to evaluate it. Tyler, within ten (10) business days, or longer as may be mutually agreed between the parties, following the date of receipt of such change request, shall provide Client with a written scope change proposal containing the following:

- Detailed description of resources (both Tyler and Client) required to perform the change
- Implementation Plans
- Schedule for completion
- Acceptance criteria
- Impact on cost and schedule
- Impact on project goals and objectives
- Price

C.9.2 Product Enhancement/Change Process

If the Client requires the modification of the products in scope, including any interface not in scope, the Client's Project Manager shall submit the request via the Enhancement Request Process documented on Tyler Community specifying the proposed enhancement with sufficient detail to enable Tyler to evaluate it.
Tyler has two different types of Product Enhancement Requests:

1. Product Suggestions - Suggestions will not be assigned submission numbers, will not be officially tracked and will not receive a response. Throughout the development planning cycle, Tyler's Strategic Review Committees will analyze thousands of suggestions. Tyler will work to identify patterns within the suggestions, which will help us best determine the areas of the product needing to be addressed.

2. Request for Development Quote - Requests are submitted via the Request for Development Quote website, assigned a submission number for tracking purposes and reviewed by our Development Teams. Tyler, within thirty (30) business days, or longer as may be mutually agreed between the parties, following the date of receipt of such change request. If the request is not generally consistent with the current direction of the respective product Tyler will notify Client in writing; otherwise Tyler shall provide Client with a written development scope change proposal containing the following:

    - Specification
    - Schedule for completion
    - Minimum version requirements
    - Any additional implementation services required, such as project management, conversions, forms output and/or training outside of the current project scope
    - Impact on current cost and schedule
    - Impact on project goals and objectives
    - Response Due Date
    - Total cost

All Request for Development requests will be coordinated and/or approved first by Client Project Manager or other designee and Tyler Project Manager. Development requests will also be identified on the issues log and elevated to Client Executive Team for review at the next Executive Team meeting.

By the Response Due Date Client shall notify Tyler in writing if Client elects to proceed with the Development request. Tyler's Project Manager will submit the approved Development request to Tyler's Contract team to create a contract amendment. Tyler will schedule the work described in the Development change request upon Tyler's receipt of a signed contract amendment. If, by the Response Due, Client gives notice to Tyler not to proceed, or fails to give any notice to Tyler, then the scope change proposal shall be deemed withdrawn and Tyler shall take no further action with respect to it.

	Client Role	Tyler Role
Steering Committee	• Review and approve change proposals	
Project Manager	• Communicate requested changes to Tyler	• Coordinate change process • Communicate requested changes to Client
Project Team / Implementation Consultant	• Communicate issues, risks, and other potential change items to Client project manager	• Communicate issues, risks, and other potential change items to Tyler project manager
Subject Matter Expert / Other		

C.9.3 Requirements/Notes

- Client acknowledges that such scope change proposals may affect the implementation schedule and Go-Live Dates, which will be changed by mutual agreement.
- Within the timeframe specified in Tyler's scope change proposal, which timeframe shall not be less than ten (10) business days from Client Project Managers' receipt of such scope change proposal, Client shall notify Tyler in writing if Client elects to proceed with the change proposal.
- All scope change requests and scope change proposals will be approved first by Client Project Managers and Tyler Project Managers. Scope change requests that impact the project timeline and/or the project Control Points, including costs will also elevated to Client Executive Steering Committee for review

C.10 Implementation Control Point and Deliverables:

When complete, all Deliverables and Control Points require acceptance from the Client Contract Manager. Upon completion, the Tyler project manager shall notify the Client project manager and provide any necessary documents for review.

	Client Role	Tyler Role

Steering Committee	• Review any issues escalated from the Client or Tyler project manager	• Review any issues escalated from the Client or Tyler project manager
Project Manager	• Review and accept/reject • Provide feedback on rejections • Review control point and upon completion grant sign off	• Coordinate acceptance process • Review control point and upon completion grant sign off
Project Team / Implementation Consultant		
Subject Matter Expert / Other		

C.10.1 Implementation Control Point and Deliverable Acceptance Process

The following process will be followed for accepting Deliverables and Control Points:

1. Tyler shall submit each Control Point or Deliverable to Client for review. Upon completion each Control Point or Deliverable, Tyler shall present an acceptance form.

2. If Client does not agree that the particular Deliverable or Control Point has been met, Client shall notify Tyler, in writing, with its reasoning within ten (10) business days, or the otherwise agreed-upon timeframe, not to be unreasonably withheld, of receipt of the delivery.

3. Tyler shall correct any deficiencies and resubmit the Deliverable or Control Point within ten (10) business days. Client shall then have ten (10) business days from receipt of the resubmitted Deliverable or Control Point to accept or again submit written notification of its reasons for rejecting the Control Point or Deliverable. If you do not sign off within ten (10) business days, or the otherwise agreed upon timeframe, not to be unreasonably withheld, the Deliverable or Control Point will be deemed as accepted. NOTE: otherwise agreed upon timeframe is mutual.

4. The process set forth in the paragraphs above shall continue until all issues have been addressed and the Deliverable or Control Point is accepted by the Client.

5. Acceptance will be initiated and managed by utilizing the Tyler SharePoint workflow approval process.

C.10.2 Requirements/Notes

- All review and acceptance periods will be identified on the project plan.
- The Client Contract Manager will have decision authority to approve/reject all project Control Points and Deliverables
- Acceptance will be initiated and managed by utilizing the SharePoint workflow approval process and an email to the Client Contract Manager

C.11 Other Project Management Resources

C.11.1 Tyler University

To assist with the knowledge transfer of Tyler's products, Tyler provides a Learning Management System, or LMS, known as Tyler University. Tyler University is loaded with course curriculum and corresponding courses for users of all types. Courses provide step-by-step, interactive eLearning recordings that allows users to enroll and participate in session content on their schedule. Tyler University will be available to Client staff upon installation of Tyler's Munis system.

	Client Role	Tyler Role
Project Manager / Tyler University Manager	• Assist with creation of Tyler University user accounts • Ensure users are following curriculums • Monitor and communicate user progress to City management staff	• Assist with creation of Tyler University user accounts • Provide user progress reports
Project Team / Implementation Consultant	• Complete Tyler University prerequisites prior to attending related knowledge transfer or training courses	• Communicate and identify prerequisite content on agendas and site reports.
Subject Matter Expert / Other	• Complete Tyler University prerequisites prior to attending related knowledge transfer or training courses	• N/A

C.11.2 Knowledge Base

Tyler provides a knowledge base website that allows users to search and receive training materials such as videos, step by step documentation, how to documentation, etc. Documentation and Release Notes are included with every new release and are distributed with each new release. Additionally, release notes and documentation are updated within the support knowledgebase. Knowledge base will be available to Client staff at the time of contract signing.

	Client Role	Tyler Role
Steering Committee		
Project Manager		• Provide reference to knowledge base documents
Project Team / Implementation Consultant		• Provide reference to knowledge base documents
Subject Matter Expert / Other		

C.11.3 Requirements/Notes

- Tyler will ensure that all referenced knowledge base documents are current and applicable for Client's project.
- References to documents on the knowledge base will be specific and direct Client to specific documents.
- Tyler will provide guidance and demonstrate to Client project team members how to use the knowledge base to find necessary information.

Section D: Technology Architecture

D.1 Hardware Requirements

Appendix 2: Hardware Requirements outlines the recommended system requirements for servers and client workstations supporting and accessing the Tyler Munis system.

D.2 Environments

As part of the project, Tyler will assist Client in establishing the following environments. All hardware specifications, requirements, and required staffing will support development of all listed environments. During the implementation project, environments will be established separately for each phase.

- Testing
- Training
- Production/Live
- Implementation

D.3 Key Dates for Hardware Availability

To prevent delays in the implementation schedule, it is the responsibility of Client to have procured and installed all applicable hardware meeting the requirements listed in Section D.1 within calendar 60 days after the effective date of the Agreement. Failure to have necessary hardware within 60 calendar days may result in delay in installing the Tyler software on Client's hardware and may require changes to the implementation schedule.

Section E: Implementation

E.1 Implementation Methodology Overview

Each phase of the project will be implemented using the methodology defined below. Throughout the project methodology, Tyler has established control points (critical review points) to ensure an organization fully understands and accepts the project and to ensure that Tyler is providing quality services to assist in Client's implementation. It is at these check points that organizational stakeholders monitoring the overall project (for both Tyler and Client) must formally accept the project to date. Once there is formal acceptance, the project will proceed to the next phase. Control points are defined in the section below and the process for accepting each is identified in Section C.11.

