

INFORMATION TECHNOLOGY AGENCY/ASSETWORKS
Detailed 3-Year Hosting Comparison
GSD, LAFD, LAPD Systems
07-25-14

ASSETWORKS	Year One	Year Two	Year Three
3-Year Dedicated Environment Option	\$723,091	\$723,091	\$723,091
3-Year Total			\$2,169,273

ITA	Year One	Year Two	Year Three
Hardware			
3 Servers	\$60,000	-	-
Storage	\$30,000	-	-
Software			
2 Windows Enterprise Server Licenses	\$5,000	\$2,000	\$2,000
Crystal Enterprise Server License	\$1,500	\$1,500	\$1,500
Crystal User Licenses (20)	\$20,000	\$20,000	\$20,000
Oracle Database (4 processors)	\$90,000	-	-
Oracle Database Support	\$20,000	\$20,000	\$20,000
Infrastructure			
2 Backup Licenses	\$5,000	\$1,500	\$1,500
1-Year Tape Retention	\$3,000	\$3,000	\$3,000
VMWare Licenses	\$6,000	\$1,500	\$1,500
Staffing * direct costs			
P A IV	\$105,444	\$105,444	\$105,444
Syst. Programmer II	\$116,343	\$116,343	\$116,343
DBA	\$121,438	\$121,438	\$121,438
Training	\$10,000	\$10,000	\$10,000
Total:	\$593,725	\$402,725	\$402,725
3-Year Total:			\$1,399,175

3 year savings through ITA Hosting: \$770,098

VMS Summary of 3-Year Expenditure Forecast

Vendor Expenditure Forecast by Year						
Software/Hardware	Year 1	Year 2	Year 3	Total 3-yr Cost:		
Maintenance & Support	\$ 740,755	\$ -	\$ -	\$	740,755	
Services - Implementation Software/Travel	\$ 119,460	\$ 123,044	\$ 126,735	\$	369,239	
	\$ 73,274	\$ 1,067,296	\$ 739,330	\$	1,879,900	
Sub-total:	\$ 933,489	\$ 1,190,340	\$ 866,065	\$	2,989,894	
ITA Expenditure Forecast by Year						
Software/Hardware	Year 1	Year 2	Year 3	Total 3-yr Cost:		
Maintenance & Support	\$ 240,500	\$ -	\$ -	\$	240,500	
Training	\$ -	\$ 49,500	\$ 49,500	\$	99,000	
	\$ 10,000	\$ 10,000	\$ 10,000	\$	30,000	
Sub-total:	\$ 250,500	\$ 59,500	\$ 59,500	\$	369,500	
Staffing						
LAPD: (2-Sr. Automotive Supervisors)	Year 1	Year 2	Year 3	Total 3-yr Cost:		
GSD: (1-Systems Analyst II, 1-Management Analyst II)	\$ -	\$ -	\$ 186,876	\$	186,876	
LAFD: (1-Programmer Analyst IV, 1-Management Analyst II)	\$ 171,676	\$ 171,676	\$ 171,676	\$	515,028	
ITA: (1-Systems Programmer II, 1-Data Base Architect, 1-Programmer Analyst)	\$ -	\$ 191,282	\$ 191,282	\$	382,564	
	\$ 343,225	\$ 343,225	\$ 343,225	\$	1,029,675	
Sub-total:	\$ 514,901	\$ 706,183	\$ 893,059	\$	2,114,143	
Communication Equipment						
GSD Communication Equipment	Year 1	Year 2	Year 3	Total 3-yr Cost:		
	\$ 15,000	\$ -	\$ -	\$	15,000	
Sub-total:	\$ 15,000	\$ -	\$ -	\$	15,000	
Vendor Expenditures + Department Staffing						
AssetWorks Costs	Year 1	Year 2	Year 3	Total 3-yr Cost:		
ITA Hosting Costs (excludes staffing)	\$ 933,489	\$ 1,190,340	\$ 866,065	\$	2,989,894	
City Staffing Costs (all depts including ITA)	\$ 250,500	\$ 59,500	\$ 59,500	\$	369,500	
GSD Communication Equipment	\$ 514,901	\$ 706,183	\$ 893,059	\$	2,114,143	
	\$ 15,000	\$ -	\$ -	\$	15,000	
GRAND TOTALS:	\$ 1,713,890	\$ 1,956,023	\$ 1,818,624	\$	5,488,537	
				Budgeted:		\$3,100,000
				Deficit:		(\$2,388,537)



STATEMENT OF WORK

City of Los Angeles



FleetFocus™ Fleet Management Applications

February 3, 2014

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Introduction

AssetWorks is pleased to assist City of Los Angeles (CoLA) with the implementation of the FleetFocus™ fleet management applications. AssetWorks recommends CoLA leverage AssetWorks' expertise and consulting resources to ensure a timely and cost effective implementation.

All professional project management and training services described in this Statement of Work are provided on a **fixed cost** basis by AssetWorks to CoLA. Task budgets are developed based on AssetWorks' current knowledge of CoLA's expressed requirements and experience with similar AssetWorks implementations. AssetWorks Professional Services resources are scheduled on a first come-first served basis. Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and CoLA will discuss these changes in good faith at their earliest opportunity.

AssetWorks will commence the project upon receiving a signed Professional Services Agreement, a registered contract or purchase order, and official notice to proceed with the project. This Statement of Work will be referenced in the overall FleetFocus Implementation contract and follow the document precedence agreed to in the master contract.

This Statement of Work identifies the tasks required for the implementation of the FleetFocus™ application and is based on AssetWorks' current understanding of the requirements and AssetWorks' previous experience with similar engagements. The services provided under this Statement of Work include project management, system analysis, testing, training, and general consulting and implementation assistance.

The following summary generally describes the services that the AssetWorks Professional Services team will deliver to insure a successful implementation of the FleetFocus application.

AssetWorks is proposing to implement FleetFocus in six phases over 20 months. The proposed phases are:

WBS 1.0 – City-Wide Implementation/Project Management: Overall project management, FleetFocus installation, interface development, and enhancements.

WBS 2.0 – GSD Implementation: Implementation of FleetFocus application at all GSD facilities, including system design, data conversion, system setup and configuration and user training.

WBS 3.0 – LAFD Implementation: Implementation of FleetFocus application at all LAFD operations, including system design, data conversion, system setup and configuration, testing and user training.

WBS 4.0 – LAPD Implementation: Implementation of FleetFocus application at all LAPD facilities, including system design, data conversion, system setup and configuration, testing and user training.

WBS 5.0 – KeyValet Implementation: Installation of KeyValet key controllers at seven CoLA locations, configuration of the Motor Pool modules and user training.

WBS 6.0 – Capital Asset Management Implementation: Implementation of the integrated Capital Asset Management (CAM) application, including system design, asset design, user training and data loading

The implementation of FleetFocus at the three agencies will follow the same approach. The implementations will be staged to allow AssetWorks and the City to focus resources on the agency, its operations, work-flows and requirements. The general services that will be offered are described below.



Project Implementation and Training

Project Management and Administration – AssetWorks will assign a Project Manager to assist CoLA with the implementation of FleetFocus™, including conducting a project Kick-Off Meeting; developing and managing the implementation schedule; managing AssetWorks resources and deliverables; conducting regular progress meetings; and providing regular project status reports.

System Design – AssetWorks will review CoLA's proposed fleet and maintenance management business process to identify opportunities to engineer those processes to take full advantage of the functionality and capabilities of the FleetFocus™ application. AssetWorks will also assemble the final requirements for all application functionality, including any interfaces, enhancements and reports. AssetWorks will document and review the requirements with CoLA before proceeding with the application design, setup and training. AssetWorks will also identify requirements for any interfaces and enhancements required to close functional gaps identified during the business process review.

System Setup and Configuration – AssetWorks will consult with CoLA on the setup and configuration of the FleetFocus™ application to support the loading of the pre-production data. This task includes setting up the application's security module, creating user roles, and populating reference codes. CoLA will have principal responsibility for loading the data and setting system flags and attributes, with direction from AssetWorks. AssetWorks will provide CoLA with templates for loading unit records into the system. AssetWorks will assist CoLA with the design of the user roles and work-flows during a work-flow planning workshop. CoLA will have responsibility for configuring the advanced functionality needed to support the planned work flows such as defining job schedules and standards; billing; warranty terms; motor pools and inventory reorder parameters.

Documentation – AssetWorks will provide CoLA with our standard documentation and training aides. CoLA will be responsible for customizing standard AssetWorks documentation to be used as training guides for CoLA users. AssetWorks will review completed documentation to insure the edited documents correctly support the application.

Application Readiness – AssetWorks will assist CoLA with conducting a conference room pilot implementation prior to the production rollout of the application. This testing will focus on proving that the application has been populated and configured correctly and is ready to deploy in accordance with specifications.

Training – AssetWorks will provide on-going training throughout the implementation. This training will include: Key-User, Application, and User training sessions. AssetWorks will provide on-site training to all CoLA fleet personnel as requested in the RFP. All training will be conducted by AssetWorks Implementation Consultants.

Production Rollout – AssetWorks will provide on-site support during the initial production roll-out for a smooth transition to the FleetFocus™ application.

Technical and Development Support

FleetFocus Installation – AssetWorks will install the FleetFocus™ application in CoLA production and test environments or in an AssetWorks managed data center. Installation includes the FleetFocus™ application and batch services, the Crystal Reports Server/Business Objects Enterprise reporting environment, and the FleetFocus™ Oracle or SQL Server production and test database instances.



Data Loading – AssetWorks will provide templates and instructions for extracting and loading large volume record sets to populate master records and appropriate history. CoLA will have responsibility for populating the templates and submitting the templates for loading.

Interfaces - AssetWorks will develop the FleetFocus side of all interfaces between FleetFocus™ and CoLA internal and external systems. AssetWorks will provide a design specification and fixed cost estimate for each interface that must be accepted by CoLA. CoLA will have responsibility for developing its side of all internal CoLA application interfaces. Completed interfaces will be delivered in a schedule maintenance release or upgrade.

- See Appendix B – Proposed Interfaces

Modifications and Enhancements – AssetWorks will provide custom development services as needed to develop customer requested modifications and new functionality. For each development item, AssetWorks will prepare a detailed design specification and fixed cost estimate that must be approved by CoLA before proceeding. Completed enhancements will be delivered in a schedule maintenance release or upgrade.

- See Appendix C – Proposed Enhancements

Business Intelligence Support - AssetWorks will provide support to CoLA with implementing the various business intelligence modules available in FleetFocus: standard reports, customizing reports, dashboards, performance measures and metrics (PMM) and ad-hoc reporting. AssetWorks will aid CoLA with determining its business intelligence requirements and recommend the appropriate tool for addressing reporting needs. AssetWorks will provide additional training with implementing those BI modules that CoLA has licensed.



WBS M5 FleetFocus Implementation Work Plan**WBS 1.0 City-Wide Implementation**

This phase of the project will run the entire duration of the project and is focused on delivery services that are common to each the City's fleet agencies, including: overall project administration, installation, and interface and enhancement development. These tasks are independent of each of the agency implementations and will be delivered concurrently with the agency roll-outs.

City-Wide Project Management

AssetWorks will assign a senior Project Manager to lead the overall project and coordinate all AssetWorks project activities for each of the implementation phases. The AssetWorks Project Manager will ensure that sufficient resources are available to implement the system in accordance with the project requirements. The AssetWorks Project Manager will monitor the project resources to ensure quality delivery of services and that the deliverables are completed in accordance with the project requirements. The Project Manager will also be responsible for preparing periodic billings in accordance with the payment terms laid out in the License and Professional Services agreements.

AssetWorks will also assign a Professional Services Manager to supervise the Project Manager, provide additional subject matter expertise, monitor the project resources and budget, and ensure quality delivery of services. While the Project Manager is the primary contact, the Professional Services Manager is CoLA's first escalation point for any issues arising during the project, while the Program Manager will provide executive level communication and support.

AssetWorks expects CoLA will appoint a Project Manager, who will lead the overall CoLA project team and be responsible for the CoLA personnel and resources on the project. AssetWorks recommends System Administrator(s) from each department be designated who will be responsible for the configuration, implementation, and administration of the FleetFocus application and server as the primary technical contact during the implementation.

Throughout the project, AssetWorks will provide the following on-going project management services:

- Coordination of project resources and work so that milestones are met in an efficient manner; tasks will be designed so as to reasonably minimize implementation time and cost while taking into consideration resource and time constraints such as CoLA staff availability;
- Follow-up on action items and issues;
- Work with CoLA and each of its agencies to manage risks throughout the project
- Serve as the main point of contact for CoLA project manager(s);
- Provide regularly scheduled updates to the work plan and project budget.



The hours and costs for project management services have been allocated to each phase

Project Start-Up

AssetWorks will commence the project upon receipt of the fully executed Professional Services Agreement or an official notice to proceed.

This initial project task is to initiate the start-up of the project by scheduling a Project Start-Up conference call with CoLA.

AssetWorks will initiate the Project Start-Up conference call with CoLA's designated Project Manager to discuss how to proceed with the implementation. Key points for this initial call include:

- Introducing key members of the AssetWorks and CoLA project teams.
- Scheduling of the Project Kickoff meeting.
- Reviewing key project deliverables, terms, and conditions.
- Distributing the FleetFocus™ Implementation Questionnaire.
- Forming the core team.

In addition to the Project Manager and System Administrator, AssetWorks recommends CoLA appoint a core project team for the project implementation with Subject Matter Experts (SME) from each operational area of CoLA's business. The SMEs will serve as the functional lead and Key-Users for their business area and will have responsibility for leading discussions and making decisions regarding the implementation and configuration of the functionality relevant to their operation. The core group representatives should have complete knowledge and familiarity with CoLA's operations and objectives, and will form the majority of the roll-out team later in the project.

City-Wide Project Administration

For the City-Wide project phase, the project management activities will be focused on working with City's Executive Steering committee to keep the overall project on task, prepare monthly invoices and to coordinate activities involving IT support and multiple agencies.

AssetWorks will conduct a monthly status meeting with the CoLA executive stakeholders to keep them abreast of the project progress and to discuss issues and activities that cross agency operations.

AssetWorks will prepare monthly statement of hours worked by task and resource, along with an accompanying invoice for services and travel expenses.

AssetWorks Deliverables for City-Wide Project Management Services

- Project billing and administration
- Project Start-Up Conference Call
- Implementation Questionnaire delivery



- Updated Project Plan.

CoLA Responsibility

- Assign Project Manager to oversee City-wide FleetFocus implementation
- Identify Core Project Team, their responsibilities and ensure their participation through-out the project life-cycle
- Coordinate Project Start-Up Conference Call

FleetFocus Environment Installation**Data Center Hardware Acquisition and Installation**

CoLA controls its infrastructure and technology. AssetWorks will provide a System Requirements document detailing the recommended hardware requirements, database sizing guide and configurations to successfully deploy the FleetFocus™ application.

AssetWorks is not responsible for the purchase and installation of hardware or database software. AssetWorks will not be responsible for any construction or communications infrastructure. AssetWorks will not install any servers or other hardware.

CoLA will be responsible for purchasing all hardware and installing the hardware in its data center. CoLA is responsible for establishing network connectivity, installation of all firewall and network security software. CoLA will be responsible for testing that the hardware is correctly installed and successfully configured on the network. AssetWorks assumes that CoLA will install the servers and resolve network configuration issues that arise as a result of the server operating system installation (in order to connect to CoLA wide area network).

CoLA will provide the required relational database management system (RDBMS), application and test web servers (the web server must use Microsoft IIS), reporting/batch server and other operating software (including licenses, media, and documentation) for this installation task. All operating systems, related server management/virtual machine software, and RDBMS must be installed and all servers operational before installation can be scheduled.

The RDBMS, Oracle 10g/11, not directly purchased from AssetWorks must be pre-installed by CoLA prior to the installation of FleetFocus. CoLA will install and configure the database instances: production and test. AssetWorks will install and configure the FleetFocus M5 schema in each instance during installation. AssetWorks will work with CoLA to correctly size the FleetFocus™ database and ensure CoLA network environment is ready for the new system.

In addition to the server environment, AssetWorks also recommends CoLA procure the following:

- Client workstations, laptops or tablets that support IE 10 or higher, Chrome, or Firefox.
- AssetWorks recommends 17" monitors for PC based workstations. Touch screen monitors are optional.
- Bar code scanners as needed to support labor capture and inventory operations. Requires Code3of9.
- An appropriate number of printers.



- A standby power supply and conditioner to protect the server environment from power problems.
- Remote access to the application and database server to support remote diagnostic communications with AssetWorks support team.
- Provision for disaster recovery.

Prior to scheduling the FleetFocus™ installation, the AssetWorks Project Manager will review with CoLA's Project Manager that the required hardware is available and configured on CoLA's network. The AssetWorks Installation Engineer will contact the appropriate CoLA technical staff *prior to* the scheduled installation date to verify that the technical environment is prepared. During that call, a pre-installation configuration questionnaire will be completed by the AssetWorks Installation Engineer.

FleetFocus Software Installation

Once CoLA's environment is ready for the installation, the Project Manager will schedule the AssetWorks Technical Support Engineer into the appropriate CoLA location. The Technical Support Engineer will complete the following software installation tasks:

The software installation will include installation of two FleetFocus™ environments to be used during the project lifecycle: Production and Test. The Test environment provides an alternative to production for testing data conversions, interfaces, and software upgrades. The Application and Test application environments must be installed on separate servers as the business components in the two environments can vary. A single Batch and Reports Server will be installed, but will contain separate file structures for test and production reports and batch programs. AssetWorks will also install test and production database schemas into two separate {CLIENTNAME}-installed database instances. License keys for FleetFocus™ and all licensed optional modules will be installed by AssetWorks activating the application. Once completed, the Technical Support Engineer will publish a URL for each environment deploying the application.

The AssetWorks Technical Support Engineer will complete an Installation Worksheet form that documents the installation for later use in support troubleshooting. The Technical Support Engineer will also complete a basic installation test plan to insure the system is correctly installed and functionality. This test will serve as certification that the application is installed and ready for use by CoLA.

An installation software CD, a copy of any third-party software provided by AssetWorks, and a copy of the completed Installation Guide will be provided to CoLA during the installation process.

During the installation, the Technical Support Engineer will provide on-going training with CoLA technical staff and FleetFocus System Administrator to review the installation, and basic application maintenance and upgrade procedures. At the conclusion of the installation the Technical Support Engineer will review the installation process with CoLA engineers and administrators.

The entire installation session is typically two to four days in duration depending on the complexity of CoLA's network and security policies and network/application management procedures. CoLA's technical resources from its network administration, security/firewall, database administration, and web-services areas should be available, or on-call, as needed during the installation period.



System Environment Documentation

AssetWorks will deliver a document detailing the ITA hosted FleetFocus environment. AssetWorks will describe the physical servers that host the FleetFocus application, batch programs, reports and database. It will detail the configuration of the servers and describe the networking topology of the FleetFocus application. AssetWorks will also deliver to CoLA the FleetFocus System Architecture guide.

System Performance Test

AssetWorks and ITA will jointly conduct a load test of the FleetFocus environment.

Deliverable for Software Installation Services

- System Requirements and Sizing Guide
- Installation of FleetFocus software and database schemas in a test and production environment
- Installation of Business Objects Enterprise or Crystal Reports Server software or adapter;
- Certification of the application installation by AssetWorks.
- System Environment and Architecture Documentation.
- System Load Test

Interface, Enhancement and Report Development

Appendix A – CoLA Requirement Matrix details functional requirements from each of the three fleets that will implement FleetFocus. AssetWorks has reviewed each of the requirements and has provided a response to each requirement. Where a gap between the requirement and functionality has been identified, AssetWorks has proposed a solution. If the proposed solution is to develop an interface, enhancement, or custom report, AssetWorks will develop the item based on the following assumptions.

Interfaces, enhancements, and custom reports are delivered on a fixed cost basis as determined by an accompanying AssetWorks prepared development specification and cost quote that has been approved by CoLA. Appendix B– Proposed Interfaces and Appendix C– Proposed Enhancements include a list of proposed interfaces and enhancements based on CoLA’s requirements provided to AssetWorks. A budget of hours for customer report development are included for each agency.

Define Interface and Enhancement Requirements

All development requires an accepted specification before AssetWorks will commence work.

AssetWorks Project Manager will meet with the appropriate CoLA operation and subject-matter resources to draft an outline of the functional requirements for each item. Additionally, AssetWorks will meet with CoLA technical resources to discuss any application environment requirements and to identify the technical requirements for any data exchange with external systems.

AssetWorks will review with CoLA any functionality gaps and work with CoLA to devise solutions for closing each gap. Possible solutions may include (i) devising a workaround using existing functionality, (ii) altering CoLA



processes to conform to the requirements of FleetFocus™, or (iii) developing specifications to enhance FleetFocus™ functionality to support CoLA's processes or to create integrations to other CoLA applications.

AssetWorks will work with CoLA to gather and assemble both the functional and technical requirements for each interface and enhancement that is to be developed. These requirements will be used to draft a development specification that will describe how the interface or enhancement will process information, the user interface for collecting and reviewing data, changes to the data model, and the integration method that will be used to link with any necessary external systems. An accompanying cost proposal will also be developed and presented with the specification.

CoLA will be responsible for reviewing the specification and cost proposal. CoLA will provide feedback on the specification, including any changes to the requirements that may necessitate a change in the design and cost proposal. AssetWorks will commence the development once CoLA has approved the specification and accepted the cost quote.

AssetWorks assumes CoLA will involve the appropriate staff to reach consensus and decisions on all interface and enhancement specifications during the discussion and according to the proposed timeline.

Interface and Enhancement Delivery

It's very common to have the FleetFocus application integrated with other business applications, particularly: fuel, financial, purchasing, payroll and human resources applications. AssetWorks has developed over 350 different interfaces for the FleetFocus application. If the requirements call for integration, AssetWorks will follow our standard interface development and delivery approach as outlined below.

Similarly, customers often request enhancement or modifications to support particular work-flows or business requirements that cannot be supported by a change in process or other work around and must be incorporated in the application functionality.

AssetWorks has a standard procedure for developing interfaces, new application functionality, modifications to existing application modules, and custom reports that includes:

- Create a preliminary design specification for each enhancement and/or interface
- CoLA project team reviews the preliminary design specification
- AssetWorks reworks the design specification as needed
- CoLA project team provides final approval of the design specification
- AssetWorks develops the deliverable in the AssetWorks development environment
- AssetWorks QA team tests new enhancements and reports against the design specification; exercising the functionality, work-flow and business rules as outlined in the specification. Interfaces are also tested in the development environment, utilizing CoLA provided data where available.
- AssetWorks releases completed enhancements and reports in a planned version release or a scheduled patch. Interfaces are also delivered in releases and patches, although some interfaces can be delivered as independent executable outside a release or patch.



- AssetWorks provides documentation based on the design specification and release notes.
- CoLA installs and test enhancement and interfaces in CoLA's test environment with remote assistance from AssetWorks
- For new modules and complex enhancements, AssetWorks provides training on-site or via a webinar
- CoLA gives acceptance of each deliverable
- CoLA deploys enhancement and/or interface in production environment

CoLA's current AssetWorks Project Manager will oversee the development work and deliverables described in this Statement of Work. The Project Manager will have the following responsibilities:

- Assemble all requirements for interfaces and application enhancements. AssetWorks will work with CoLA to prepare a list of functional and technical requirements for each development item.
- Based on the functional and technical requirements, draft development specifications for each individual interface and/or enhancement.
- Review with CoLA the specifications and obtain CoLA's revisions and final acceptance of the specification(s).
- Coordinate with the AssetWorks FleetFocus Development team the delivery of each deliverable and periodically communicate with CoLA on the progress of each item.
- Coordinate with CoLA any prerelease review and testing of the interfaces and/or enhancements. This may include WebEx-based showcases and/or remote testing on an AssetWorks demo or testing environment.
- Coordinate the delivery of the new interfaces and/or enhancements in a FleetFocus patch or release.
- Schedule any training that must accompany the implementation of new interfaces or enhancements.
- Consult with CoLA during their internal testing of the deliverables; communicate with the AssetWorks development team the results of client testing and coordinate any development support needed to insure the delivered items are installed and functioning as described in the specification.
- Document any changes to the requirements and coordinate any updates to the specification(s) and cost quote(s) required to satisfy the new requirements.
- Document CoLA's acceptance of each deliverable.

Once development has been completed and tested by AssetWorks in its test environment, AssetWorks will deliver the interfaces and/or enhancements to CoLA for testing in its FleetFocus™ test environment.

Interfaces and enhancements will likely be delivered in new release or a patch to a current release. CoLA will be responsible for installing the patch or release. After delivery and installation in the CoLA test environment, CoLA will have an agreed upon amount of time to test and accept or reject each development item.

AssetWorks will provide documentation – typically the final development specification – and instruction in how the interface and enhancement are to be installed and executed. AssetWorks will provide remote assistance to instruct



clients on the setup and configuration of any customer-specific interfaces or enhancements once they have been installed.

CoLA will be responsible for testing the delivered items against the design specification and providing final approval on each item. Each interface program is tested using CoLA database and test cases defined in the design specification. For incoming interfaces, CoLA will be responsible for generating an incoming file of test data and submitting the file through the planned input method. Outgoing interfaces will generate test data output and submit that output to the target external application using the approach outlined in the design specification.

Enhancements will be tested in the CoLA Test environment using test case data generated by CoLA. It will be up to CoLA to work through the various scenarios needed to test that the application functionality matches that that is described in the design specification. AssetWorks will provide assistance with helping CoLA verifying that the enhancement is correctly processing the data according to the work-flows, business process, and rules outlined in the specification.

Issues or changes required to the interface or enhancement to meet CoLA requirements will be documented. AssetWorks will review the documented issues and will correct those issues that do not meet the explicit requirements of the design specification. AssetWorks will coordinate with CoLA the delivery of any updated items. Those issues that are outside of the scope defined in the accepted design specification will be reviewed and new quote prepared if required.

Once the delivered items have been accepted by CoLA, the interfaces and enhancements can be installed and configured in the production environment.

Unless otherwise agreed to, AssetWorks invoices the entire fixed-fee development such as is included in this Statement of Work, amount upon delivery of the item to CoLA. AssetWorks will notify CoLA via email that the development item is ready for delivery and the development item will be placed as a release, patch or executable on the AssetWorks FTP site for download by CoLA. At which time, it will be CoLA's responsibility to download and install the items in their test environment.

If after 30 days following the delivery of the development item, CoLA has not installed the delivered items in its test environment, has not begun testing, has not documented to AssetWorks any issues or changes required, or has not formally rejected in writing the development item, AssetWorks will consider the item delivered and accepted. Any item installed in a production environment will be considered accepted.