E.2 Control Points

To ensure quality and adherence to the methodology identified in this SOW, Tyler and Client have identified the following control points that must be formally accepted prior to moving on in the project. Control points are as follows:

Phase	Control Point	Description
1	1.1	Client Acceptance of Phase Schedule • Kick-off complete • Implementation Management plans accepted (DED 1-1) • Project Plan accepted and posted to project SharePoint site (DED 1-2) • User Manuals Provided (DED 1-3)
1	1.2	Chart of Accounts Design Acceptance • Chart of Accounts analysis complete • Chart of Accounts Workbook delivered • Chart of Accounts conversion loaded into Test/Train
1	1.3	Authorization to Proceed to SET • As-is/to-be analysis complete • Data Conversion Plan accepted (DED 1-4) • System design Document completed with initial to-be decisions (DED 1-5) • Static Environment Test plan accepted (DED 1-6)
1	1.4	Authorization to Proceed to Implementation • Static Environment Test complete • System Design Document updated with to-be decisions (DED 1-5) • Acceptance to load final Chart of Accounts into Live/Production
1	1.5	Authorization to Proceed to Live Preparation

		• Training complete for all applicable processes • Go-live planning complete • Authorization to load Tyler Forms Libraries • Pre-live check list accepted (DED 1-8)
1	1.6	Sign-off to begin Live Processing • Go-live checklist complete • Authorization to load required data conversions into Live/Production • Authorization to begin live processing • Lessons Learned (DED 1-9)
1	1.7	Phase Closure • Post-live training topics scheduled, if applicable • Support transition call complete
2	2.1	Client Acceptance of Phase Schedule • Kick-off complete • Project Plan accepted and posted to project SharePoint site (DED 2-2) • User Manuals Provided (DED 2-3)
2	2.2	Authorization to Proceed to SET • As-is/to-be analysis complete • Data Conversion Plan accepted (DED 2-4) • System design Document completed with initial to-be decisions (DED 2-5) • Static Environment Test plan accepted (DED 2-6)
2	2.3	Authorization to Proceed to Training • Static Environment Test complete • System Design Document updated with to-be decisions (DED 2-5)
2	2.4	Authorization to Proceed to Live Preparation • Training complete for all applicable processes • Go-live planning complete • Authorization to load Tyler Forms Libraries • Pre-live check list accepted (DED 2-8)
2	2.5	Sign-off to begin Live Processing • Go-live checklist complete • Authorization to load required data conversions into Live/Production • Authorization to begin live processing • Lessons Learned (DED 2-9)
2	2.6	Phase Closure • Post-live training topics scheduled, if applicable • Support transition call complete
3	3.1	Client Acceptance of Phase Schedule • Kick-off complete

		• Project Plan accepted and posted to project SharePoint site (DED 3-2) • User Manuals Provided (DED 3-3)
3	3.2	Authorization to Proceed to SET • As-is/to-be analysis complete • Data Conversion Plan accepted (DED 3-4) • System design Document completed with initial to-be decisions (DED 3-5) • Static Environment Test plan accepted (DED 3-6)
3	3.3	Authorization to Proceed to Training • Static Environment Test complete • System Design Document updated with to-be decisions (DED 3-5)
3	3.4	Authorization to Proceed to Live Preparation • Training complete for all applicable processes • Go-live planning complete • Authorization to load Tyler Forms Libraries • Pre-live check list accepted (DED 3-8)
3	3.5	Sign-off to begin Live Processing • Go-live checklist complete • Authorization to load required data conversions into Live/Production • Authorization to begin live processing
3	3.6	Phase Closure • Post-live training topics scheduled, if applicable • Support transition call complete
4	4.1	Client Acceptance of Phase Schedule • Kick-off complete • Project Plan accepted and posted to project SharePoint site (DED 4-2) • User Manuals Provided (DED 4-3)
4	4.2	Authorization to Proceed to SET • As-is/to-be analysis complete • Data Conversion Plan accepted (DED 4-4) • System design Document completed with initial to-be decisions (DED 4-5) • Static Environment Test plan accepted (DED 4-6)
4	4.3	Authorization to Proceed to Training • Static Environment Test complete • System Design Document updated with to-be decisions (DED 4-5)
4	4.4	Authorization to Proceed to Live Preparation • Training complete for all applicable processes • Go-live planning complete • Authorization to load Tyler Forms Libraries

		• Pre-live check list accepted (DED 4-8)
4	4.5	Sign-off to begin Live Processing • Go-live checklist complete • Authorization to load required data conversions into Live/Production • Authorization to begin live processing • Lessons Learned (DED 4-9)
4	4.6	Phase Closure • Post-live training topics scheduled, if applicable • Support transition call complete

* Note: Client may authorize Tyler to proceed with the project and withhold acceptance of the control point. For the control point to be accepted, all work identified under each must be complete.

E.3 Project Initiation

During this step, Tyler and Client will begin working to plan the project kick off meeting. The kick off will be scheduled and completed no later than sixty calendar (60) days after contract signing. During the kick off, Tyler's project manager will meet Client's project team and discuss project expectations and policies. All Client team members will be present for the project kick off.

E.3.1 Task – Project Kick Off

	Client Role	Tyler Role
Steering Committee	• Participate in kick off meeting	
Project Manager	• Review SOW • Coordinate kick off meeting	• Review SOW • Coordinate kick off meeting
Project Team / Implementation Consultant	• Review SOW • Participate in kick off meeting	• Review SOW
Subject Matter Expert / Other	• Participate in kick off meeting	

E.3.2 Requirements/Notes

- All Tyler project managers and implementation consultants will become familiar with the contract, SOW, and any applicable Client policies.
- The kick off meeting presentation will be a collaborative effort between Client and Tyler
- Tyler will lead development of the kick off presentation (Client to provide input) and the kick off presentation will be developed specific to the Client project (not a generic kick off PowerPoint template).
- Kick Off meetings will occur prior to the beginning of each phase.

E.3.3 Outcomes/Deliverables

- Deliverables:

- Project Outcomes:
  - Introduction of all key project team members
  - All project team members understand project and contract requirements
  - Client project team members understand Tyler implementation approach

E.4 Project Planning

Client and Tyler will work to develop customized project plans and implementation management plans that document key project management processes and policies. The project management plans will establish project policies for the duration of the project and be consistent across all phases of the project. Overall project planning will occur at the beginning of the project for all phases and the implementation management plan (DED-1) will be developed to cover all phases. As part of the implementation management plan tasks Tyler will provide change management training. The project plan, as defined in Section C.1 will occur in phases

E.4.1 Develop Implementation Management Plans

	Client Role	Tyler Role
Steering Committee	• See DED 1	• See DED 1
Project Manager	• See DED 1	• See DED 1
Project Team / Implementation Consultant	• See DED 1	• See DED 1
Subject Matter Expert / Other	• See DED 1	• See DED 1

E.4.2 Develop Project Plan

	Client Role	Tyler Role
Steering Committee	• See Section C.1	• See Section C.1
Project Manager	• See Section C.1	• See Section C.1
Project Team / Implementation Consultant	• See Section C.1	• See Section C.1
Subject Matter Expert / Other	• See Section C.1	• See Section C.1

E.4.3 Requirements/Notes

- Project Planning will occur in full during Phase 1. For subsequent phases, the Tyler project manager and Client project manager will review plans and make any necessary changes, as applicable.

E.4.4 Outcomes/Deliverables

- Deliverables:
    - Deliverable 1: Implementation Management Plans (DED 1)
    - Deliverable 2: Project Plan/Schedule (DED 2)
    - Deliverable 3: Standard Tyler Munis User Manuals (DED 3)

- Project Outcomes:
    - Project Plan Complete
    - Project Plan Includes Full Scope of Project and is Consistent with SOW Tasks
    - Implementation Plans complete and all project stakeholders understand key project management processes and roles throughout the project.

- Control Point(s):
    - Phase Schedule Accepted

E.5 Structural Foundation

The Structural Foundation includes tasks required to start a Munis implementation.

E.5.1 Chart of Accounts (CoA) design

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Build CoA Spreadsheet • Review and confirm CoA in spreadsheet was loaded correctly • Load converted CoA into Munis	• Discuss CoA options • Facilitate discussions on CoA Best practices • Demonstrate CoA options in Munis • Train Client on preparing CoA Spreadsheet • Review and validate CoA spreadsheet
Subject Matter Expert / Other		

E.5.2 Software installation

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Coordinate software installation activities	• Coordinate software installation activities
Project Team / Implementation Consultant		
Technical Team	• Assist with install	• Install software

E.5.3 Initial System Administration Training.

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Schedule training attendees	• Coordinate Training
Project Team / Implementation Consultant	• Attend Training	• Provide Training • Provide training materials/documentation
Subject Matter Expert / Other	• Attend Training (Client Technical Team)	

E.5.4 Requirements/Notes

- Structural foundation will only occur for Phase 1

Chart of Accounts

- Client will complete the Tyler Munis CoA workbook as instructed by Tyler consultants
- Tyler consultants will explain and follow up on any Client questions related to most applicable configurations of the CoA.
- Tyler consultants will review all federal, grantor, or other requirements for the Client chart of accounts and ensure that the set up will be sufficient to handle any reporting, tracking, or budgeting needs of Client.

Installation

- Tyler will install any third party software included as part of the scope of the project phase

System Admin Training

- System admin training will be provided for the Client Technical Team and select members of the Client Project Team.

E.5.5 Outcomes/Deliverables

- Deliverables:
  - N/A

- Project Outcomes:
  - Munis successfully installed and system installation accepted by Client
  - Chart of accounts defined and loaded into Munis.
- Control Point(s):
  - Chart of Accounts Design Acceptance

E.6 Knowledge Transfer

Knowledge transfer for the project includes tasks necessary to, conduct an as-is analysis, provide to-be demonstrations, and document system set-up decisions. As part of the as-is analysis, Tyler will review all in scope items (both functional and organizational) scope to best assess how the Client should be configuring Munis. Prior to the project, Client completed detailed as-is process maps. Tyler consultants will review all Client documentation and be familiar with current processes prior to analysis meetings. As-is analysis is intended to review detailed Client needs and how Munis would be configured to meet these needs.