M5-2.0, 3.0, 4.0 GSD, LAFD, LAPD Fleet Implementations

AssetWorks is proposing to implement FleetFocus at each of the CoLA three major fleet operations in a phased approach:

- M5-2.0: General Services
- M5-3.0: Fire Department
- M5-4.0: Police Department

The tasks that will be completed for each implementation will be nearly identical and follow the same sequence. The following describes each task and the responsibilities of AssetWorks and each fleet operation to complete the implementation.

Each agency will be implemented as a separate operation and segregated in the database by a company code on each record. This will allow each fleet to implement FleetFocus to suit its operations and support its specific coding and work-flows. Each operation will be responsible for executing each task as outlined below.

A. Kick-Off Meeting

The Kick-Off Meeting is devoted to introducing the core project team to the AssetWorks team, the project implementation methodology, and the FleetFocus application. After completing this session, the project team will have an understanding of the implementation process and will be prepared to start collecting the data required to setup and configure the system.

This meeting is typically held over one to two days and includes discussion and review of the following topics:

- Project plan tasks and timeline,
- System Implementation Steps (Jump Start Implementation document)
- Assignment of customer responsible tasks,
- Assigning the Implementation Questionnaire,
- Contract deliverables,
- Change management procedures,
- The data loading process, and
- Orientation on the FleetFocus™ system.



Based on discussions during the Kick-off Meeting, the AssetWorks Project Manager will revise the project plan and assign AssetWorks and CoLAproject resources to various tasks in the plan. Following the Kick-off Meeting, an updated project schedule will be delivered to CoLA by AssetWorks.

CoLA will assist in facilitating this session. CoLA will provide a suitable meeting facility, with a projector and will be responsible for inviting attendees. AssetWorks will CoLA with soft copies of the orientation materials, which will include presentation materials outlining the project objectives and product information. CoLA will be responsible for producing and distributing any hard copies of orientation materials.



B. Project Management

AssetWorks' Project Manager will have responsibility for managing AssetWorks responsibilities with the implementation of FleetFocus in GSD operations. During the implementation, AssetWorks will provide the following project management and administrative services to execute the project plan, including:

- Manage and maintain the project plan. AssetWorks project manager shall submit a complete draft of the Project Control Document (PCD), which includes a detailed work plan and project schedule, for LAPD review within ten (10) business days of project inception.
- Managing all deliverables. Before work begins on each deliverable, the AssetWorks' project manager shall prepare and review the proposed format and content for the deliverable with the LAPD project manager
- Conducting regularly scheduled status meetings and preparing monthly status report.

AssetWorks project manager shall notify LAPD project manager and executive sponsor of any delays in completing a project deliverable. Notification must be received in writing within five (5) business days of the delay being identified. All delays reported by the AssetWorks project manager shall include the impact of the delay and describe or suggest measures to get back on schedule.

AssetWorks Deliverables for Project Management Services

- Relevant Project Status Meetings and Reports
- Management of action items, issues and risks
- Facilitation of status meetings
- Scheduling and execution of all AssetWorks' deliverables
- Preparation and execution of any project change orders
- Updated Project Plan.

CoLA Responsibility

- Coordinate CoLA resources in order to maintain the project schedule and minimize delay
- Schedule Project Team meetings; provide meeting facilities, including teleconferencing; and ensure appropriate CoLA attendance
- Schedule Project Steering Committee Meetings; provide meeting facilities, including teleconferencing; and ensure appropriate CoLA attendance
- Ensure appropriate management and project team members attend.
- Provide meeting facilities



- Review the Issue Log
- Provide Change Control Procedure
- Review (and facilitate approval, as required) the Project Plan
- Review the Project Status Report
- Provide project-related documentation and identify project resource constraints
- Answer AssetWorks' questions related to CoLA's project material



C. System Design

The goal of this phase is to develop an understanding of CoLA's policies and procedures, identify opportunities to adopt best practices that support the application's implementation and determine how FleetFocus™ will be integrated into the day-to-day operation of the fleet.

Following the Project Kick-off, AssetWorks will initiate a high-level cooperative review of CoLA's current and planned fleet business processes and procedures and its strategic goals in order to develop a set of requirements for a successful system implementation. The Business Process Assessment (BPA) will identify practices and procedures that can be changed to provide a more efficient fleet management operation and a smoother implementation and operation of FleetFocus. AssetWorks will perform the following tasks as part of the BPA:

Implementation Questionnaire and Process Review

The Implementation Questionnaire introduced during the Kick-Off Meeting will be the starting point for the Business Process Review. CoLA's core team is responsible for completing the Implementation Questionnaire before any training sessions can be scheduled. CoLA's responsibilities for this task also includes the assimilation of all relevant fleet, operations, and maintenance operating procedures and documents supporting the proposed data and work-flows. Once the Questionnaire is completed, AssetWorks will review it and incorporate this with the materials we have gathered as part of the business process assessment.

While CoLA is completing the questionnaire, AssetWorks will also begin to familiarize ourselves with the overall operation, conduct field site visits to meet users and observe operations, and begin to assemble documents, procedures and other materials supporting current operations and business processes.

Current State Workshop Sessions

Once the Questionnaire has been completed and all relevant documentation assembled, AssetWorks will meet with the Core Team to commence the Current State Workshops. The BPA Workshops are a series of meetings and interviews with core team members and other subject matter experts (SME) to review the Implementation Questionnaire; document current work-flows; identify barriers to process efficiencies; identify potential integration opportunities;; and discuss strategic objectives for future operations.

The interviews and sessions will provide AssetWorks with the following:

- Awareness of how CoLA works and processes fleet information
- Ability to define information processes, functions, and functional areas
- Assessment of the likely adoption of future state (To Be) processes and recommendations

AssetWorks will conduct interview sessions for the following CoLA functional areas.

- **Maintenance Management** – Topics include: opening work orders, work assignment, labor hour tracking, indirect time, reviewing work orders, requesting parts, and other shop activity functions such as PM scheduling, PM programs, and the development of PM checklist items.
- **Purchasing and Inventory Management** - Topics include: inventory management, replenishment, emergency



purchases, charging materials, creating purchase requests, handling parts warranties, dealing with serialized parts, and other inventory management functions.

- **Asset Management** - Topics include: how assets are acquired, entered into the application, assigned, and eventually disposed. Also discussed will be fleet specification and categorization, warranties tracking, capital costs and depreciation, replacement planning, meter management and other asset management tasks.
- **Fuel Management** - Topics include: internal fueling, commercial fueling, and fuel card management.
- **Financial Management** - Topics include: cost assignment, account management, rate development, markups, customer service agreements, and billing methods. Also discussed will be lease and motor pool assignments and rates.

The following image is representative of the proven tools AssetWorks will bring to the project.

AssetWORKS

Functional Configuration Questionnaire
Maintenance Planning and Scheduling

Distribution

To:	Project Manager	@Customer.com
Co:	[Customer] Core Implementation Team	

Maintenance Planning & Scheduling

Required Participants:	
Optional Participants:	
Date/Time/Location of Meeting:	
AssetWorks:	

Goal

Goal:	1. Understand how [Customer] plans and schedules all maintenance activities in their garage. 2. Understand how [Customer] manages timekeeping and labor capture. 3. Collect documentation (i.e. reports, forms, screen shots, etc.) 4. Create a graphical representation of current workflow.
Attachment(s):	

Discussion Points

Discussion Points:	1. How does [Customer] currently plan and schedule maintenance activities? 2. How is work prioritized? 3. What systems and/or reports do you use to support scheduling? 4. How is refueling accomplished? 5. How does [Customer] capture labor currently? 6. Is labor at the garage level used to compute payroll? How? 7. Are there any pay differentials? How do they work? 8. Are there any new initiatives [Customer] is planning to implement with regard to timekeeping, or labor capture, or pay differential?
Attachment(s):	

Understanding the "As-Is"

Question:	Answer:	Answer provided by:	Action Item for:
1. TYPER'S mechanic/technician comes into work, how do they know what to do?			

Maintenance Planning & Scheduling.doc AssetWorks Confidential Page 3 of 4

Future State Workshop

After completing the Current State sessions, AssetWorks will compile the results of the interview and document the recommended future state TO BE processes and work-flows. AssetWorks will present these recommendations to CoLA in a workshop format to review the proposed processes and work-flows and gather final feedback from CoLA. AssetWorks will demonstrate at a high-level the recommended work-flow and functionality that will support



the planned future state, as well as discuss any gaps that may exist between the current and future state requirements. The purpose of this workshop is not to finalize work-flows or processes, but to insure that both AssetWorks and CoLA have an understanding of what functionality will be implemented and generally how that functionality will support future operations. The results of this workshop will be used to guide training, configuration and future work-flow planning.

Future State Concept Report

AssetWorks will document our findings and the concept for the planned future state in a report. This document will describe at a high-level the future to-be processes and FleetFocus functionality that will be deployed to support those processes.

Deliverable for Business Process Assessment

- Implementation Questionnaire
- Current State Workshop
- Future State Workshop
- Future State Concept Report

CoLA's Responsibility for Business Process Assessment

- Completion of Implementation Questionnaire in agreed upon time.
- Provide facilities for workshops.
- Arrange to have the correct subject matter experts in attendance for the various workshops.
- Review and approve the Future State Concept Report within 5 days of receipt.



D. System Setup Services

Key-User Workshop

As outlined in the Project Start-up Call task, AssetWorks recommends CoLA appoint a small core team of Key-Users to participate in this project and provide subject matter expertise. CoLA should involve representatives from every department within the fleet organization, and each department should participate and provide input on these critical implementation decisions.

This group must have the authority and charter to make appropriate decisions regarding the FleetFocus implementation. The group representatives should have complete knowledge and familiarity with the operation, including maintenance, equipment acquisition, parts inventory, and procurement. The group members should be familiar with the current processes and systems.

The Key-User workshop is very much a dialogue and exchange of information where CoLA's project team will plan the overall integration of FleetFocus™ into CoLA operation under the guidance of AssetWorks' expertise. Decisions made during this phase of the project will have a **direct effect** on the work flow in the roll-out of FleetFocus™.

AssetWorks will lead this group in a series of Key-User Workshops over several days. The results of the earlier Business Process Assessment Workshops will be used to guide the discussions. The objective of this Workshop is to provide key users with the skills and information necessary to make decisions and perform all system set-up tasks with relation to system security, reference codes, departments, locations, vendors, units, employees, products, inventory, scheduled jobs, warranties and items.

The goal for these meetings is to define and source at least 90% of the standard coding schemes and business practices required for system roll-out. Additionally, AssetWorks will conduct a detailed review of the System Module Flags and will guide CoLA through decision-making process to insure that flags are set to support planned work-flows and processes. Some codes and flags will be set in the production database during the workshop. CoLA resources will have the responsibility in the subsequent configuration tasks for developing and populating the codes defined, but not setup during the workshop.

Prerequisite: This session requires the installation of FleetFocus™, the configuration of the production database, completion of the Business Process Review. The customer must also provide a training room with workstations that can access FleetFocus™. AssetWorks recommends no more than two attendees per computer.

System Configuration

AssetWorks will advise the Project Team on how to setup and configure FleetFocus. CoLA will take action items from the Key-User Workshop to finalize the definition of all relevant FleetFocus™ data elements and references and to use these definitions to configure the application. This configuration will build on the setup defined with CoLA core team during the Key-User Workshop and will focus on setting system flags, setting up new codes, configuring code attributes and loading references.

Because FleetFocus™ enforces referential integrity at the database level; any electronic data conversion cannot be executed until all referenced data elements are loaded. The method used for loading the data will often depend on the number and type of records to be loaded, the availability of electronic sources to convert from, and the complexity of the reference. For many references, it is far easier to simply key in the code and required



description. Departments, Locations, Vendors, and Employees include a record copy feature to copy one configured record to a new record on the table, speeding the entry of these records.

The information to be loaded during the System Configuration includes:

Reference	Task Description
System Flags	The user must review and either accept the default setting or configure each System Flag to configure the application to match the functionality and business rules that support CoLA fleet operations.
System Settings and Masks	System settings set base values used by the application to define locale, time zones, language settings and field masks for time, currency, and other field types. Translation tables can be updated to convert screen and report labels to match user terminology and local language settings.
Maintenance Codes	Configure codes used in the maintenance process, such as: reason codes, the components making up job codes, position codes, and service codes. FleetFocus™ is preloaded with the ATA VMRS coding scheme. These codes can be used as the point of departure for loading the maintenance or codes or the District can start loading from its current coding scheme.
General Reference Codes	Enter all of the references used to assign various codes, standard descriptions and system operation attributes to other objects in the application. These code tables must be populated before the data conversion can fully proceed. For most of these codes, the user only needs to enter a code and description.
Locations	Locations are physical sites that can provide maintenance, store parts, issue fuel, take delivery of new vehicles and serve as the home base for a unit.
Departments/Organizations	Departments are the organizational units assigned to units and represent the basis for all billing and cost accounting. Users also define parameters for performing maintenance directly to a department and creating department group security authorizations.
Vendors	Vendors represent external and internal organizations the provide products and services to the fleet organization. Basic vendor data can be loaded electronically and attributes such as vendor service codes and location preferences configured manually.
Employees	Employees are internal or contracted staff resources that charge time, issue parts, or operate vehicles. Administrative staff and other non-fleet employees, such as pool users, can also be maintained. Employee Groups are created for assigning job. Training courses and transcripts can also be created to track each employee's licenses, certifications and training. Employees could be maintained through an interface.
Asset Codes	The final set of reference codes to be entered is the Asset Codes. These codes are assigned to units to establish the unit's maintenance cycle and its technical specifications. In most cases the Maintenance Class Codes are created manually, but the Manufacturer/Makes/Models and the base Tech Spec information is loaded electronically from the unit data extract. The Tech Specs are then manually configured to assign additional attributes and reporting parameters to a unit.

AssetWorks will provide direction to CoLA during the setup; with CoLA having the primary responsibility for loading all data and verifying that all data has been entered or converted correctly. AssetWorks does offer a Jump Start code set that can be used to pre-populate some of the codes, such as Job Reason Codes, System Codes, and Category Codes.



CoLA's deliverable for this task is complete documentation of CoLA's definitions for all applicable FleetFocus™ data elements. This deliverable is a critical prerequisite to the development of the training material for the roll-out. AssetWorks will work with CoLA to prepare this documentation. CoLA must work through each of the reference and setup screens to insure that manually entered and electronically converted data are loaded correctly and to complete fields not loaded during the data loading or conversion.

System Security/Reference Review

After setup is completed, AssetWorks and CoLA will review the converted and loaded reference codes to verify that all of the codes have been loaded and properly configured to support the conversion of part catalog, units, and other master records that will be loaded electronically. The pre-production data conversion of units, parts and other data records can begin as the necessary reference codes will be in place to allow the enforcement of referential integrity constraints to the converted data.

Deliverables System Setup Services

- Key-User Workshop
- Standard FleetFocus™ System Setup and Configuration Documentation
- System Security/Reference Review

CoLA Responsibilities for System Setup

- Attendance and participation of Key-Users in the Key-User Workshops
- Entry, setup and/or configuration of System Flags, References and Codes
- Design and setup of User Security Roles
- Participation in the Security/Reference Review



E. MCMS Data Conversion

AssetWorks has a standard Data Conversion process in place for AssetWorks clients to move from MCMS to M5. MCMS is AssetWorks' first fleet application. Although the FleetFocus™ M5 application and database structure is several generations removed from MCMS, many of the same MCMS developers were active in developing M5. Our intimate knowledge of the MCMS database structure insures that critical historic and reference information can be brought forward from MCMS to M5.

Key to the MCMS-M5 conversion process is the use of the XML scripts in conjunction with the M5 business components to load the MCMS data. This process insures that all business and referential integrity rules can be applied to the converted data and all related database fields populated.

In most typical conversions, the migration to a new fleet management system results in possible revisions of workflows and a translation of exiting data to conform to the new system or to provide the client with the ability to regroup their existing data to put it more in-line with business requirements. The MCMS to M5 conversion is no different.

Clients have an opportunity to translate key reference data if required through the use of cross-walk tables. Cross-walk tables are temporary tables that contain the old MCMS value and the corresponding new M5 value. During the conversion process where the old MCMS value is encountered, the new M5 value will be substituted. For example, this approach allows for units to be renumbered, locations renamed, and departments redefined.

Units and Unit History Conversion

Similar to MCMS, M5 contains a Unit record with specific information related to the unit. Most of the information contained in the Unit Description (table MCMTB067) table has a similar field in the M5 Unit Main (unit_dept_comp_main) table.

M5 has an unlimited number of "user defined" fields that can be created and customized by the client. Rather than define specific database fields as exists in MCMS for specification unit information, M5 allows a client to define their own field name (or item) and populate the value as required. For each unit, these user-defined fields can have specific values.

The use of user-defined items is common to most structures in M5 and provides the client with the ability to customize the data collected.

Units in M5 are not specifically designated as Power or Trailer or Lift or Reefer units through a "unit type" code but there are several ways to classify these vehicles as such if required. M5 contains 5 user-defined Class Codes and an Activity Code that a client can configure. Each Class Code and Activity Code has an underlying reference table for validation to enforce data integrity. These codes are included as sort and selection options on many of the base M5 reports and on-line query functions.

In addition, M5 contains a Technical Specification code that is used to identify specific configuration classifications of the asset (see discussions under the "Application Group"). The Technical Specification can also be used to segregate vehicles into different classifications.



Equipment History

MCMS captures equipment summary history cost and usage period information by a rolling operating-year (for 10 years) and life-to-date (LTD). These history costs are further broken down by system code. M5 tracks history costs and usage by a fiscal period, fiscal year and LTD. This is a decidedly different approach and will result through the conversion process with the MCMS LTD cost and usage information to be updated in M5 as the last period in the previous fiscal year. Because the operating year is specific by unit and any unit that has been operating for more than 10 years will have the cost and usage information for years 10 and beyond in the MCMS fields presenting the 10th year, the conversion of the operating years to fiscal year and period is difficult. The conversion will retain all MCMS LTD summary costs and the specific period costs for the past 12 or 13 periods.

Fuel History

The conversion of the MCMS Unit History will include LTD fuel issue quantity and cost as well as the previous 12 (or 13) periods. This information coupled with the conversion of the period usage amounts will provide for fuel performance reporting capabilities.

The standard MCMS conversion plan does not include the conversion of detailed fuel transaction history (table MCMTB097) but through mappings of required Client fueling data, this information could be converted to the M5 Unit Fuel Journal (f_unit_prod_chg) and the M5 Commercial Fuel Journal (f_comm._prod_chg).

Application Groups

Typically, the MCMS Application Group relates to the M5 Technical Specification (tech spec). Every vehicle or unit in M5 MUST have a Tech Spec. The Tech Spec in M5 is a structure used to group vehicles by year, manufacturer, make, model and engine/fuel type.

When a Tech Spec is assigned to an Unit record, that record immediately inherits multiple attributes that are linked to the Tech Spec and common to all assets in that group. FleetFocus uses the tech spec to also define the tasks, estimated labor and parts list required to complete any standard job; and to determine what products (fuel) that vehicle can be filled with. Including the fuel type will differentiate the requirements of doing a standard job for a diesel F350 versus one that runs on unleaded, as well as prevent unleaded fuel from being issued to a diesel engine truck.

The tech spec code is one that AssetWorks recommends have some intelligence built in so that knowing a vehicle's tech spec will identify the type of vehicle. In many of the conversions defined by AssetWorks, the typical structure of the 13-position tech spec would be as follows:

- Positions 1& 2 – last two digits of the model year
- Positions 3 – 5 – abbreviation of the make or manufacture of the vehicle
- Positions 6 – 10 – abbreviation of the model of the vehicle
- Positions 11&12 – M5 fuel product of the vehicle

An example of a tech spec for a 2002 Ford F150 XL that uses unleaded fuel ("UL" in this example) would be:
00FRDF150XUL



While this example is somewhat straight forward, the “XL” designation could be open for interpretation on whether the tech spec should be “00FRDF15XLUL” instead.

AssetWorks can offer as an option and additional cost, a VIN decode process to accurately identify each assets proper year, manufacturer, make, model and engine. This process requires CoLA to extract each unit number and corresponding VIN (Serial Number) and pass that to AssetWorks in a delimited file. AssetWorks will submit the list to our VIN decode partner for processing and will return to CoLA the decoded results.

Because the structure of the Application Group values for many MCMS clients do not specifically group vehicles by year, manufacturer, make, model and engine/fuel type, clients usually construct tech specs manually using an Excel spreadsheet. This technique has two major benefits:

- Allows a client to standardize manufacturer, make and model information
- Provides for a possible mapping algorithm such that the conversion process can determine how to associate an application group to a tech spec

The second benefit listed above, the mapping of an application group to a tech spec, also allows entries for unit products (f_unit_prod in M5) to be created with the appropriate unit number, last fuel meter and usage as well as the creation of unit warranty (unit_warr in M5) entries if the data is available in MCMS.

If an Excel spreadsheet representing the appropriate M5 tech specs is created, AssetWorks can load this data directly into the M5 Technical Specification (tech_spec) table.

The other related Application Group files, specifically the Unit Group Specification data can also be mapped to M5 with some assistance from the client. M5 has an unlimited number of “user defined” fields that can be created and customized by the client. Rather than define specific fields and their definitions as exists in MCMS for the specification information, M5 allows a client to define their own specific field name (or item) and populate the value as required. For instance, in the Unit Group Specification tables, each different “unit type” (P-Power, T-Trailer, R-Refer and L-Lift) for which specific data values are captured for predefined specification attributes are contained in separate MCMS tables.

In M5, these same specification attributes can be captured as tech spec items and associated to the proper tech spec. The significant difference in M5 is that the user can define what tech spec (or group of vehicles) that the item is associated with, the label of the field on the screen, whether the field is displayed or not and also whether there are a list of allowable values to validate the data. To assist in the conversion process, the client will need to define what values, if any, in the Unit Group Specifications should be converted to M5 and what the resulting M5 user-defined field should be used to hold the value.

Preventive Maintenance

The meter type information contained in the Unit Meter and Usage (table MCMTB068) information is typically not converted in a one-for-one field manner because of the M5 structure differences. The meter type attributes in M5 are defined by the Maintenance Class Codes (MCC). The MCC allows for grouping of assets by meter type, usage and standard job scheduling information.

During the initial M5 set-up, clients will create all their Maintenance Class Codes (with some direction by AssetWorks) and develop a mapping so that the conversion process can associate converted units with their MCC



values. Once this is complete, the actual meter reading information contains in the MCMS data can be updated in the M5 Unit Main table and historical Meter Journal (meter_jnl) records created.

The MCMS Unit PM Management (table MCMTB069) information is converted to capture the last completed PM Job information to update the unit's standard job information in M5.

Parts Inventory

The basic difference between MCMS and M5 is that the key to the Part Master Catalog (Parts) is the part number and the manufacturer. This may cause an issue if the client has not used manufacturer part numbers in MCMS as the base part number value. In addition, as with many structures in M5, the client can create user-defined part items for storing data not found in the standard M5 Parts tables.

Parts are typically an area where clients spend time cleansing the data. M5 also contains a simple method for renaming parts because of the design of the part record. Specifically, each Part Master has an assigned part identifier that ties all part-related transactions together, like issue and order transactions. This part identifier is assigned at conversion or manual entry time and is not seen by the user.

Once the standard mapping has been approved by Client and any cross-walk tables implemented, the MCMS Parts Catalog information will be converted to M5. In addition, the MCMS Part Location information will also be converted to the corresponding M5 Inventory Location tables.

For cross-referencing, M5 contains a single table that houses all possible cross-reference numbers include superseded, interchange and vendor part numbers.

Part History

Through the conversion of the work order history, part issue transactions will be included. These transactions are included in the Work Order Detail process as M5 Work Order Part Charges (o_part_chg) and associated Part Journal (part_jnl) transaction detail.

Chart of Accounts

M5 does not have an internal Chart of Accounts as defined in MCMS. That does not mean that M5 cannot associate charges to accounts. M5 contains a very sophisticated, user-defined charge back (typically called billing) functionality that can associate charges to several accounts if required. The basic of this billing process is a Billing Code that defines what and how to bill and the Direct Account structure that represents the actual account values as typically defined in a client's corporate general ledger or financial system. The M5 Billing process will associate charges to the proper Direct Account values depending on the attribute definitions within the Billing Code structure.

In M5, each unit MUST have a Billing Code defined even if a client decides not to use this functionality. There is a system module flag (synonymous to a MCMS System Control Record Option) where a default billing code can be defined as the default for every unit added to the system.

During a conversion process, if the MCMS client is using the Chart of Accounts function, the account information could be converted to M5. Of particular importance would also be the configuration of Billing Codes in M5. These are typically entered manually since there are not any different ways that the charge back process would occur thus not requiring many Billing Codes in M5.



While M5 does have an excellent Billing process, balances by accounts are not kept in the same fashion as MCMS. A Billing Period History (bill_period_loc_hist) table maintains historical billing transactions complete with the associated account information.

Customers

Customer information is used in MCMS for billing/invoicing purposes. The main Customer file (CST000) contains the customer specific information such as demographic and mark-up information. There also exists a Customer History file (CST010) that contains the current fiscal year period and rolling 10-year charge information.

The similar M5 structure is called a Department (unit_dept_comp_main). Every unit in M5 MUST have both an owning and a using department. These can be the same value. The M5 department allows the system to designate who owns the vehicle and who uses the vehicle. Don't get too tied up in the term "Department". It just as easily could have been called an "Entity". In M5, departments can have an unlimited number of organizational hierarchy levels that define the reporting structure or hierarchy within a client's organization. This organizational hierarchy is just another way to report on the fleet by rolling it up through the hierarch levels.

In addition, M5 departments are typically the "place holders" for account information. It is common for all vehicles assigned to a specific department to have all their charges associated to the same GL account. This allows accounts to be defined at a department level and defaulted down to the units.

The objective of these data loading services is to process data from the applicable CoLASources and map the data into FleetFocus. AssetWorks will determine the necessary data required to make the system operational (e.g., asset data, current assignments and locations, etc.) and then identify, in conjunction with CoLA staff, what data will be available from current systems, and what data CoLA may have to develop or enter

CoLA will provide a sample of the data as soon as possible. Using this sample, the team will define exactly what data will be loaded and define a mapping of data into FleetFocus. AssetWorks will help CoLA finalize the data mapping and identify the specific sources for each data element the will be included in the actual conversion.

AssetWorks is assuming that no historical data will be converted. Only master records will be loaded electronically, particularly assets, parts, employees, departments, vendors and direct account codes - where such data is available electronically.

Work Order History

AssetWorks will convert MCMS work orders to FleetFocus M5 using our standard work order conversion process:

Detail Transactions – Convert the detail transactions that make up the work order, including: labor detail, part detail, and commercial repair detail. This approach includes the highest level of detail for later analysis. Additional references may be required to support the details found on each record. In some cases, individual employees or part may be converted to generic conversion employees, part, or vendor numbers where the actual reference are no longer active. This can also be done to insert transaction details that are not to be linked to specific employees, vendors or parts.