E.6.1 As-Is Analysis

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Complete process questionnaires • Participate in As-Is Sessions	• Review Client project documentation • Review as-is process maps • Provide process questionnaires • Conduct analysis of Client business processes • Identify detailed configuration requirements • Review inventory of processing, configuration and data flow options
Subject Matter Expert / Other	• Participate in As-Is Sessions	

E.6.2 Data Conversion Analysis

Tyler consultants will complete a data conversion analysis. During the analysis current data systems will be reviewed and consultants will determine with Client staff a plan for data conversion. Data conversion plan will include:

- Scope of data conversion
- Level of detail converted
- Historical data converted
- Identification of current data sources
- Strategy and timing for data conversion

Tyler will provide detailed Conversion schemas as a guide to the types of data that can be converted, the specific fields available in Munis and other significant information. These schemas are distributed for all purchased conversions and help guide the data mapping process.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Make decisions on data conversion plans • Identify current data to be converted	• Review contracted data conversions • Review current data • Provide recommendations for data conversion

Subject Matter Expert / Other	• Identify current data to be converted	

E.6.3 Security Analysis

Application security needs are defined during analysis. All user access roles and permissions are reviewed and options are discussed and implemented along with their particular module. Tyler will conduct the security analysis for all the types of users being implemented within each phase. As part of the security analysis, Tyler will deliver a security matrix to assist Client to identify appropriate permissions and roles needed to meet Client business processes.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Attend meetings • Make security decisions • Document security decisions in security matrix	• Review Client business process and facilitate process to define user access roles and permissions • Identify correct Munis security features to match to Client business process decisions
Subject Matter Expert / Other		

E.6.4 Workflow Analysis

Workflow business rules are defined during analysis and users will be trained to set up all workflow functionality to accommodate Client's business practices. All available workflow options are discussed and implemented along with their particular module analysis and setup training sessions. Tyler will conduct the workflow analysis for all workflows applicable to the modules being implemented and processes decided upon. As part of the workflow analysis, Tyler will deliver a workflow matrix to assist Client to identify appropriate workflow roles and processes configurations to meet Client business processes.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Attend meetings • Make workflow decisions • Document workflow decisions in workflow matrix	• Review Client business process and facilitate process to define new Munis workflows • Identify correct Munis workflow features to match to Client business process decisions
Subject Matter Expert / Other		

E.6.5 Custom Interface Analysis

Custom Interfaces involve creating custom layout, web services, etc. for the purpose of receiving, sending, or exchanging data between Munis and a third party system.

So long as the 3rd party system integrating with Munis can use the existing Munis formats / methods, then programming charges will not be required. However, if Tyler needs to change any of its formats to meet the needs of 3rd party products, the desired changes would follow the process outlined in the Scope/Contract Change Process section.

Tyler will train on the standard import and export functionality within the contracted modules, as needed.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Identify requirements for interfaces • Coordinate third party interface needs/development • Document Interface	• Review existing standard interface options within Munis
Subject Matter Expert / Other		

E.6.6 Program Modifications Analysis

Program customizations or modifications ("Program Modifications") require changes or additions in program functionality in order to affect some new, desired result within the Munis programs. No program modifications have been identified and contracted in the scope of this project. Desired changes would follow the process outlined in the Scope/Contract Change Process section.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• See DED 07	• See DED 07
Subject Matter Expert / Other		

E.6.7 To-Be Decisions

	Client Role	Tyler Role
Steering Committee	• Review business process decisions • Make decisions elevated to steering committee	
Project Manager		

Project Team / Implementation Consultant	• Make decisions on business process • Document system design decisions • Conduct internal meetings to review design decisions for Static Environment Test • Develop customized user documentation for items not in Appendix 3	• Conduct analysis of desired process changes • Review available options • Review module parameters, code configurations and work flow options • Conduct analysis of set up tables codes and parameters • Review Munis set up options to facilitate to-be decisions • Develop customized user documentation for items in Appendix 3 • Prepare System Design Document (DED –5)
Subject Matter Expert / Other		

E.6.8 Requirements/Notes

- All project decisions will be documented in a system design document (DED 5).
- Project decisions and system design documentation will reference the Client functional requirements

E.6.9 Outcomes/Deliverables

- Deliverable(s):
  - Data Conversion Plan (DED 4)
  - System Design Document (DED 5)
    - Workflow Matrix
    - Security Matrix
  - Modification Specifications, if applicable (DED 7)

- Project Outcomes:
  - Review and analysis of all Client business processes in scope for project
  - Client and Tyler review of best practice recommendations and decision on to-be process
  - Client makes all necessary business process and configuration decisions
  - Tyler documents all Munis set up decisions in system design document

- Control Point(s):
  - Authorization to Proceed to Static Environment Test

E.7 Static Environment Test (SET)

The Static Environment Test (SET) is designed to test and prove the process decisions made during business process consulting. This test is completed on a clean database with a subset of hand entered (not converted) data provided by Client. This ensures that Client is familiar with the data being tested and is able to verify the processes as the test is conducted by Tyler staff. After the SET is complete, implementation activities such as conversions, core user training and testing will begin.

For the payroll phase of the project, SET will occur after initial set up table training and training on how to build employees. This will allow Client Core Users to view the process using their actual set up and data, and to make process decisions based on the required set up. The first pass of the employee master and deductions may also be done prior to the SET. The Tyler Project Manager will include all activities and their timing in the payroll phase project plan.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Prepare/gather test data • Review and provide feedback on SET test script • Participate in SET Test Session • Assess project decisions and validate/correct project decisions. • Revise system design document as required. • Re-perform SET Test for any changes to major decisions	• Develop SET Test Script (DED 6) • Facilitate and lead SET Test • Document results from SET Test • Re-perform SET Test for any changes to major decisions • Send forms output data to Tyler Forms team for each form in the scope of the respective Phase.
Subject Matter Expert / Other		

E.7.1 Requirements / Notes

- The Static Environment Test will be used to test business and configuration decisions. After the Static Environment Test, items that Client identified as open issues will be re-evaluated, new decisions made, and the items re-tested.
- The Static Environment Tests will be organized by module, but will include all necessary cross module processes so that Client can evaluate the integration between modules and its impact on business processes.

E.7.2 Outcomes/Deliverables

- Deliverable(s):
    - Static Environment Test Plan (DED 6)

- Project Outcomes:
    - Major business process and Munis set up decisions are tested and validated.
    - Forms output data sent to Tyler Forms to begin the forms design process
    - Client ready to begin full configuration of Munis consistent with DED 5: System design document
- Control Point(s):
    - Authorization to Proceed to Implementation

E.8 Implementation

The implementation process includes table building and setup, data conversion and proofing, forms design and testing, modifications and interface testing, core user training, and parallel processing or process testing.

E.8.1 Table Building and Set Up

Tyler will train Client on all system set up tables (codes, global settings, user permissions, etc.). Client is responsible for entering codes into the live Munis database, as instructed.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Client builds Set Up tables • Client builds Workflow	• Train Client on completion of Set Up Tables according to analysis sessions • Train Client on Workflow completion
Subject Matter Expert / Other		

E.8.2 Data Conversion and Proofing

Tyler will train Client on the use of all programs needed to proof conversion data. That includes maintenance, inquiry, and reporting programs. Tyler will assist Client on all initial conversion passes so that Client has the necessary knowledge and tools to proof conversion data. Client is responsible for proofing conversion data and signing off before the conversions are loaded into LIVE.
Tyler will provide detailed Conversion schemas as a guide to the types of data that can be converted, the specific fields available in Munis and other significant information. These schemas are distributed for all purchased conversions and help guide the data mapping process.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Client pulls data from legacy system (-) • Client produces balancing reports • Client documents and submits needed corrections to conversion	• Train Client on methods for validating converted data in Munis
Subject Matter Expert / Other	• Client pulls data from legacy system (-) • Client produces balancing reports • Client is responsible for producing reports from the	• Prepare system parameters and codes to align with data mapping • Write and execute program to convert submitted data according to crosswalk • Through analysis, fields in legacy

	legacy system at the time of data extraction. These reports are critical for use during conversion validation • Load all conversion passes as directed by Tyler PM • Tyler will produce an error report outlining errors that result from running Client's data through the conversion program. Client is responsible for reviewing the report and investigating solutions • Client validates converted data using error reports, balancing reports, etc.	systems and Munis will be outlined for conversion. Tyler staff will use best efforts to direct Client on the legacy source files and desired fields for conversion mapping • Tyler will program conversion programs according to the accepted file submission layout.

E.8.3 Forms Design and Proofing

Using the data extracted during the Static Environment Test process, output data is sent to Tyler's Forms Design team to create proofs for each of the forms in scope for the respective Phase. Tyler's Forms Team merges the data according to the decisions and options from the Forms Kits. The proofs are sent back to Client in an iterative process to review for accuracy or report any necessary adjustments. Once Form proofs have has been accepted and forms are loaded on Client's server, testing continues throughout the balance of the implementation. The goal, at a minimum, is to print forms as part of SME training so that both the content and process are validated repeatedly.

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Client accepts form design and authorizes installation	
Project Team / Implementation Consultant	• Client fills out Tyler Forms Kits • Client validates form design, content and layout • Submit forms to bank for approval.	• Assist in data mapping questions • Assist in issue resolution
Subject Matter Expert / Other		• Tyler Forms creates form designs from Client mock-ups • Tyler Forms merges data from To-Be Test with Form designs • Tyler sends form design proofs for review and acceptance • Tyler Forms installs Forms Server on client Forms server • Tyler installs Forms Library on client forms server

E.8.4 Program Modifications/Interfaces

In the event of an approved Scope Change involving a Program modification or interface, Tyler will provide all in scope program modifications and interfaces according to the timelines mutually agreed to and documented on the project plan. Upon receipt of the program modification or interfaces, Tyler consultants will initially test the program modification or interface to ensure it meets the specifications identified in DED 7 and then submit to Client for additional testing.

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Modification sign off	• Coordinate sign off
Project Team / Implementation Consultant	• Client will validate performance of customization through repeated unit testing as well as process testing throughout implementation	
Subject Matter Expert / Other		• Tyler will program changes as outlined in the signed specification document. Changes subsequent to sign-off will be considered out of scope and may require repetition of previous steps • Tyler's QA team will test customization within applicable, impacted modules • Tyler will deliver and demonstrate customization as scheduled. Demonstration will include validating compliance with written specification • Programs will be developed to import/export Tyler data in format required • A document is created describing the interface and how to utilize it

E.8.5 SME Training

Tyler will train all Client SMEs to perform ongoing training of Decentralized End Users. The Tyler Project Manager will provide a proposed training schedule based on target live dates and availability of resources (Tyler Implementation Consultants, Client trainees, training room, etc.).