AssetWorks will assist CoLA in developing a process to unload the information currently in the legacy application to XML files based on the level of detail CoLA wishes to pursue. AssetWorks will create and run XML Template programs to open a work order; create jobs; charge labor, parts and commercial repairs; add notes; complete the



jobs and work orders; and finally close the finished work order. These scripts will load each of the work orders through our components and simultaneously build the unit and work order history tables.

The advantage we have in using the components is the user can continue to create work orders in the current MCMS application up until M5 is placed in production. All we require is that all work orders be closed in the legacy application and new ones opened in M5. We can run a final work order conversion immediately following the switch to M5.

AssetWorks will convert work orders for all active units and for units that were retired or sold in the last 7 years. The LAPD conversion will include the conversion of ITA units and work order history.

Data Loading Preparation

Once the data loading specifications are completed, AssetWorks will be responsible for populating FleetFocus™ with approved and “clean” CoLA data. AssetWorks assumes that all CoLA data files are formatted to facilitate uniform electronic loading. AssetWorks requires that CoLA supply all loading data in text documents (flat file ASCII format) with necessary documentation.

AssetWorks will provide Microsoft Excel templates to assist in loading data into FleetFocus. AssetWorks will convert only the data that maps into FleetFocus. Data that does not map into FleetFocus™ will not be loaded. Further, only data elements that can be entered on a FleetFocus™ screen are part of this loading.

CoLA will provide the data in the properly formatted spreadsheets (per AssetWorks’ specification) for loading into FleetFocus.

AssetWorks makes the following assumptions about the data from the legacy CoLA system(s):

- The data files for the asset, part, and other master records will be text-based flat files with one row of data per unique record.
- The data files for the summary cost history records will be text-based flat files with one row of data per entry.
- AssetWorks will use default values for any data element that FleetFocus™ requires that is not in the data file.
- CoLA will provide each test data file and each production data file in exactly the same format.
- AssetWorks will not be responsible for “scrubbing” or “cleansing” legacy CoLA data.
- AssetWorks will not source or manually enter any data.

Pre-production Data Loading

After AssetWorks and CoLA have jointly documented the data mapping and data load process, AssetWorks will develop the scripts needed to load a pre-production database instance with CoLA’s data. AssetWorks will load the data based on the rules defined earlier in the project. The pre-production instance will be exported to CoLA and imported into a pre-production test environment for review.

AssetWorks is assuming that only a single pre-production data conversion will be completed. Subsequent iterations or executions by AssetWorks of the pre-production conversion process will require a change order.



Validation of Loaded Data

CoLA will be responsible for validating the loaded data. AssetWorks will assist CoLA Project Manager in the validation process by conducting sample tests against the converted data. Additionally AssetWorks will supply CoLA with a Referential Integrity Violation report that will identify any widowed and orphaned records where primary and/or foreign keys are not found on the related table. It will be up to CoLA to correct the records, either by adding the missing keys or updating the reference. Once corrected, CoLA can execute the conversion scripts again to reprocess the revised data.

AssetWorks will correct errors in AssetWorks provided conversion scripts that incorrectly load properly configured data and will execute those scripts. If CoLA wishes to revise already converted data, a change order will be required for the additional effort needed to revise the scripts and execute the process again.

The corrected and finished preproduction environment will be preserved and become the basis for the production environment. AssetWorks suggests that during the implementation phase, CoLA implement procedures to track changes to the converted data and begin making simultaneous changes to keep the production database in sync with the legacy system. This is necessary as records in FleetFocus will be assigned attributes and configured to support FleetFocus and these settings need to be retained or CoLA.

Production Conversion

In the run-up to Go-Live, a series of production conversion scripts will be executed to load recent values such as meter readings, last PM date and other recent history variables that are used by the application.

Prior to go-live, AssetWorks will update via a conversion script certain dynamic attributes that are critical to the application functionality. The dynamic conversion scripts will update:

- Units – most recent meter readings, last pm dates, current book value, depreciation rate/terms, and operator.
- Parts – Stock status by location (non-stock, stock, or consignment) and for stock/consignment: bins, primary vendor id, on-hand quantity, inventory minimum/maximum reorder points.

CoLA will be responsible for extracting the data, linked to the same primary key found in FleetFocus, into AssetWorks provided templates. AssetWorks will provide scripts to CoLA to load these values into the prepped pre-production database just prior to Go-Live.

AssetWorks is assuming that production conversion will take place one-time for all locations and records

Deliverables for Data Loading Services

- Data Element Mapping Document
- Data Template Specification and Instructions
- Data Templates
- Data Loading Scripts
- Loaded Data



CoLA Responsibility for Data Loading Services

- Participation in the data mapping design discussions
- Review and acceptance of the Data Element Mapping Document
- Extraction and loading of data to Data Conversion Templates
- Importation of the converted databases into the M5 instances
- Timely review and validation of loaded data
- Documentation of data errors



F. System Configuration

Application Workshop

AssetWorks will conduct Application Workshop sessions for CoLA system administrators, core project team members and key system users in the various application functions (i.e.: Asset Management, Maintenance Management, Invoice Processing, Materials Management, Work Management, Time Entry, Reporting, etc.). The goal of these sessions is to familiarize CoLA with application functionality and work-flows that the application can support.

The actual topics of this training will depend on the functionality to be used, but generally includes:

- Unit Set-up
- Unit Acquisition and Disposal
- Work Order Processing
- Parts Inventory
- Account and Billing Set-up
- Automated Labor Input
- Standard Jobs and PM Forecaster
- Billing and Accounting Functions
- Optional Modules (i.e. Motor Pool, Replacement, Performance Monitoring)

This training will be divided into separate sessions with each session covering a specific topic. The AssetWorks Project Manager will provide a training agenda agreed to by the Project Team that will detail the specific topics for each day of training. A typical agenda may include:

- Day 1 – Asset Management
- Day 2 – Maintenance Operations
- Day 3 – Inventory Management
- Day 4 – Billing, Batch Processes, Interfaces, and Standard Reporting
- Day 5 – Fuel Management, Advanced Functionality, and Review of Optional Modules

The Project Manager will be responsible for having the appropriate key personnel from each functional area available for the training sessions.



Prerequisite: This session requires the completion of the FleetFocus™ configuration steps and the initial conversion process. Experience indicates that conducting this workshop with CoLA's own data promotes an increased comprehension of the material. CoLA must also provide a training room with workstations running FleetFocus™. AssetWorks recommends no more than two attendees per computer.

Work-Flow Design Workshop

AssetWorks will conduct a Work-Flow Design Workshop with the Core Project Team to outline the specific work-flow and user roles supporting CoLA's implementation of FleetFocus™. AssetWorks recommends that key-users and stakeholders from each of the functional areas participate in the design workshop to bring practical experience to the process.

AssetWorks will utilize the FleetFocus™ Work-Flow Skills Matrix to assist CoLA with outlining user roles that integrate those requirements into FleetFocus. The Work-Flow Skills Matrix will be used by CoLA to develop custom user menus and to configure user security roles during the system setup and configuration phase.

After the Work-Flow Design Workshop, CoLA will document the agreed upon work-flows and is responsible for develop corresponding Standard Operating Procedures. These documents will outline the various application work-flows and serve as the basis for all future end-user and roll-out training sessions.

Application Configuration

The final phase before go-live involves setting up various functions that support the planned workflows. Similar to the reference code configuration process, CoLA's user will be responsible for updating FleetFocus™ directly.

The functionality that is configured will depend largely on those system functions identified during the Application and Work-Flow Workshop as integral to supporting CoLA's business processes. Possible functions that must be configured include:

Functionality	Description
User Menus	FleetFocus™ is delivered with a standard menu giving access to all system functions. Using the Work-Flow Matrix, users setup custom menus for each user role with only those screens and reports each user role requires. Field Security Templates can also be used to further control visibility and access to individual screen fields.
User Roles and User Setup	CoLA must define user roles and create application users in the system. User roles setup includes defining and assigning to each role Location Groups, Department Groups, KPI Groups, Role-Based Menus, Report Groups, Printers, and User Privileges. Each User must be assigned a role and configured for access to the application, external web services, mobile access, ad-hoc reporting, the Crystal Reports Server, and the user's homepage.
Asset Management	The user must load and configure a master record for every asset in the fleet, including fleet numbers, descriptions, codes, groupings, assignments, dates, meters, notes, accounting data, fuel products and items. Most of this information can be loaded electronically using the Standard Unit Template
Standard Job Schedules	Users define by maintenance class the schedule for each standard job. Job schedules can be setup by time, usage and/or fuel consumption.



Functionality	Description
Fuel Management	Users that plan to use a commercial fuel interface must setup product definitions, fuel location, and fuel card information. Customers that will use an interface to a third-party system or AssetWorks FuelFocus hardware must also configure tank types, tank and hose settings, and ICU configurations for each of the fuel locations. An initial inventory balance is received and fuel cards are created.
Billing	AssetWorks will work with CoLA staff to review in detail the billing, charge-back and markup functionality and aide CoLA in defining the Billing Items, Billing Codes, Charge-back Schemes, Tax Schemes, and Markup Schemes for each CoLA client. AssetWorks will also work with CoLA to define the direct account master and matching account codes to the appropriate owning and using department records. CoLA will be responsible for loading FleetFocus with the identified settings.
Unit Availability	This functionality allows users to setup a count of units to meet operational requirements by class of equipment and location. User defines the lines by location, the unit counts and count times.

LAPD Accident Module Configuration

LAPD will be replacing its current accident and damage tracking processes in MCMS with the FleetFocus Accident module. AssetWorks will provide additional assistance to LAPD with the configuration of the Accident module, including using Screen Designer to design custom accident reporting screens.

Deliverable for System Configuration Task

- Application Workshop
- Work-Flow Design Workshop
- Application Configuration and User Guides
- LAPD Accident Module Configuration

CoLA's Responsibility

- Provide facilities to conduct workshops.
- Participation in and feedback during Application and Work-Flow Workshops.
- Document and distribute designed work-flows.
- Develop standard operating procedures incorporating FleetFocus work-flows.
- Review AssetWorks' Setup and Configuration Documents.
- Make setup and configuration changes to base install of FleetFocus™ system.
- Provide all data for the configuration of the system.
- Setup and configure Menus, User Roles and Application Users



- Configure the application to support designed work-flows.
- Configure Billing Module.



G. Business Intelligence Support

The following reporting tools are delivered with each FleetFocus implementation:

- **Standard Reports** – FleetFocus has over 200 AssetWorks developed Crystal Reports that come standard with the FleetFocus application. These reports cover multiple functional areas and are designed to allow the user to filter and group the report to meet a variety of different reporting needs from a single report.
- **List-of-Values Exports** – Any standard List of Values lookup screen has the ability to have the data selected in the list of values exported to the MS Office clipboard and copied into Word, Excel or other clipboard supported application. This is a useful reporting tool for generating inventory related information, lists of primary references and code data.
- **On-line Query and I-frame Exports** – FleetFocus has several dozen standard query screens where a user can enter specific filters and the resulting records will appear on-line in a list/grid format. That list can be exported to the clipboard and copied to Word or Excel for reporting or further analysis outside of FleetFocus.

In addition, FleetFocus has several optional modules that that CoLA will implement:

- **Operational Dashboards** – The optional Dashboard function allows users to write SQL select formulas to report on any measurable data as frequently as necessary to support current operations. Dashboards are meant to push key measures directly to the user to alert them to a condition that requires some action on their part to correct or manage. Dashboards are best suited for measures that are discreet and change frequently.
- **Ad-Hoc Reporting** – The optional Ad-Hoc Report Writer allows FleetFocus users to develop custom queries, charts, gauges and basic list reports from within the FleetFocus application. User-friendly topic specific views are used to allow novice users to simply select which fields to display and filter from in constructive simple reports. The reports can be saved, reran and shared with other users to answer a reoccurring need or they can be one-time inquiries to answer a specific question.
- **Performance Measures & Metrics** – This optional tool constructs a simple data warehouse of key performance measures and individual metrics that is summarized each fiscal period to support trend reporting and analysis. Users can select from one of over 60 prebuilt measures and drill down using the PMM Viewer to see how measures compare by location and asset type. The PMM Trend Reporting tool allows for the reporting of past periods to compare how the measure trends over time and to look for correlation between two measures.

During this task, AssetWorks will provide support to CoLA with the setup and configuration of each of the reporting tools.

Report Requirements Matrix

AssetWorks will conduct a review of the CoLA data information requirements to develop an understanding what information the organization needs to meet its mission. For this task we will be looking at documenting what the



critical, must-have information is to support operations, comply with regulations and policy, supporting financial reporting and analysis, and to meet the management's expectations of what the fleet operation's mission is.

AssetWorks will interview key users of the fleet information to understand what their specific needs are, how those needs are being met today and what their unmet needs are. AssetWorks will also collect examples of regular reports that are supplied to CoLA management, operations, its users, and to the organizations management outside of Fleet. Additionally, AssetWorks will ask for any internal or external reporting requirements needed to comply with any regulations or policy.

From this review AssetWorks will prepare a matrix of the key reporting requirements to include:

- The information requirement
- A general description of the requirement
- What specific data must be reported
- How the information is to be used to support decision-making
- How the data is to be aggregated and summarized, including any definitions of metric or measures
- What are the selection criteria for the report
- The frequency that it is reported
- Who executes the report
- Who is the consumer of the information

While there are endless bits of information that can be reported and documented, AssetWorks will focus this task on documenting that information that is deemed critical to the operation. Based on the time allotted to this task, the top 20 core reporting requirements will be documented. AssetWorks will provide a basic list of the additional requirements and it will be up to CoLA to document those additional requirements, or if needed issue a change order to this Statement of Work to address additional requirements beyond the top 20. The completed matrix will serve as a template and example for additional reporting requirements outside the top 20.