- Client Project Manager/Team will be trained according to the schedule developed by the Tyler Project Manager for the Education Plan detailed in the Tyler Implementation Management Plan (DED-01).

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Attend training on completing Trial Run/Parallel processes	• Perform test of Tyler Forms through process testing and training • Train Project Team Leads/Subject Matter Experts on applicable Munis

	• Complete Trial Run/Parallel process steps, identify discrepancies and correct	processing • Train Client on completing Trial Run/Parallel processes • Train Client on process of printing and testing forms
Subject Matter Expert / Other	• Attend Training • Complete Trial Run/Parallel process steps, identify discrepancies and correct	
Project Team/Change Management Leads	• Attend Change Management Coach sessions	

E.8.6 Report Training

Training will be conducted during all phases of the implementation on Tyler reporting. Tyler uses a "train the trainer" approach, which will provide the Client Project Team the tools necessary to fully use the Tyler reporting tools and to train additional users on the subject matter as they see fit.

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Coordinate report training	
Project Team / Implementation Consultant	• Attend report training	• Conduct report training
Subject Matter Expert / Other	• Attend report training	

E.8.7 Requirements / Notes

- **Table Building and Set Up –**
    - All homework tasks will be listed on the project plan

- **Data Conversion -** Tyler makes the following assumptions in providing a fixed-price data conversion approach:

    - Legacy system data to be converted is provided in a non-proprietary format, such as fixed ASCII, CSV or character-delimited files
    - Each legacy system data file submitted for conversion includes all associated records in a single file layout
    - Each legacy system data file layout submitted for conversion remains static for all subsequent data submissions, unless mutually agreed upon in advance of the change.
    - Legacy system data validation and control reports are provided with each data submission to ensure data files are complete and accurate
    - Conversion validation is performed after each pass of converted data is loaded into a testing database. Use of control reports, filtering techniques, comparison reports and visual inspection are all part of this process. The purpose is to identify all issues with data, whether due to mapping inconsistencies, source data issues, data submission content or conversion programming errors. Client must review and provide authorization to proceed to final conversions before the pre-live period so that final conversion submissions have little or no risk of data or conversion programming issues. This

authorization to proceed is necessary prior to live processing as the last step before data is loaded in the live database and live processing begins. This testing is part of pre-live assessment.
    - Tyler will program conversion programs according to the accepted file submission layout. This layout must be maintained consistently for all future data submissions.

- **Forms Design**
    - Client must receive bank approval for all check forms a minimum of thirty (30) calendar days before live processing. This testing is part of pre-live assessment.
- **Program Modifications/Interfaces**
    - Tyler will provide a separate DED 7 for each contracted program modification
- **SME Training**
    - Training documents and videos used as prerequisites for the sessions will be referenced on the agendas and available on the SharePoint site or linked to our Knowledge Base for easy access by attendees. Client will be responsible for printing the necessary documents for the users, as needed.
    - Prior to scheduled training sessions, all users must have access to the Munis training environment. The users must have logins established and know how to access the training environment.
    - Navigational Videos - Tyler will provide Knowledgebase URL links to any referenced or required Munis navigational videos to Client.

E.8.8 Outcomes/Deliverables

- Deliverable:
    - None

- Project Outcomes:
    - Munis system has been configured to meet the functional requirements, SOW, and System Design Document (DED 5).

- Control Point(s):
    - Authorization to Proceed to Live Preparation

E.9 Live Preparation

This step allows the Project Team to review the status of the project and its readiness to go live on plan. As part of live preparation, Client will complete user acceptance testing, end user training, final data conversions, and prepare a pre-live checklist. Tyler develops the go-live check list as part of project go-live planning

User Acceptance Testing

User Acceptance testing is conducted both leading up to and following end-user training. While some recommend that user acceptance testing is all performed post end-user training, Tyler supports incremental user acceptance testing through trial run processing in Financials and parallel processing in

Payroll and Human Resources. Early trial runs and parallels will most likely not involve end-users, once again isolating them from any issues that may be discovered through the process. Once processes are stabilized and can be completed without significant error, the user acceptance testing will expand to include End Users. Once the implementation project is complete, Client will have sufficient time as identified in the agreement to conduct full user acceptance testing prior to go-live.

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Coordinate User Acceptance Test	
Project Team / Implementation Consultant	• Conduct User Acceptance Test	
Subject Matter Expert / Other		

E.9.1 End User Training

Client trainers will provide training to all of Client's End Users. Client will be responsible for End User Training.

E.9.2 End User Training

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Coordinate all logistics for End User Training	• Provide template training materials and template training agendas
Project Team / Implementation Consultant	• Train End Users	• Schedule and track completion of training on the project plan • Develop training materials
Subject Matter Expert / Other	• Attend Training	

E.9.3 Pre-Live Planning

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Meet to outline go-live steps, requirements and assignments • Evaluate readiness of Client staff to perform live process from training and change management perspective	• Meet to outline go-live steps, requirements and assignments • Evaluate readiness of Client staff to perform live process from training and change management perspective
Project Team / Implementation Consultant		
Subject Matter Expert / Other	• Client performs any desired stress testing	

E.9.4 Final Data Conversions

	Client Role	Tyler Role
Steering Committee		
Project Manager	• Client ceases activities in applicable legacy applications	
Project Team / Implementation Consultant	• Client ceases activities in applicable legacy applications	
Subject Matter Expert / Other	• Client ceases activities in applicable legacy applications • Client pulls Final Conversion data and submits to Tyler • Client validates converted data using error reports, balancing reports, etc. • Client accepts final conversions and authorizes them to be loaded in Live Database • Load data into Live environment	• Execute program to convert submitted final data according to crosswalk • Work with Client to confirm readiness to load data into Live environment

E.9.5 Requirements / Notes

User Acceptance

- User Acceptance periods will be scheduled in the project plan. Prior to User Acceptance, the system will be configured to meet all functional requirements.

End User Training

- End User Training will occur after User Acceptance is complete.

- Prior to scheduled training sessions, the Tyler and Client will make sure the following prerequisites are met:
  - Training Database - All users must have access to the Munis training environment. The users must have logins established and know how to access the training environment.
  - Tyler will provide interactive eLearnings to Client via Tyler University. The eLearnings demonstrate basic functions including: navigation, general concepts and process flow, add/update/output, search, and a common toolbar.

Pre-Live Planning:

- NA

Final Data Conversions

- NA

E.9.6 Outcomes/Deliverables

- Deliverable(s):
    - Pre-Live Checklist (DED 8)

- Project Outcomes:

    - All end-users included in training plan are trained on system and business processes
    - Client makes decision to go-live

- Control Point(s):
    - Signoff to Begin Live Processing

E.10 Live Processing

Upon the decision to go-live, Tyler's consultants will assist Client users in entering and completing transactions in the Live system as well as troubleshooting assistance for desired setup changes or data conversion issues.

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant		• Provide go-live assistance • Provide setup and data conversion troubleshooting
Subject Matter Expert / Other	• Client users utilize Munis for live processing	

E.10.1 Requirements / Notes

- Client will track any open issues or new issues though the issues log during Live Processing.

E.10.2 Outcomes/Deliverables

- Deliverable
    - NA

- Project Outcomes:
    - Client is using Munis for live processing

E.11 Post Live Process

After Client is using the system for live processing, Tyler will provide additional training using actual Client-processed data as outlined in the Requirements/Notes. A review of System Design document is done to ensure that the processes put into place using the Munis system are being adhered to, or adjusted as necessary.

Client, with input and assistance from the Tyler, will be responsible to execute against the post-go-live support plan and provide post go-live support in order to complete the conversion to Munis. This will include functional and technical assistance from Tyler in the following areas, per phase:

- Problem analysis and resolution
- Problem tracking
- Guidance and mentoring to Client staff who provide Munis application support functions and user help desk support (problem resolution)
- Respond to help requests and resolve system defects
- Coaching users on use of the new system
- Support and direct assistance for business owner departments (Finance, Procurement, Benefits, Human Resources, Information Technology, etc.)
- Provide proactive support and special attention to processes and departments for functions that are run for the first time during the post go-live period and any functions that are executed for the first time after the go-live period

	Client Role	Tyler Role
Steering Committee		
Project Manager		
Project Team / Implementation Consultant	• Review policy and procedure decisions	• On-site to resolve issues • Train Client on SSRS Reporting Tools • Facilitate review of policy and produce decisions • Provide training on reconciliation process
Subject Matter Expert / Other	• Client users utilize Munis for live processing • Record issues as identified	• Provide custom reports that are in-scope

E.11.1 Requirements / Notes

- Within the proposed go-live and through coordination with Client for the post-live plan, Tyler will provide post-go live support after go-live for each project phase.
- Tyler, within the proposed go-live, will also provide post-go live support for all key processes that are run for the first time outside of the initial post go-live support period. Such events include:
  - Fiscal Year End Activities
  - End of Year Payroll and 1099 Activities
  - Benefits Open Enrollment
  - Budget Development
- On-site or scheduled training sessions will be budgeted for and entered into the project plan. Non-scheduled support will also be available through Tyler Technical Support.
- Additional assistance beyond the phase/project closure will be considered out of scope and will require a change order or purchase order for additional services. Additional assistance beyond that specified here will be considered out of scope and will require a change order.

E.11.2 Outcomes/Deliverables

- Deliverable(s):
  - Lessons Learned (DED 9)

E.12 Phase Closure

This process allows for a formal transition to the Munis support team and a review of the lessons learned during this phase of the project in order to use these lessons on other phases or projects within Client or at Tyler. Lessons learned will be gathered and documented at each status meeting, and the final lessons learned document will include the lessons documented throughout the project phase.