After the specific requirements have been identified and documented, AssetWorks will help CoLA with the setup and configuration to support these requirements.

The first step will be to determine which FleetFocus BI tool can best support the requirement. AssetWorks will try to match the appropriate tool to the requirement and identify if a standard report, query, list-of-value, dashboard, or PMM can meet the requirement out-of-the-box. AssetWorks will only evaluate those options that are currently licensed by CoLA.

Where an out-of-the-box capability exists, AssetWorks will provide recommendations on how the item is to be configured, scheduled, executed and delivered to the information consumers. A reporting matrix will be developed to identify the method that will be used to deliver the report, the configuration settings/SQL needed to



generate the required results, the parameters for the item, its delivery method and execution schedule. For Standard Reports, AssetWorks will configure the reports parameters and save the parameters for future execution. Dashboards will have the SQL statement saved and a sample Dashboard KPI constructed for a default user. Additional user dashboards will be the responsibility of CoLA to setup and maintain.

If the requirement cannot be met from an existing tool, AssetWorks will determine if an ad-hoc report can be developed to meet the need, if an existing Crystal Report can be modified and substituted using the Reports Alternate functionality, if a new dashboard SQL can be developed or if a custom Crystal Report is needed. For simple items that can be addressed through a dashboard or Ad-Hoc report, AssetWorks will assist CoLA with their construction including providing the necessary SQL Statement or views.

CoLA has the option of modifying the reports or developing alternative versions of the reports themselves and using Report Alternates or Options to substitute their version for the FleetFocus standard version. Custom reports that require a new Report Parameter page and customer filters, will require a detailed specification and must be developed by AssetWorks.

Dashboard Design & Configuration

The FleetFocus Dashboard module is fully user-configurable and includes a set of standard dashboard definitions and gauges. AssetWorks will work with CoLA to instruct them on how to create Dashboard KPI Groups, develop the SQL for specific dashboards, and build user dashboard pages including configuring gauges and setting up drill-downs. AssetWorks will consult on modifying current KPI SQL scripts to support specific KPI identified during the requirements phase. AssetWorks will provide instruction on how to construct custom dashboards based on user-developed SQL.

Configuration and consulting services will be limited to the budget of hours established to support the core reporting requirements. This task does not include developing custom KPI SQL scripts to generate non-standard or CoLA specific dashboards, or AssetWorks validation of user-defined scripts beyond those identified in the core reporting requirements. These services can be provided on a time and materials, or fixed cost basis.

Additional dashboard configuration services and support may be added with a change order.

Ad-hoc Query Workshop

Following Go-Live, AssetWorks will provide a training workshop to various CoLA business analysts and report developers on the writing and distribution of Ad-Hoc Query reports. This training will include a review of the ad-hoc reporting views that are delivered with the module, the mechanics of construction an ad-hoc report, formatting reports, using charts and gauges, and how to make ad-hoc reports available to other users. The session will last several days and AssetWorks will provide instruction on developing sample ad hoc reports based on the core reporting requirements.

The development of custom ad-hoc reports beyond those identified during the core requirements and covered in the training session are not included in the proposed task budget and can be provided on a time and materials, or fixed cost basis.

PMM Module Implementation Workshop

In the first fiscal period following Go-Live, AssetWorks will conduct a PMM Implementation Workshop. The PMM module allows for the comparison of various performance measures and metrics by location, asset type and fiscal



period. AssetWorks will provide support to CoLA with the setting up of the PMM module framework including creating PMM Groups, the PMM location hierarchy, and defining asset types. AssetWorks will review the current set of standard PMM and discuss with CoLA how to configure the application to support the calculation of each PMM and identify custom PMM to match CoLA specific requirements.

The development of custom PMM scripts is not included in the proposed task budget and can be provided on a time and materials, or fixed cost basis.

Custom Report Development

AssetWorks has included a bucket of hours in each agency's project budget for the development of custom reports. During the Reports Matrix development, where new custom Ad-hoc, Dashboards or Standard reports are identified, AssetWorks and CoLA will develop requirements for the report. AssetWorks will prepare a specification and estimated number of hours to complete the development of the report. The actual hours needed to complete the report will be deducted from the budget of hours allocated to the agency.

Ad-hoc reports and Dashboards will be developed directly in the FleetFocus by AssetWorks. Standard reports will be developed off-site by AssetWorks using Crystal Reports. The completed report will be delivered to CoLA to be published in the FleetFocus Crystal Report Server. Any new or modified views required to support the new reports or dashboards will be delivered as part of our standard database table maintenance process and will be maintained by AssetWorks in the future.

It will be up to ITA or other authorized user to execute the scripts to create the view in the FleetFocus database. Standard Reports that include a customized launch screen in FleetFocus will require a script to be executed to create the Frame Maintenance entry and will require an application patch to add the new launch screen. The new report must also be published in the Crystal Report Server. ITA, or other authorized user, will have responsibility to publish any custom Crystal Report and to execute the scripts and publish the report.

Deliverable for Business Intelligence Support

- Reporting Requirements Matrix.
- Custom Crystal Reports based on the approved specifications.
- Dashboard Module training and consulting
- Ad-hoc Query Workshop
- Performance Measure and Metric Implementation Workshop
- Development and delivery of custom reports, ad-hoc reports and dashboards.

CoLA's Responsibility

- Identify top 20 most widely used current fleet reports and top reporting requirements
- Review and approve the Report Matrix within 5 days of delivery.
- Review and approve custom report specifications and cost proposals within 5 days of delivery



- Attend and participate in training sessions and workshops.
- Create and populate KPI/PMM Groups and Ad-Hoc user security settings
- Design and Develop SQL statements for custom dashboards.
- Configure Dashboard and PMM graphical presentation (gauges).
- Configure PMM Location Hierarchy and Asset Types.
- Develop and deploy Ad-hoc reports.
- Execute scripts to create or modify database views.
- Execute scripts to create report launch pages and publish new Crystal Reports.



H. FleetFocus User Training Services

Develop Training Plan

The AssetWorks project team will develop and deliver a comprehensive, customized training program to provide FleetFocus™ training for various types of CoLA users. The training will be role-based and will differ for trainees from the various organizational and functional areas. Each CoLA trainee will have the basic skills in the overall use of FleetFocus™ and strong knowledge of how to use the application in his or her specific job function or area of expertise.

AssetWorks recommends a “train-the-trainer” approach for end-user training, whereby AssetWorks conducts the first sessions, and CoLA trainers (core project members, designated trainers and key-users) conduct the subsequent sessions. This approach ensures that CoLA has the expertise necessary for ongoing training and internal support after the implementation is complete.

All end-user training sessions are broken down by job function (mechanic, service writer, parts technician, asset clerk, etc.) and are based on the work-flows to be implemented; insuring training is targeted to the needs of the end-users.

AssetWorks will develop a training plan that describes training that will be delivered. AssetWorks will develop a plan that addresses the following topics:

- Role-based training sessions and list of topics that will be included.
- A schedule of training sessions by location.
- Assignment of AssetWorks and CoLA resources to each training session.
- Samples of training media for each type of role described below (e.g., handouts, practice exercises, and screenshots with step-by-step instructions).

All courses will consist of a combination of classroom and hands-on instruction. Training will include classroom and hands-on instruction through the use of the actual application.

The duration of the end-user training sessions depends on the complexity of the work-flows and functionality to be implemented. AssetWorks recommends that CoLA allot five to ten days to training users before production roll-out occurs at each location.

In addition to the core project team and designated trainers, AssetWorks recommends CoLA identify at least one key-user at each location to attend the training. These individuals will be responsible for closely support the cut-over at their location by answering initial end user questions, and most importantly, implementing subsequent changes or alterations to the documented procedures at their location. After the initial training, CoLA will provide all subsequent user training required in connection with new members entering the user community and on an ongoing basis.



Update Standard Training Materials

AssetWorks will consult with the CoLA project team on preparing appropriate training companion documents based on examples provided by AssetWorks, which will serve as both an aid to the operational training and as an additional resource to consult during live operations. Existing AssetWorks training documents will serve as the basis for these manuals.

Once CoLA approves the Training Plan, AssetWorks will provide a master electronic version of our standard training materials to CoLA. Any training materials, including: presentation materials, user guides and training aides will be delivered to CoLA as electronic media in Microsoft Word or Microsoft PowerPoint format.

AssetWorks will provide the following standard documentation:

- System Installation Guide - AssetWorks will provide documentation detailing the installation and upgrading of FleetFocus™ M5.
- System Administration Guide - AssetWorks has standard documentation instructing system administrators on managing and maintaining the application.
- Configuration Guides – Detail the setup and configuration of the application.
- Application User Manuals – AssetWorks has standard documentation for each application module that serves as standard user guides and are the basis for developing custom user documentation

CoLA will be responsible for customizations to AssetWorks standard training manuals. CoLA may tailor the training materials to reflect CoLA terminology and to incorporate CoLA specific work-flows developed during the design and configuration phases. Customized training materials may cover work order functions; parts and labor posting functions; and other common FleetFocus features and transactions. The topics and work flows included in the roll-out training will be those finalized by CoLA team during the system setup and follow-up tasks.

AssetWorks will provide additional assistance to LAPD with the customization of standard training materials to integrate custom LAPD work-flows and processes.

CoLA is responsible for preparing and providing hard and electronic copies of training materials to all trainees.

User Training Services Deliverables

- Training Plan for trainers and end users.
- Training class schedule.
- Electronic, soft copy of standard training materials for trainers and end users.

CoLA's Responsibilities

- Review and accept the Training Plan within 5 days of delivery.
- Customize and distribute AssetWorks' standard application training documentation and user guides.



I. Application Readiness Review

A Readiness Review is used to verify FleetFocus™ in a controlled environment to ensure that the application is ready for deployment. For smaller operations this will serve as a pilot implementation before deploying the application in the shop and storeroom. The purposes of this review is to walk through the work-flow process and using a test environment verifying that the processes and system are functioning in accordance to the specifications for the tested function.

During this review, the focus will be on:

- **Data Loading/Conversions** – Was the legacy data correctly mapped and transformed into FleetFocus™? Are there missing data elements that have not been converted that are available from an electronic source, or that need to be manually loaded?
- **Application Configuration** – Has the application been configured correctly to support planned work flows and is the data processed according to the expected configuration? Are the user roles correctly defined and authorizations assigned to meet expected work flows?
- **Proposed Workflow** - Do the proposed workflows efficiently support real-life operations? Are the proper procedures in place to support the collection and entry of information?

A pre-production test environment will be established to test application settings and functionality in a controlled environment using CoLA data and configuration settings. This approach assumes that all data entered will be test information and that the test environment will not be the system of record.

Prepare System Test Plan

AssetWorks will provide our standard System Test Plan that consists of the following primary functional and data validation tests. Additional testing items may be required based on CoLA planned deployment of the application and its modules. CoLA will modify the standard test plan to include any specific processes not addressed.

AssetWorks will review and recommend methods to test the additional requirements

If enhancements or interfaces are required to support any of the planned work-flows, CoLA will be responsible for testing these items following delivery and installation of the completed item in a patch or upgrade release.

Enhancements or Interfaces will not be include in Test Plan; separate test scripts will be provided for each development item based on the item's specifications.

Readiness Review Workshop

The actual testing will be the responsibility of CoLA with AssetWorks participating in a review of the results at the end of the task. CoLA will be responsible for executing the test plan using sample CoLA data. CoLA will document for each item the data used during the test and the outcome of the test.

CoLA, with AssetWorks support, will conduct the following workshops and functionality tests leading to the application acceptance:

System Admin Testing I

- Create New User, Assign to User Role



- Verify select User Role Location Groups
- Verify select User Role User Privileges
- Verify select User Role Menu and screen security controls
- Verify select User Role Report/KPI Groups
- Verify select User Role Department Access Functions (if used)

Test Asset Management Process

- Create a Tech Spec
- Create new Unit
- Assign Unit to Department/Operator
- Transfer Unit to Using Department
- Attach File to Unit
- Update Unit record
- Update Meter
- Dispose Unit

Test Work Request Process

- Review Standard Job MCC setup
- Execute Forecaster
- Review forecasted Work Requests
- Create an Incident/convert to WR
- Create manual Work Request
- Generate Campaign
- Generate Work Requests notifications
- View Work Request Query

Test Work Order Process

- Open Work Order
- Add Work Requests To WO



Where the results of the test did not meet expectations, these items will be reviewed with AssetWorks to determine if the data entered was invalid; if the application requires additional configuration; if the application must be reconfigured and if the failure was caused by a failure in the application code.

AssetWorks will consult with CoLA on the best method for correcting the identifying issues. Issues discovered during this initial testing phase that are attributed to problems with the FleetFocus™ application will be documented as items in our FOCUS software management system and addressed by the development team. Any items requiring modification to the application code will be scheduled into a planned patch or release depending on the severity of the issue and its impact to CoLA's ability to go-live.

For LAPD, AssetWorks will take the lead for testing the application. AssetWorks will prepare and execute the test scripts based on LAPD planned work-flows and processes. For all GSD and LAFD, AssetWorks will provide our standard test scripts and those agencies will have the primary responsibility for testing.

Deliverable for Application Readiness/Testing Services

- AssetWorks Standard System Test Plan
- Readiness Review Workshops
- AssetWorks review of and response to issues documented during the Readiness Review

CoLA's Responsibilities

- Approve the Test Plan
- Modify standard test scripts provided by AssetWorks as necessary in time for test execution
- Participate in Readiness Review Workshops
- Perform application testing
- Document test results
- Work with AssetWorks to remediate/resolve testing issues



J. User Training

System Administration Training Workshop

Following Application Training and the Work-Flow Design Workshops, AssetWorks will conduct a separate training workshop for the System Administrator(s). This one to two-day session will focus on the following:

- User Role and Application User Creation and Maintenance
- System Flag Setup and Maintenance
- Application Logging and Troubleshooting
- Batch Processing
- Interface Configuration and Processing
- Crystal Reports Server Maintenance and Troubleshooting
- Patch and Upgrade Installation

The System Administration training is typically a small group of users or a single user and can often be conducted at a workstation or in a small conference room. Following the training the System Administrator will have responsibility for setting up and configure Roles and Users.

User Training Workshops

AssetWorks will provide on-site training to CoLA as described in the Training Plan in a classroom environment suitable for training. CoLA will be responsible for providing and preparing the training facility and assigning CoLA resources to the agreed upon training sessions.

User Training sessions are typically held as close to the Go-Live date as possible to insure that the users have an immediate opportunity to put their training to practice and retain as much training as possible. Training that incurs weeks before the go-live is often wasted as users typically don't retain the training a few days without practical reinforcement.

A single, enterprise-wide production go-live approach requires that all training be delivered in the week or two prior to go-live, with the majority of shop-floor training taking place in the days prior to go-live. This can be easily accomplished in operations that have fewer than four or five facilities, where users can be trained centrally or the trainer can easily travel between locations in the same day.

The End User training can occur in a classroom setting for certain user groups or actually on the shop floor for others. The FleetFocus™ Implementation Roll Out schedule must be defined so that each End User training session can be scheduled. CoLA must also have FleetFocus™ executing in the shop environment. CoLA should schedule End User training sessions so that every employee work shift is able to attend an appropriate training session. Any bar-coded code materials, code books or code boards should be ready and deployed.



The topics and work flows included in the training will be those finalized by CoLA team during the system setup and follow-up tasks and described in the training plan. CoLA should remain especially sensitive to necessary last-minute procedural changes or clarifications based on end user feedback.



Examples of session by role include:

Training Session	Functional Areas/Topics	Typical Duration	Typical Attendees
Asset Management	Unit and Component Setup Accounting/Billing Purchasing Disposal Licensing Assignment User-defined fields	4 – 8 hours depending on role	Asset Managers Accounting Clerical support
Shop Operations	Opening/closing work orders Work request management PM schedules/forecasting Work order history Shop reporting Labor capture	4 – 8 hours depending on role	Shop Supervisors Foreman Service Writers Clerical Support
Shop-Floor	Updating Work Orders Labor capture Adding/Completing jobs Part Entry Unit repair history	2 – 4 hours depending on role	Mechanics
Part Operations	Part Catalog and cross references Part lookups, queries, and reporting Storeroom setup and maintenance Procurement procedures Stock Receipts, Issues, and Transfers Non-Stock Issues Returns and Adjustments Physical Inventory	4 – 8 hours depending on role	Parts Supervisors Parts Room Staff
Customer / Management	System Navigation Standard report generation and scheduling Look-ups and queries Motor Pool Reservations Meter Entry	2 – 4 hours depending on role	Fleet Customers Senior Management

AssetWorks strongly recommends CoLA determine the end users who may require basic computer skills training and provide this training prior to the End User sessions.

User Training Services Deliverables

- System Administration Training Workshop
- On-site training sessions for CoLA trainers and key-users.
- Support End-user training sessions and schedule as identified in the Training Plan.

CoLA's Responsibilities

- Assign CoLA staff to serve as FleetFocus End-User Trainers
- Provide facilities and computers for training.



- Assign and schedule users to attend End-User training sessions based on designated user role.
- Lead end-user training sessions as identified in the Training Plan and ensure that these sessions are effective such that end-user resources are proficient in the system.

K. FleetFocus Production Deployment Support Services

The final task is the actual production roll-out for each location. This task requires the completion of End User training at CoLA locations and the FleetFocus™ system to be “live”; that is CoLA must have FleetFocus™ running in the shop environment.

Prepare for Cutover

AssetWorks will gather feedback and observations from the readiness review, user training and any testing to present a recommended plan for the extended roll-out of FleetFocus.

Depending on the organizations size and geographic disparity, Go-Live may be schedule to occur in a single, ‘Big Bang’ approach where FleetFocus is brought up live at all locations simultaneously, or Go-Live may occur in phases by region, district or operation depending on how locations and maintenance operations are organized.

AssetWorks will work with the CoLA Project Manager to develop a roll-out schedule based on how the operations are organized and the roll-out approach that will be taken. The roll-out schedule will be directly linked to the training plan, as training will occur just prior to go-live.

Prior to the production deployment, AssetWorks will be onsite staging and preparing for the system roll-out/cutover. This time includes final site testing of hardware and system readiness and review of procedures with user personnel.

Production Go-Live

When CoLA commences live operations using FleetFocus, AssetWorks will be on-site to “go live” assistance for CoLA maintenance operations. The AssetWorks and CoLA team will provide refresher training and help on the shop floors and offices to make sure the transition is as smooth as possible. AssetWorks will also work with the System Administrator and SME to provide first-level technical and application support and to troubleshoot any issues related to data integrity and application setup and configuration.

AssetWorks will document any issues that occur during the go-live, and where issues are related to the planned production deployment, provide follow-up support to the system administrators and implementers. Additional support, new development and items not part of the original production deployment plan will result in change orders for additional service days as required.

Deliverable for Production Deployment Support Services

- Live production environment and operations.

CoLA’s Responsibility

- Identify operations issues and notify the AssetWorks.
- Identify ad-hoc training needs and notify the AssetWorks.



- Perform the cutover to deploy FleetFocus™ CoLA end users.

L. Post-production Support

The Go-Live Support phase is a critical part of all FleetFocus deployments. The purpose of this phase is to insure that the application environment is stable and functioning as required before and after the transition to CoLA It resources and before CoLA takes over full support responsibilities for all users.

AssetWorks will provide resources following the go-live rollouts to specifically address open items identified before and during the production roll-outs. We will provide both technical and deployment assistance to address issues related to system configuration, data conversion, application maintenance, and user acceptance identified during the production roll-outs. A punch-list of open issues will be maintained and addressed during this phase. Additionally, interfaces and enhancements that were not required for the initial production rollout will be worked on and delivered.

The AssetWorks deployment team will be on-site periodically in the months following the go-live rollout for services to be provided prior to final acceptance of professional services and until the conclusion of the contract to consult with CoLA on issues and questions that have arisen following the go-live. This support is necessary to insure that the application is stable and that issues that were discovered during the production roll-outs are addressed before the application is turned over to CoLA for full support.

AssetWorks will document any issues, and where issues are related to the Deployment plan, provide follow-up support to the system administrators and implementers. Additional support, new development and items not part of the original Deployment plan will result in change orders for additional service days as required.

At the conclusion of this phase, AssetWorks will transition the full maintenance and support of the application to CoLA application support team.

Deliverable for Post Production Support Services

- Live production environment and operations.

CoLA's Responsibility

- Identify operations issues and notify the AssetWorks.
- Identify ad-hoc training needs and notify the AssetWorks.
- Perform the cutover to deploy FleetFocus™ CoLA end users.



WBS 5.0 KeyValet Implementation

AssetWorks is will deploy out KeyValet automated motor pool dispatch system at seven CoLA motor pool sites. The services for this task are related to the procurement, delivery, installation, configuration, testing and deployment of the KeyValet hardware and related FleetFocus Motor Pool functionality.

KeyValet Project Management

AssetWorks will assign a Project Manager to oversee the KeyValet phase of the project. The services provided will be similar to those project management services delivered during the Fleet deployments

Hardware Procurement

AssetWorks will order the key box hardware identified in the contract, for delivery to the appropriate site. AssetWorks will place the hardware order based on the agreed models and quantities. AssetWorks estimates the delivery of hardware will be completed in approximately 20 calendar days to a CoLA location.

AssetWorks will order the appropriate vehicles communication devices (Vehicle Data Controllers and/or NetworkFleet GPS/AVL devices) from the manufacturer following the Kickoff meeting. Delivery of these devices should be completed within 3 weeks from the time of order and will be dropped shipped to a CoLA location.

Motor Pool Module Configuration

KeyValet is fully integrated with the AssetWorks FleetFocus M5 application and makes use of the base application and several modules that are already installed in any existing FleetFocus M5 environment.

Existing AssetWorks FleetFocus customers have the option of setting up a dedicated KeyValet server, but KeyValet is normally installed on the existing FleetFocus batch server. Unless CoLA indicates in writing that it will stand up a dedicated KeyValet environment, AssetWorks will install the KeyValet application and related components as an additional module on the existing FleetFocus Batch server. The existing database instance will be utilized to support the KeyValet application and store all KeyValet transactions.

Prior to installation of the KeyValet Module in the existing FleetFocus environment, AssetWorks recommends that the FleetFocus production environment be upgraded to the most currently available release of FleetFocus M5, or at a minimum FleetFocus M5 release 2.7 be in production.

The KeyValet application consists of several FleetFocus modules:

- **Motor Pool** – The existing FleetFocus Motor Pool module is required to support the reservation, dispatch and return process. This module is pre-installed as part of the FleetFocus installation, but does require an activation key for access. If the module is not already activated, AssetWorks will provide an activation key to turn the module on.
- **Screen Designer/Motor Pool Reservation Portal** – This module provides an external web-based portal that permits users to make and manage Motor Pool reservations. Constructed with the Screen Designer module,



the reservation portal can be linked to CoLA intranet sites to allow users to make reservations without needing access to FleetFocus.

- **KeyValet Module** – The KeyValet module includes the MAXQueue integration module and M5 KeyValet Adapter. AssetWorks will install this module on the FleetFocus batch server, or on a dedicated KeyValet server if requested.
- **Telematics Module Option** – If the Vehicle Data Collector (VDC) or another telematics provider such as NetworkFleet will be used to communicate with the vehicles, AssetWorks will activate the FleetFocus Telematics Module that is preinstalled on the FleetFocus batch server

All installation can occur remotely, provided AssetWorks can be given remote access to the Batch/Key Valet server, the FleetFocus application and database.

For remote installations, AssetWorks will coordinate with CoLA the time and access to the environment. CoLA will be responsible for initiating all remote access from the CoLA data center and for maintaining connectivity during the installation process.

If remote access is not available, AssetWorks and CoLA will schedule an AssetWorks Technical Engineer to come on-site to perform the installation. CoLA will be charged for a minimum one day of labor for the on-site installation, as well as all related travel expenses.

During the installation, CoLA will need to have Network and Database resources available to assist with any hardware configuration, network/firewall settings, and for execution of database scripts.

Vehicle Hardware Installation

AssetWorks will have a certified installer provide up to two days of training in the installation and troubleshooting of the vehicle RF/GPS units. The trainer will instruct CoLA technicians in the proper installation techniques for each device (Vehicle Data Collector and/or NetworkFleet) and identify potential installation hazards that could cause interference or otherwise impair the operation of the RF units. AssetWorks will complete minimum 12 installations during the two-day session, with CoLA responsible for completing all remaining installations. AssetWorks certified installers can be contracted on a per vehicle basis to complete additional or future installations of new vehicles.

Prep KeyValet Controller Sites

AssetWorks is assuming that each location will be prepared for the installation of the KeyValet hardware

CoLA will have responsibility for preparing the KeyValet sites for installation. This preparation may include construction services to prepare the location to mount the KeyValet enclosures and box, electrical services to provide power to the KeyValet controller and box; and network services to install network connectivity to the KeyValet controller. The CoLA will have primary responsibility for coordinating and delivering these services either with its own resources or through subcontractors.



Survey and Accept Controller Site Readiness

AssetWorks will review the hardware installation and site preparation with CoLA to confirm proper connectivity and operation. This review will take place on-site with the CoLA project team. The review will ensure that everything is in proper working order prior to production roll out of the system.

KeyValet Controller Installation/Testing

Once hardware has been delivered, [CLEINTNAME] will prepare each site for the installation of the KeyValet Key Manager key controllers. [CLEINTNAME] will provide network connectivity and supply power at all KeyValet controller location and be responsible for installing the boxes, supplying power and connecting the controller to the CoLA network.

KeyValet/Motor Pool Administrator Training

The AssetWorks project team will develop and deliver a training program to provide training for various types of CoLA users. The training will be role-based and will differ for trainees. Each CoLA trainee will have the basic skills in the overall use of KeyValet and strong knowledge of how to use the application in his or her specific job function in the Motor Pool operation. The deliverables will not include remedial training for computer skills or any computer-based training.

AssetWorks will provide Trainer training to designated CoLA trainers for the roll-out of KeyValet. AssetWorks assumes the CoLA trainers will have been involved in the prior tasks, including the system setup and all configuration tasks, so as to be familiar business rules discussed at that time. AssetWorks will provide up to 32 hours of Trainer training (in a single week) for up to twelve users (assuming CoLA's training facility has a sufficient number of workstations for these concurrent training sessions).

KeyValet User Training Material

AssetWorks will provide its standard training materials and begin scheduling and planning for the training. The training will cover motor pool management; placing and cancelling reservations; reservation dispatch and return processing; and other common features and transactions as well as system administrator functions. The topics and work flows included in the training will be those finalized by the CoLA team during the system setup and follow-up tasks. Any deviations in the defined and agreed upon work flow could cause delays and added costs to the training.