	Client Role	Tyler Role
Steering Committee	• Grant final acceptance	
Project Manager	• Coordinate final acceptance process • Grant final acceptance for the phase	• Initiate transition to support • Facilitate Lessons Learned discussion and develop lessons learned document
Project Team / Implementation Consultant	• Document issues	• Troubleshoot and resolve issues related to user acceptance testing
Subject Matter Expert / Other		

E.12.1 Requirements / Notes

- Tyler's consultants will perform training on the identified post-live processes.
- Client-authorized users shall document and report issues through the provided Tyler support resources

E.12.2 Outcomes/Deliverables

- Project Outcomes:
  - Implemented system and Project satisfy all SOW terms and functional requirements as defined in Exhibit F of the Agreement
  - Transitioned to Tyler Support
  - Final Acceptance

- Control Point:
  - Acceptance of Project/Phase Closure

Section F: Homework Requirements

The following outlines major expectations, requirements and, activities surrounding the implementation of the Munis solution:

- Tyler will provide in writing to Client the trainee prerequisites that must be completed prior to conducting all implementation or training sessions. All prerequisites will be identified on the project plan and communicated to Client in agenda's for each implementation or training session.
- Tyler will provide in writing to Client project manager after each training or implementation session what tasks that must be completed prior to Tyler personnel returning to the site. These tasks will be shown on the site report after each site visit and posted on the project SharePoint site. All tasks will also be listed on the project plan.
- Homework assignments and tasks will also be listed on the Project Plan along with due date and owner
- Typical homework items are as follows:
    - Complete set up of tables and codes based on training conducted
    - Practice on processes learned
    - Review any delivered documents prior to attending scheduled training session
- Should Client not be able to complete communicated prerequisites or tasks, the Client project manager is to bring it to the attention of the Tyler Project Manager immediately so that assistance can be offered or scheduling be revised.

Section G: Facility Requirements

The following outlines Client's requirements for providing a suitable work location to be used by the project.

- Client will provide a room to be used as a training lab for Tyler staff to transfer knowledge to Client resources as well as a place for Client staff to practice what they have learned.
- The room is to be set up in a classroom setting. The number of workstations in the room is to be determined by Client. It is Tyler's recommendation that every person attending a scheduled session with a Tyler Implementer have their own workstation; however, Tyler requires that there be no more than two people at a given workstation.
- A workstation is to consist of a computer that has access to the Munis training/test database and a printer.
- Client is to provide a workstation that connects to Munis for the Tyler trainer conducting the session. The computer must be linked to a projector so everyone attending the session is able to follow the information being communicated.
- In addition to computers and a printer, it is recommended that a phone be available in the room as well as a white board with markers and eraser.
- Client is responsible to schedule the training room for the sessions conducted by Tyler staff.
- Should phases overlap, it may be necessary to make multiple training facilities available.

Section H: Appendix

Appendix 1: Deliverable Expectation Document

A description of each summary deliverable is provided below. All deliverables will be provided electronically in the format used to prepare the deliverable (example: Microsoft Word, Excel) to allow for updates and revisions.

Deliverable Number: DED-1 (1-1)	
Deliverable Name: Implementation Management Plans	**Phase:** CROSS ALL PHASES
Objective: To provide procedures for project management and managing changes to the project scope, schedule or budget.	
Scope: Customized management plans to reflect Client's specific project approach. Management plans will document specific project management processes that are agreed upon between Client and Tyler project manager. As part of project planning, the Tyler project manager will review the SOW and contract with Client. The management plan will include all information and procedures for all phases of the project.	
Format: Microsoft Word	
Outline: ***Resource Management Plan*** • Identify Tyler resources on project and specific roles/tasks for the project • Identify Client resources and what meetings/roles/tasks each needs to be included on • Determine method for identifying/communicating on-site resources ***Communication Management Plan*** • Definition of Project Communications • Communication Methods • Key Stakeholders / Audiences for Each Communication • Frequency of Communications • Roles and Responsibilities ***Risk Management Plan*** • Definition of Risks • Risk Assessment Methodology • Risk Documentation ***Quality/Testing Management Plan*** • Testing Process • Testing Criteria • Process for Resolving Testing Issues • Quality Review Process / Deliverable Quality Review • Overall Project Quality Standards ***Schedule Management Plan*** • Identify process for making adjustments to schedule ***Change Management Plan*** • Develop Change Management Strategy • Identification of project concerns, risks and issues	

Deliverable Number: DED-1 (1-1)

- Determine the types, frequency and delivery of communications
- Identify Client resources and what meetings/roles/tasks each needs to be included on

Education Management Plan

- Software/Hardware
  - How many databases will be utilized?
  - Will we establish a Financials Training environment separate from Payroll?
  - Who will refresh the training database?
  - Will a second server be utilized?

- Facilities
  - How many training rooms will be utilized?
  - Where are the training rooms?
  - How many workstations will be in each training room?
  - How many printers will be in each training room?
  - Other training room requirements (white board, phone, etc.)
  - Who will schedule the training room?

- Staff
  - How many students per teacher?
  - How many students per workstation?
  - What are the hours of training?
  - Who will be trained on each Munis application?
  - Who will take attendance?
  - Will management be present for each session?
  - Who will train the end-users Munis versus Project Team Leads)?

- Schedule
  - Who will determine the exact days for training?
  - Who will notify staff members?
  - How far in advance will the training schedule be built?

- Quality Control
  - How will Client determine if attendees have learned required training outcomes?
  - How will follow up training be administered?

Client Role:

- Attend project planning sessions scheduled by Tyler
- All project team members will participate in the development of these plans.

Tyler Role:

- Tyler will lead development of the plans and will have responsibility for documenting all decisions as part of the deliverable.

Acceptance Criteria:

- Client project team has read, understands, and agrees with the procedures and schedules within the Implementation Management Plan
- The deliverable contains all the components specified in the Outline of this DED and the SOW

Deliverable Number: DED-1 (1-1)
• The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.

Deliverable Number: DED-02 (1-2, 2-2, 3-2,4-2)	
Deliverable Name: Project Plan / Schedule	**Phase:** ALL
Objective: Task list with owners and due dates for successful completion of the project.	
Scope: See SOW Section C.1	
Format: Initially developed and maintained on the Project SharePoint site. Tyler is currently testing the use and integration of MS Project with SharePoint. If the testing is complete and successful during Client's implementation, Tyler will consider the transition of this deliverable to be in MS Project.	
Outline: The project plan will follow the Tyler Implementation Methodology WBS and contain all WBS tasks, tasks necessary for completion of WBS tasks, Deliverables, Control Points, review/acceptance periods, and other key project events.	
Client Role: • Review project plan • Contribute information necessary to complete and maintain project plan	
Tyler Role: • Provide initial on-site and remote session schedule to client for approval • Create project plan • Post project plan to Project SharePoint site	
Acceptance Criteria: • The client signs off on the project plan and schedule • The deliverable contains all the components specified in the Outline of this DED and the SOW • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.	

Deliverable Number: DED-03 (1-3, 2-3, 3-3,4-3)	
Deliverable Name: User Manuals	**Phase:** 1,2,3,4
Objective: Provide documentation on standard Munis functions	
Scope: Comprehensive user manuals for all Tyler modules purchased.	
Format: MS Word	
Outline: • Overview of module • Detailed description of how to generally complete tasks in Munis	

Deliverable Number: DED-03 (1-3, 2-3, 3-3,4-3)
• Identification of options, fields, and functions built into the Munis software.
Client Role: • Review User Materials • Update materials with Client-specific steps and processes
Tyler Role: • Provide training manuals on SharePoint.
Acceptance Criteria: • The deliverable contains all the components specified in the Outline of this DED and the SOW • The training materials will be updated to reflect current features and functions in the software version that Client is implementing. • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.

Deliverable Number: DED-04 (1-4, 2-4, 3-4,4-4)	
Deliverable Name: Data Conversion Plan	**Phase:** 1,2,3,4
Objective: Document conversion option decisions, timelines, tasks and validation methods.	
Scope: All conversions listed in Section A.5 that Client chooses to convert. As analysis sessions occur, the plan will be updated with scope of conversions, years of history, and fields to convert.	
Format: MS Excel	
Outline: • Conversion options to be exercised • Conversion options not to be completed, with description of change order action • Timelines for each conversion option • Reports and data validation recommendations	
Client Role: • Attend conversion and applicable module analysis sessions • Participate in planning discussions • Review and accept the conversion plan	
Tyler Role: • Provide conversion analysis • Provide conversion specifications and guidelines • Provide guidance on proofing methods and tools • Create and provide the conversion plan	
Acceptance Criteria: • The deliverable contains all the components specified in the Outline of this DED and the SOW • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • Data has been proofed and accepted in a test environment by the client. • The deliverable is free of formatting and spelling errors.	

Deliverable Number: DED-05 (1-5, 2-5, 3-5,4-5)	
Deliverable Name: System Design Document	**Phase:** 1,2,3,4
Objective: To document the decisions and processes resulting from analysis and identify how Client will use the Munis system.	
Scope: Detailed review of each in scope functional area, module, and business process to identify the current needs, business process requirements, business process and Munis configuration decisions, and detailed set-up notes for how Munis will be used. The document is to contain workflow, and security information where applicable.	
Format: MS Word and/or MS Excel	
Sample Outline: **Current Needs:** • Identification of current process • Analysis of Munis fit/gap **Client Decision Making:** • Process Decisions • Munis Considerations • Follow Up Items **Detailed Munis set-up considerations** • Munis set up details • Modifications • Interfaces **Other Information** • Workflow Details • Security Details	
Client Role: • Participate in all meetings and make decisions • Review the documents provided by the Tyler project team • Identify any discrepancies • Ask for clarification from the Tyler team, if necessary	
Tyler Role: • Complete deliverable documenting decisions and Munis details • Post the analysis notes on the Project SharePoint site • Update deliverable based on feedback from the client	
Acceptance Criteria: • The deliverable contains all the components specified in the Outline of this DED • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.	

Deliverable Number: DED-06 (1-6, 2-6, 3-6,4-6)	
Deliverable Name: Static Environment Test (SET) Plan	**Phase:** 1,2,3,4
Objective: Prepare the test script based on Client's process and set up decisions through As Is and To Be analysis.	
Scope: Tyler will lead Client in the step by step testing of Client business process decisions built into the functionality of Munis. This test will enable Client to see the way the system functions using their own data and business processes. Focus will be on helping Client understand the impact the desired business processes will have on the way the system functions and the impact of the system on Client business process decisions. The SET Test Plan will contain detailed testing scripts to test Client business processes.	
Format: MS Word document	
Outline: • Detailed test scripts by business process for each functional area/module in scope for the project.	
Client Role: • Review the SET plan • Provide feedback for additional processes to be tested	
Tyler Role: • Develop SET plan • Modify SET plan prior to testing based on client feedback	
Acceptance Criteria: • The deliverable contains all the components specified in the Outline of this DED and the SOW • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.	

Deliverable Number: DED-07 (1-7, 2-7, 3-7,4-7)	
Deliverable Name: Program Modification / Interface Design Specifications	**Phase:** 1,2,3,4 (if applicable)
Objective: Review and understand Client requirements for the customizations and interfaces. Specification will contain a description and details of the intended program modifications and custom interfaces to be delivered to address the contract item – this document identifies exactly where and how the application programs will be changed.	
Scope: Any Program Modifications and Interfaces added to the scope via an approved Scope Change.	
Format: Word document to detail design specifications	
Outline: Word document provided by Development that will describe the proposed functionality desired by Client.	
Client Role:	

Deliverable Number: DED-07 (1-7, 2-7, 3-7,4-7)
• Client provides business practices and/or mandates that drive the need for the modification. • Client reviews the design specification with Development and Implementation. • Client signs off on final design specification.
Tyler Role: • Development obtains clients business practices and/or mandates that drive the need for the modification. • Development may suggest existing functionality to achieve the desired results. Implementation will provide relevant details for the client's suggested future Munis business practices. • Development creates the design specification for the modification. • Development and Implementation review the design specification with the client. • Development updates the design specification with any requested changes, if applicable. • Implementation PM makes adjustments to the modification task dates in the project plan, as necessary. • Development obtains client sign-off of the design specifications. Modify specifications if required after development of modification.
Acceptance Criteria: • The deliverable contains all the components specified in the Outline of this DED • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.

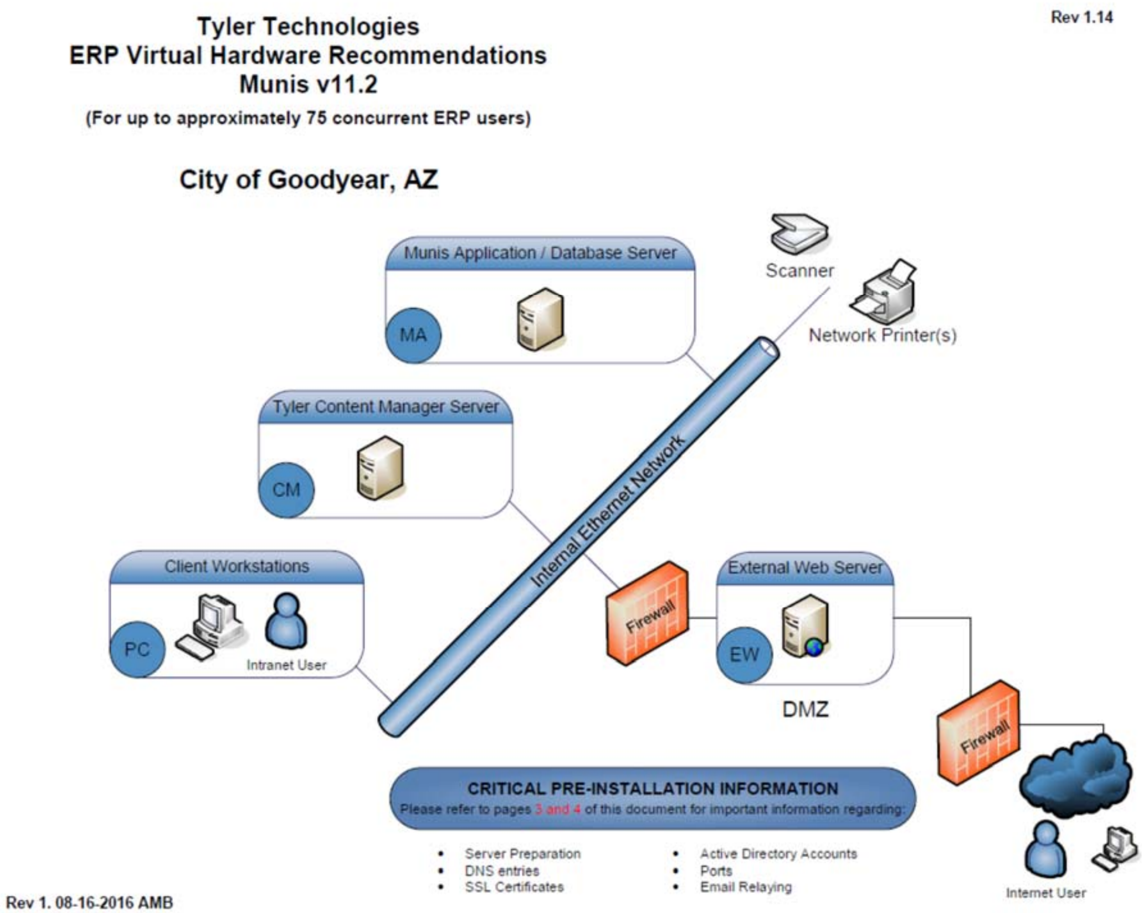
Deliverable Number: DED-08 (1-8, 2-8, 3-8,4-8)	
Deliverable Name: Pre-Live Checklist	**Phase:** 1,2,3,4
Objective: Identify all tasks that will need to be completed for Go-live. Checklist will provide cutover timelines to cease processing in the legacy system, timeline for final conversions, contingency processing plans and instructions for decentralized departments.	
Scope: Implementation will provide the client with a checklist of items needed to be completed for Go-Live	
Format: MS Excel	
Outline: Sample activities from a Payroll Go-Live Checklist: • Separation of duties between Payroll and HR determined and tested • Validate process of starting a payroll, switch T & A users • Review Dept. Time & Attendance process, proof reports • Verify GL Distribution Posting correctly- Finance Dept. approval • Verify appropriate permission levels on General, Time & Attendance and Payroll Run Processing for all users Checklist columns: • Item ID	

Deliverable Number: DED-08 (1-8, 2-8, 3-8,4-8)
• Activity • Owner • Date Verified • Client Approval (initials) • Notes/Comments
Client Role: • Review and complete the list of items required for go-live.
Tyler Role: • Provide client with a list of items required for completion for the go-live, by phase.
Acceptance Criteria: • The deliverable contains all the components specified in the Outline of this DED and the SOW • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.

Deliverable Number: DED-09 (1-9, 2-9,3-9)	
Deliverable Name: Lessons Learned Document	**Phase:** 1,2,3
Objective: Document lessons learned to apply to future phases/projects	
Scope: All lessons learned specific to Munis implementation	
Format: MS Excel	
Outline: • ID • Date • Title • Phase • Lesson Value • Description and Impact • Recommendation(s) • Contact	
Client Role: • Gather feedback • Participate in lessons learned session • Document and archive lessons learned	
Tyler Role: • Lead lessons learned session • Develop after action Change Management review plan for subsequent phases • Archive lessons learned	
Acceptance Criteria:	

Deliverable Number: DED-09 (1-9, 2-9,3-9)
• The deliverable contains all the components specified in the Outline of this DED and the SOW • The respective Tyler and Client project team members have resolved all material content and/or quality issues. • The deliverable is free of formatting and spelling errors.

Appendix 2: Hardware Requirements



Recommended Production Hardware Configuration (Virtual Servers):

(MA) Munis Application / Database Server*

4 Intel Xeon Virtual CPUs / Cores
48 GB of dedicated memory
800 GB of disk storage (RAID 10 recommended):
    100 GB C: Drive – Operating System
    800 GB D: Drive – Applications and Databases
64 – bit Windows Server 2012 R2 Standard
64 – bit SQL Server 2014 Standard
1024-bit or higher SSL Certificate

(CM) Tyler Content Manager Server

4 Intel Xeon Virtual CPUs / Cores
24 GB of dedicated memory
300 GB of disk storage**:
    100 GB C: Drive – Operating System
    200 GB D: Drive - TCM Applications & TylerForms
64 – bit Windows Server 2012 R2 Standard
1024-bit or higher SSL Certificate

***The virtual machine containing the core Munis application should have the MAC address set to a static value in the hypervisor.**

****TCM databases are stored on the MA server. TCM databases local to CM server (combined SQL/TCM) will require significantly higher disk space requirements and an additional SQL license.**

(EW) External Web Server

1 Intel Xeon Virtual CPUs / Cores
12 GB of dedicated memory
100 GB of disk storage:
    100 GB C: Drive – Operating System & Web Content
64 – bit Windows Server 2012 R2 Standard
1024-bit or higher SSL Certificate

Backup Solution– *(not shown)*

Offsite, Snapshots, Enterprise, Tape, etc.

SAN Unit – *(optional, not shown)*

iSCSI or Fiber Channel recommended

Note: Listed servers are representative of all necessary hardware required to deploy the applications. Multiple environments are contained independently within each server. Additional servers are not required for alternate environments (i.e. Train, Dev, Test), but can be utilized if requested.

Performance Notes:

Robust Munis performance and the subsequent end user experience rely primarily on properly provisioned and configured hardware infrastructure. This fundamental rule applies to physical, virtual and mixed infrastructure environments. Performance of the core Munis ERP Financials solution is primarily determined by the capability of the underlying database solution, Microsoft's SQL Server. In our experience the best indication of robust SQL performance is access to low latency, high performance 15k SAS or solid state drives configured in a RAID 10 disk array. Due to the rapid pace of change Tyler recommends that all sites interested in leveraging virtual servers to work closely with a vendor who is an expert in this arena. Tyler is available to work with you and your vendor of choice to ensure the proper infrastructure is designed and implemented for use with the Munis ERP Financial solution. Utilizing more than one network port in a server requires appropriate software and network configuration which is the responsibility of the client and/or hardware vendor

Licensing:

Database and Operating System licensing is the responsibility of the client. Depending on the use of the software, often times core based licensing and external connector licenses are necessary. Some Tyler software provides database services to Internet users. We encourage all clients to contact their authorized Microsoft Software Vendor to determine what licensing is required.

Rev 1. 08-16-2016 AMB

Domain Users and Groups

'MunisUsers' Security Group – Any user who will access the core Munis application needs to be a member of this group. ***Note: All users must have an active directory account and it is strongly encouraged that users are logging into their workstation with AD credentials.***

'tylerservice' user* – This is an administration account used to manage the servers and install Tyler software and underlying technology (SQL, SharePoint, etc.). This account is used to run many of the services on the server. This user only needs to be member of the local administrators group on each server.

'munis' user – This is the Munis core application super user. It is used by Tyler Support and Implementation for system administration and troubleshooting. The 'munis' user must be a member of this 'MunisUsers" group. This account name is case sensitive.

'MunisLDAP' user* – This user only needs to be able to read Active Directory for LDAP sync purposes.

'Tyler_SPFarmAdmin' user* – This is the SharePoint farm administrator account.

'Tyler_SPCache' user* – This is the distributed cache service account for SharePoint Foundation.

'Tyler_SPAppPool' user* - This is the application pool account for SharePoint Foundation and Dashboard.

Application Users – All users who are going to be using the Munis application need to have Active Directory domain accounts. If multiple domains are in use, then the domain the servers reside on must trust any domain a user account resides on. All users, from all domains, must be members of the 'MunisUsers' security group. Munis Self Service users are not required to have domain accounts.

*These accounts are used to run services. Tyler recommends setting passwords to not expire to prevent any impact to these services. If you need to change a password, please contact TSM Support for assistance. Passwords for these accounts can be communicated directly to the Tyler engineer or technician. Tyler Technologies strongly encourages the use of complex and unique passwords for each account.

Rev 1. 08-16-2016 AMB

TCP Ports

22 – 2 way communication between the (MA) Munis Application server and the Tyler MIU server (ftp.munis.com). This is used for downloading application updates. This traffic will always initiate from the MA server. (Note: this uses a SFTP connection)

443 – 2 way communication between the (MA) Munis Application Server and the (EW) External Web server. This allows web service calls between the Munis Application and Munis Self Service. This traffic will always initiate from the EW server.

5832 – 2 way communication between the (MA) Munis Application Server and the Tyler Bomgar Appliance (erpsupport.tylertech.com). This if for use of a Bomgar Jump Client. This traffic will always initiate from the MA server.

49876 - 2 way communication between the (MA) Munis Application Server and the (EW) External Web server. This is used for pushing updates to the Self Service products from the Managed Internet Update utility on the MA server. This traffic will always initiate from the MA server.

389 – 2 way communication between the (EW) External Web server and the domain controller. This is used for Mixed Mode authentication of the Munis Self Service product.

Internal Network – It is assumed that traffic will not be blocked between servers that reside on the internal network.

For DR Clients Only:

807 & 2546 - Outbound communication from the (MA) Munis Application Server and Tyler DR (yar-evault-dr1.tylertech.com). This is used for transferring backups.

8086 & 8087 – 2 way communication between the (MA) Munis Application Server and Tyler DR (208.64.239.123). This is used for WebCC and EVAULT monitoring and management.

E-Mail Relaying

An SMTP email server is required for sending Munis notifications. E-mail will be sent from the (MA) Munis Application Server, (CM) Tyler Content Manager Server, and the (EW) External Web Servers. Please open ports and enable relaying as necessary.

Server Preparation

In preparation for your software installation, please have the following tasks completed:

- All servers fully built and provisioned
- Operating System installed on servers [2]
- Servers joined to the domain [3]
- Have SQL Server media available/mounted [1]
- Microsoft Updates enabled and applied (no .NET 4.6.x)
- Firewall rules in place
- Service accounts created/verified
- 'tylerservice' AD user added as local administrator
- SSL certificates purchased or created and installed on the servers where they are to be used
- DNS aliases created
- All requested Tyler software downloaded to MA D: drive

[1] Tyler strongly prefers to install and configure SQL Server
[2] Servers can not be a domain controller. Tyler will be responsible for installing and configuring the required roles and features for each server.
[3] Hostnames can not be changed after the installation

DNS Aliases[4]

DNS Aliases need to be created for web applications. The following examples are commonly used by clients *(where "yourdomain.org" represents your organizations domain).*

(MA) Munis App/DB Server (internal domain)

Application	Example of common DNS aliases
Munis Core Applications	munisapp.*yourdomain.org*
Dashboard Prod	munis.*yourdomain.org*
Dashboard Train	munistrain.*yourdomain.org*
Dashboard Test	munistest.*yourdomain.org*
Dashboard Impl	munisimpl.*yourdomain.org*

(CM) Content Management Server (internal domain)

Application	Example of common DNS aliases
Tyler Content Manager	tylercm.*yourdomain.org*

(EW) External Web Server (externally facing)

Application	Example of common DNS aliases
Munis Self Service	selfservice.*yourdomain.org*

[4] It is strongly recommended that DNS Aliases are NOT changed once the server build has begun, or afterwards.

SSL

Tyler requires all communication between their applications and end users be secured using SSL.

The external web server must be secured with a certificate purchased from an external certificate authority.

Tyler strongly recommends purchasing a wild card certificate from an external certificate authority. Wild Card certificates can typically be used to secure all servers and websites across the domain.

Clients with an internal certificate authority can generate certificates to secure internal communication. Any workstation or device using the application would need to be on the domain or have the certificate manually installed.

Internal communication can be secured using self signed certificates generated from each server. The self signed certificates can be pushed out to domain workstations using group policy or they have to be installed manually. This method is NOT recommended, as it can be challenging to revoke a certificate and requires interaction with individual workstations.

Rev 1. 08-16-2016 AMB

Software – Components Itemized by Server

MA Munis Application Server

- Munis Application Modules (Prod/Train/Test/Impl)
  - Accounting/GL/BG/AP
  - Cash Management
  - Employee Expense Reimbursement
  - Fixed Assets
  - Project & Grant Accounting
  - Purchasing
  - HR Management
  - Payroll
  - Accounts Receivable
  - Business License
  - Central Property File
  - General Billing
  - UB Interface
  - Utility Billing CIS
- Munis Analytics and Reporting
  - Role Tailored Dashboard
  - SharePoint Foundation 2013
  - Munis Web Framework
  - Munis Office
  - Tyler Reporting Services
- Tyler Cashiering
- MapLink SL
- Tyler System Management Health Check Script

CM Tyler Content Manager Server

- Tyler Content Manager SE
- Tyler Forms Processing DocOrigin
- Apache Tomcat

EW External Web Server

- Munis Self Service
  - Employee Self Service
  - eProcurement
  - Citizen Self Service
- Munis Mobile
- IVR Gateway

PC Client Workstations

Operating System:	
Windows:	8.1 64-bit (*recommended*), 10 64-bit, 7 64-bit & 7 32-bit
Mac OS X:	10.10 (*recommended*) & 10.8 (*minimum**)
Memory (RAM):	4+GB (*recommended*, 2 GB (*minimum**)
Processor (CPU):	Intel CPU
Screen Resolution:	1280x800 (*recommended*), 1024x768 (*minimum**)
Internet Browser:	
Windows:	Microsoft Internet Explorer 11 Google Chrome – version 31 *(auto updates enabled – for HTML5 only)* 32-bit Mozilla Firefox 3.0+ (*Self Service only*)
Mac OS:	32-bit Apple Safari 6.2+
Microsoft Office:	
Windows:	Microsoft Office 2013 & 2010 (32-bit require if using Office Plug-ins)
Mac OS:	Microsoft Office for Mac 2011
Additional Software:	Microsoft Silverlight 5.1 browser plug in Java Runtime Engine (JRE) 7u79 or 8u66 (for *Tyler Content Manager full client only*) Microsoft .NET Framework 4.0 SP1 (*used with Tyler Cashiering v2.10+*) Microsoft.NET Framework 4.5.1 (*used with Tyler Cashiering v2016.x*)

*Meeting the minimum PC requirements will ensure the Tyler applications will operate, but will not guarantee performance. All performance and benchmark testing is done with PC's that meet (or exceed) the 'recommended' hardware configuration.

Rev 1. 08-16-2016 AMB

Networking Requirements

Overview

Tyler applications communicate over TCP/IP and a network infrastructure of 10/100 Mbps between workstation and server and gigabit (1000 Mbps) connections between servers is highly recommended.

All external web servers should reside in a Firewall DMZ. A 1024-bit SSL certificate is required and must be obtained by the client for all web and application servers to encrypt all traffic over HTTPS between the server and end users.

Bandwidth Requirements

Bandwidth usage can vary depending on application user type and their daily functions. Based on benchmarks through Tyler's SaaS data center and Test Lab, Tyler recommends the following bandwidth requirements:

Client to Server:
Minimum: Mobile broadband
Recommended: 10/100 Mbps
20-25 Kbps per concurrent user session

Server to Disk Subsystem (i.e. SAN):
Small server environments: iSCSI
Large server environments: Fiber

Server to Disk Subsystem (i.e. SAN):
Small server environments: iSCSI
Large server environments: Fiber

Remote access options including Remote Desktop Services (RDS), RemoteApp and Citrix are also supported and recommended for low bandwidth environments.

Tyler highly recommends sites with many anticipated remote users request a bandwidth utilization report for at least 1 month of recent usage from their ISP to ensure they have sufficient bandwidth available to meet these requirements, especially those considering Tyler SaaS Hosting.

Active Directory

Microsoft Active Directory is required for authentication with Tyler back office applications. All Tyler servers must be a member of a domain that includes Active Directory user accounts for all back office users. All workstations used to access back office applications must also be a member of the same domain to ensure an optimum end-user experience with Single Sign-On capability. Active Directory configuration and administration is the sole responsibility of the client and must be configured prior to installation of Tyler servers. Munis Self Service users do not require Active Directory accounts or access from workstations that are members of the domain.

Please consult Tyler's Installation Department to discuss using Tyler applications in advanced Active Directory environments.

Network Load Balancing

A hardware-based network load balancer is strongly recommended for multiple application servers. Tyler has tested the Barracuda Load Balancer (recommended model 340 or 440) and BigIP's F5 network load balancer.

Email Server

An SMTP email server is required for sending Munis notifications. While any SMTP server can be used for email notifications, Microsoft Exchange is required for the following advanced functionality:

- Automated scheduling in areas such as Scheduler Central for Permitting, Work Orders and Utility Service Orders as well as Work Order Facilities room reservations
- Automated archiving of emails initiated from the Munis system to Tyler Content Manager
- Appointment creation on records directly from the Munis client
- Tyler Dashboard web parts for Outlook Email, Outlook Calendar, Outlook Tasks and Outlook Contacts

Rev. March 2015

TylerForms Output Management Solution Printer Requirements

Our solution is designed for and guaranteed to work with HP black and white laser jet printers meeting the minimum requirements. For non-check forms we will make every effort to print to other networked printers that meet the technical requirements outlined above. While we routinely and successfully print other forms to many brands of laser printers, if we are unable to print to a printer on your site, you will be required to provide an alternate printer.

We do not program for tray calls or support tray calls. Printing from specific trays can and should be managed and controlled by clients at the printer level.

Check Printers
The following technical specifications must be met for check printing with the TylerForms Output Management Solution

HP Brand Black/White Laser Jet Networked Printer with Static IP Address
High Speed USB 2.0 Port
HP PCL 5e Personality or Language Installed
Automatic Duplexing Included and Enabled
Minimum Memory - 64MB
Minimum of 80 Internal TrueType Scalable Fonts (80 HP Font Set)
Minimum of 2 Full Input Trays (Manual Feed Tray not usable)
Accommodates Letter and Legal Size Paper Stock
Printers must have the latest firmware updates installed

IMPORTANT NOTE: We do not support HP printers that have been modified with TROY brand or any other 3rd party MICR security features for check printing.

Recommended TylerForms Check Printers
Please note that some of these printers may not be available from HP directly as they change printer models often. They are generally available from HP resellers and other retailers even if HP is no longer offering them directly.

HPLJ 3015x HPLJ M606dn*
HPLJ M604dn* HPLJ M606x
HPLJ M605dn* HPLJ M806dn
HPLJ M605x HPLJ M806x
**If using the HPLJ M604dn, HPLJ M605dn or M606dn you must purchase an additional input tray in order to meet the requirement of two full input trays.*

Other Form Printers
The following technical specifications must be met for all other form (not check) printing with the TylerForms Output Management Solution.

Network Laser Jet Printer with Static IP Address
PCL 5e Personality or Language Installed
Automatic Duplexing Included and Enabled*
Minimum Memory - 64MB
Minimum of 80 Internal TrueType Scalable Fonts
Minimum of 2 Full Input Trays (Manual Feed Tray not usable)
Accommodates Letter and Legal Size Paper Stock
Printers must have the latest firmware updates installed
**Please note that for some non-check form designs you will need to have a duplexing capabilities.*

Rev. April 2016

Appendix 3: Detailed Processes Covered in the Business Process Consulting

The following represents a listing of the in-scope processes that will be covered under the Business Process Consulting Service. Setup and code tables are not included as part of the Business Process Consulting Service. Some processes below may not be included if it is mutually determined in the analysis that a particular process will not be utilized.

*DCT indicates this document could also be used for decentralized end user training

- **General Topics for all Modules**
  - Navigation (DCT)
  - Munis Office & Saved Reports (DCT)
  - Dashboard (DCT)
  - Tyler Content Manager (DCT)
- **General Ledger**
  - Adding a New Account
  - General Journal Entry
  - Recurring General Journal Entry
  - General Journal Approvals
  - Account Trial Balance Report
  - GL Account Inquiry (DCT)
  - YTD Budget Report (DCT)
  - Periodic Processing, including
    - Month End Processing
    - Year End Processing
  - Import GL Journals
- **Purchasing & Requisitions**
  - Overall Purchasing Process
  - Vendor Maintenance
  - Requisition Entry (DCT)
  - Attaching Documentation (DCT)
  - Requisition Approval (DCT)
  - Requisition Conversion to PO
  - PO Entry Proof
  - PO Approvals (DCT)
  - PO Receiving (DCT)
  - Print PO's
  - PO Maintenance
  - PO Reports (DCT)
  -
- **Accounts Payable**
  - Overall AP Process

- Vendor Maintenance
- Invoice Entry /Proof (DCT)
- Recurring Invoice Entry
- Scanning and Attaching Invoices using Bar Codes
- Invoice Approvals (DCT
- Post Invoices
- Check Run Process (Select Items to Be Paid, Print Checks, Cash Disbursement Journal)
- EFT Processing
- Create Positive Pay File for bank
- Void Check Process
- Invoice Maintenance
- Retainage Processing
- Check Reconciliation
- AP Reports (DCT)
- Vendor Central (DCT)

- **Budget**
  - Overall Budget Process
  - Define/Start Budget Projection
  - NY Budget Entry (DCT)
  - NY Budget Reports (DCT)
  - Roll/Factor/Merge Budget Projection
  - Next Year Budget Detail Approval (DCT)
  - Budget Transfer and Amendments (DCT)
  - Budget Transfer and Amendments Approvals (DCT) –
- **Project/Grant Accounting**
  - Overall Project and Grant Accounting Process
  - Creation of Project and Grant
  - Reimbursement and Indirect Cost Process
  - Using Project Ledger
  - Project Reports (DCT)
- **AR Miscellaneous Cash**
  - Overall Miscellaneous Cash Process
  - Payment Entry (DCT)
  - Applying a Payment to a General Bill (DCT)
  - Payment Post
  - Payment Reversals
  - Apply NSF Fee
  - Print NSF Notices
  - AR Reports (DCT)
- **General Billing**

  - Overall GB Process
  - Customer File (DCT)
  - Invoice Processing (DCT)
  - Recurring Invoice (DCT)
  - Invoice Approval (DCT)
  - Employee Insurance Bills
  - Assess Late Fees
  - Print Bills and Statements
  - Reports (DCT)

- **Cash Management**
  - Interest Allocation
  - Cash Flow
  - Bank Reconciliation
  - Reports

- **Employee Expense Reimbursement**
  - Overall Employee Expense Process
  - Entering an Expense Claim (DCT) -
  - Allocating an Expense Claim (DCT)
  - Approving an Expense Claim (DCT)
  - Converting an Expense Claim
- **Utility Billing:**
  - Customer Maintenance
  - Utility Maintenance
  - Service Maintenance
  - Miscellaneous Fee Maintenance
  - Deposit Maintenance
  - Pay Fees Program
  - Account Customer Inquiry
  - Service Orders Maintenance
  - Meter Inventory Maintenance
  - Handheld Export and Import Process
  - Bill Run Processing
  - Final Bill Run Processing
  - EFT Processing
  - Bill Refund Process
  - Bill Adjustments
  - Late Fees
  - Delinquent Notices
  - Cut Off Process
  - Collections Process
  - Lien Processing
  - Setoff Debt Processing
  - Special Conditions
  - Payment Plans
  - Container Inventory
  - Assessments

- Budget Billing
-

- **Payroll**
  - Overall Salary & Benefit Projections Processing
    - Projection Start & Status
    - Projection Processing
    - Projection Pay Types
    - Projection Job Class
    - Projection Salary Tables
    - Projection Position Control
    - Projection Allocation Maintenance
    - Projection Employee Master
    - Projection Employee Job/Salary
    - Projection Employee Deductions/Benefits
    - Projection Contract Increases
    - Projection Step Increases
    - Projection Longevity Report
    - Projection Salary Calculate
    - Projection Benefit Calculate
    - Post Projection Data to Budget
    - Update Live Position Control
  - Overall Payroll Process
    - PR Start & Status
    - Time Entry (DCT)
    - Time Entry Approval (DCT)
    - Time Entry Import to PR
    - Void Payroll
    - Misc. Payroll
    - Payroll Vendor Processing
  - Overall HR Process
    - Employee Certifications
    - Employee Evaluations
    - Case Management
    - Training Courses
    - Employee Training
    - Training Forecast Report
    - Training Hours Completed Report
  - Overall Personnel Actions Process
    - Actions Entry (DCT)
    - Personnel Actions Setup
    - Rapid Entry

        - Condensed Pending Master File
        - Actions Inquiry (DCT)

- **HR Benefits Enrollment**
    - Overall Open Enrollment Process
    - Overall Life Event/New Hire Enrollment
    - Benefit Election Setup
    - Online Benefit Enrollment
    - Election Approval and Posting Process
    - 834 File layout and setup