AssetWorks will provide a master electronic version for the CoLA Project Manager. CoLA will produce and provide copies (across all roles) of the final training materials for use during the training sessions. CoLA will be authorized to reproduce and use any training materials for ongoing training within CoLA Training materials (Base)

KeyValet Production Go-Live

As each site is brought on-line, AssetWorks will be present to assist in operator use of the key box, provide refresher training to the CoLA System Administrator and address any configuration issues that might arise.



WBS 6.0 Capital Asset Management (CAM) Implementation

The following WBS tasks represent those services necessary to implement the AssetWorks Capital Asset Management (CAM) application. These services include the installation of the CAM application and database; project management services; basic training services; and data loading. The proposed project plan assumes that AssetWorks will provide instruction and direction to CoLA during the implementation with CoLA Project Team responsible for conducting most of the task work.

The CAM application will be implemented in a single phase that will incorporate each of the three fleet operations.

CAM Installation

AssetWorks will install the CAM application in the ITA managed data center in the FleetFocus environment. CAM will be installed as a separate website on the application server and a separate schema in the FleetFocus database instance.

The MVP version of CAM will include the following functionality:

- CAM User Interface
- Security: User Roles, Users, System Flags
- References: Codes, Departments, Vendors, Locations, People
- Events: Notifications and Tasks
- Asset Register and Design: Asset Main, Category, Spec Type, Attributes and Specifications
- Data Mart: Usage Journals (Time, Distance, Count), Maintenance Journal, Energy Journal, Capital Journal
- Analytics: Life-Cycle Cost Analysis
- Procurement: Asset Requests, PO Builder, Purchase Orders, Receipt, Acceptance, Invoicing

The remaining CAM modules and functionality will be developed over the next 18-24 months and delivered as each development sprint is completed. AssetWorks will update the hosted environment with the new functionality to allow users to test the functionality before it's moved to production. AssetWorks will update the development roadmap periodically and publish this to update the CAM user community on the delivery of upcoming functionality.

Each CAM customer will have a Production and 'Sandbox' environment. AssetWorks will have responsibility for setting up each environment; and for the initial population of the database instances with data extracted from the FleetFocus application – see Data Loading. Once CoLA deploys CAM, a regularly scheduled extract of the Production instance will be made and used to update the Sandbox instance. The Sandbox will serve as both a test and training environment, enabling CoLA to train users, test new functionality and test configurations without impacting the Production data.



Deliverable for CAM Installation

- Creation of CoLA Production and Sandbox database instances and web-sites on the shared CAM environment
- Publication of CoLA specific URL linked to CoLA Sandbox and Production sites.
- Certification of the application deployment by AssetWorks

CoLA's Responsibility

- Open and maintain firewall access to the CAM URL and server IP addresses
- Test the published URLs for accessibility
- Provide workstations with suitable browsers to users that can access the CAM URL
- Maintain CoLA communication, network and security infrastructure
- Install CAM patches and upgrades
- Workstations with HTML5 compliant browsers: IE9, IE10, Chrome, Firefox, or Safari

Business Process Review

During the FleetFocus implementation Business Process Review, AssetWorks will be conducting current and future fleet operations. As part of the CAM implementation, a separate set of workshops will be held during the process review, AssetWorks will conduct a series of interview sessions for the following CoLA functional areas.

Asset Management – General review of asset management practices.

Life-Cycle Management – Review of how life-cycles are developed and applied and review of maintenance data collection processes.

Planning and Budgeting – Review the processes for developing asset acquisition and replacement plans and overall budgets, and the tracking of assets against the plan.

Asset Requests – Review of the processes currently used to request and approve new and replacement assets.

Asset Procurement – Review how assets are purchased and the flow from requisition to acceptance.

Asset Disposal – Review of how assets are disposed or remarketed.

Financial Management – Review how are assets valued, depreciated and accounted for.

A separate CAM implementation questionnaire will be distributed prior to each agency's business process review. During the reviews, AssetWorks will refer to the CAM questionnaire. As part of the overall BPR report, AssetWorks will include a section describing the implementation of the CAM application.

Deliverable for CAM Business Process Assessment

- CAM Implementation Questionnaire
- Current State Workshop
- Future State Workshop



- Document Future State Design

CoLA's Responsibility for CAM Business Process Assessment

- Completion of Implementation Questionnaire in agreed upon time.
- Arrange to have the correct subject matter experts in attendance for the various workshops.



System Setup

Following the Business Process Review, CoLA and AssetWorks will begin to setup up the CAM application to load data, test the application and prepare it for deployment. The phase will consist of two tasks, a training workshop for Key-Users and the configuration of the system.

Key-User Training Workshop

AssetWorks will conduct a Key-User Training Workshop for CoLA's Core Team, system administrators, and asset management SME. The purpose of this workshop is familiarize the principal users and system managers how the application is setup and configured, so that CoLA can ready the application for loading of data from FleetFocus and other legacy asset management systems.

During the workshop, AssetWorks and CoLA will review:

- Application Security
 - CAM System Flags
 - Building User Roles
 - Assigning Users
 - Department Security
- Code Maintenance
- Configuring Events
- Building the Approval Matrix
- Key reference objects: Departments, Locations, Vendors
- Designing Assets
 - Creating Attributes
 - Defining Spec Types
 - Constructing Categories
 - Setting up Specifications
 - Assigning Attributes to Categories, Spec Types and Specifications
 - Creating valid specification combinations



AssetWorks will walk through each of the setup and configuration screens to instruct CoLA on the purpose of the reference, its role in the application and work-flows, key decisions and assumptions that must be made in the definition of codes, and how to configure the data to support desired future-state outcomes.

During the training, AssetWorks and CoLA may setup and configure some settings and load sample codes with recommended configurations in the test environment. It will be CoLA's responsibility to make corresponding the corresponding setup and configuration in the production environment.

Because CAM will be integrated with FleetFocus, many of the reference codes will be loaded through the data loading process. AssetWorks will review with CoLA the source of all references and data objects to determine which can be loaded electronically using templates and which must be entered manually.

System Configuration

CoLA will learn to setup and load the CAM application during Key-User Training. CoLA will take action items from the Key-User training to finalize the definition of all relevant data elements and references and to use these definitions to configure the application. This configuration will build on the setup defined with CoLA core team during the Key-User Workshop and will focus on setting system flags, setting up new codes, configuring code attributes and loading references. Among the general items that must be setup and configured:

- Security: System Flags, User Roles and Users
- Codes and References: Departments, Locations, Vendors, System-Assembly
- Events: Notifications and Tasks
- Approval Rules and Matrix
- Interface Configuration
- Asset Model: Spec Type, Category, Attributes, Specifications

Because CAM enforces referential integrity at the database level; any electronic data conversion cannot be executed until all referenced data elements are loaded. The method used for loading the data will often depend on the number and type of records to be loaded, the availability of electronic sources to convert from, and the complexity of the reference. For many references, it is far easier to simply key in the code and required description.

Throughout the project, AssetWorks will be available to consult with CoLA on decisions related to the definition of references and record configuration. AssetWorks will not be responsible for loading or configuring data in CAM unless mutually agreed to and incorporated into the project budget.

AssetWorks and CoLA will identify which references can be loaded through templates filled with records extracted from the legacy system – see WBS 6.0 Data Loading. Those records that can be loaded electronically must be reviewed and configured to support the CAM functionality.

CoLA will have responsibility for loading all manually entered records that cannot be sourced from a legacy system in both test and production environments.



AssetWorks will work with CoLA to define the configuration for the interfaces between CAM and the legacy system for loading the Asset Register and Data Mart. CoLA will be responsible for making changes to the legacy asset application to support an integration.

Deliverables System Setup Services

- Key-User Training
- Support with Setup and Configuration
- Assist with the configuration of CAM-FleetFocus interfaces

CoLA Responsibilities for System Setup

- Provide training facility for the key-user training, to include PC workstations for each trainee.
- Identify Key-Users, System Administrations and Trainers responsible for configuring the application.
- Attendance and participation in the Key-User Workshops.
- Entry, setup and configuration of all security roles and settings.
- Data collection and entry, setup and configuration of reference and codes.



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Asset Design

CAM is designed to support a variety of different asset types, from vehicles and equipment, to infrastructure. The CAM Asset Model is configurable to allow users to define the structure of assets based on how each user manages how they plan, order, procure, track, and dispose of the assets. Because of this flexibility and that the model differs from the most legacy maintenance system, designing assets becomes a critical task in configuring CAM and must be completed before the Asset Register can be populated. The Asset Model is described in detail in WBS CAM 6.0.

Key-User Training will review the CAM Asset Model and provide instructions on how assets are to be designed. AssetWorks will develop several examples during the training that can be used as templates by CoLA as it designs and builds the assets in CAM.

CoLA will have the responsibility to:

- Determine which assets will be maintained in CAM
- Determine the component structure of each asset type
- Create the Spec Types to define the components
- Categorize asset types into groups with a common component structure, life-cycles, and vocation.
- Assign Spec Types to the Category
- Determine the Attributes (user-defined fields) that are common to the component and specific to the unit
- Load and configure Attribute definitions
- Assign Attributes to Spec Types and Category
- Create component Specifications (year, make, model, or generic description)
- Assign Options to Specifications
- Assign Specifications to Category/Spec Types
- Create valid Specification Combinations

The complexity of this task may depend on which functionalities will be deployed in CAM and how CoLA treats old and new assets. Legacy assets may be configured with a generic code, while new assets may be linked to a more detailed configuration.

CoLA will have the responsibility during this task to complete the design and make the configurations necessary to build the asset definitions. Templates can be utilized to extract and load some large record sets to generally define some of the asset model structure – See WBS CAM-6.0 Data Loading. CoLA will have some additional work to



associate the structures together to form Asset in CAM. For example, Spec Types must be created and associated with Categories before Specifications can be assigned to a Category.

AssetWorks will consult with CoLA during the design process to assist them with making design and configuration decisions.

Deliverables System Setup Services

- Consulting support with asset model design, setup and configuration.

CoLA Responsibilities for Asset Design

- Design and loading of Asset model structures.

CAM Data Loading Services

The CAM application has an Asset Register that contains records for each asset managed in CAM and a Data Mart that has several journals containing historical transactions: maintenance, usage, energy and capital. The Data Mart is linked to FleetFocus or the legacy maintenance system and is updated on regular basis via interfaces.

CoLA will be responsible for extracting data from its legacy system(s) to load the CAM Asset Register and Data Mart templates. The source of data will depend on the completeness of data in the maintenance system(s) that CAM will integrate with to populate the Data Mart. For FleetFocus customers most data required in CAM can be sourced directly from FleetFocus, assuming the data is loaded in FleetFocus. If key data is missing in FleetFocus, other sources can be used to populate CAM conversion templates for loading into CAM. For example, if components and purchase costs are not in FleetFocus, but exist in a fixed asset system, data extracted from the fixed asset system could be used to populate CAM.

From FleetFocus M5, AssetWorks will extract the following tables:

- | | | |
|----------------------|--------------------|-----------------------|
| • assoc_unit | • item_list | • o_part_chg |
| • category | • item_valid | • o_wo |
| • class1-5 (if used) | • job_visit_reason | • pd_dwn_stat |
| • comp_main (view) | • loc_gen | • prod_gen |
| • dept_main (view) | • m5_cat_class | • spec_item |
| • emp_main | • mcc | • spec_prod |
| • f_comm_prod_chg | • meter_jnl | • tech_spec |
| • f_unit_prod | • o_comm_chg | • unit_asgn_hist |
| • f_unit_prod_chg | • o_job | • unit_capital_jnl |
| • fiscal_cal | • o_labor_chg | • unit_dept_comp_main |



- unit_downtime
- unit_sys
- vendor
- unit_item
- unit_syscomp

Asset Register

The Asset Register must be loaded initially with data extracted from FleetFocus, or other legacy system. Because the CAM asset model and structure is different from most maintenance systems, a conversion process must be used to build the assets in CAM. During the Key User training, CoLA users will be trained how to design assets and before the data loading begins, CoLA will construct the Asset structures in CAM against which an Asset will be loaded.

To facilitate the data loading, AssetWorks will provide to CoLA a series of templates that will be populated with data extracted from its legacy system. CoLA will use these templates to map the legacy assets to the CAM asset model as well as other reference codes. The following templates will be used to design and build assets in CAM:

- **Category** – Extracts from legacy system the basic code and description from the source table that will be used to determine which Category the asset will be assigned. AssetWorks will provide a template to pre-load the CAM Category from one of the primary Asset references in the legacy system. In FleetFocus possible sources include: Category, Classes 1-5, MCC, Activity Code, Operational Class, or a Unit Item. Or CoLA can have the option of developing an entirely new code set for the CAM Category and through a mapping template translate each asset to a new Category Code. Each Category will have one or more Spec Types assigned.
- **Attributes** – User Defined Fields (Unit Items and Spec Items in FleetFocus M5) will be extracted from the legacy system and populated in a template. CoLA will review each field/item and select which ones will be used to load information in CAM from the legacy system. Where a restricted list of valid values will be used, CoLA will be responsible for populating an Attribute Validation template with valid options. The template will load the CAM attributes table.
- **Specifications** – Extracts from the legacy system the various specifications describing an asset. In FleetFocus M5, this would be the Tech Spec and/or Manufacturer, Make and Model. Each FleetFocus Specification will be mapped to a CAM Specification. CoLA will review each Specification and update the mapping as necessary.
- **Parent Assets** – Extracts Units from the legacy system, the specification and source category. CoLA will review each asset to validate that the specification and source category are accurate and will make adjustments to the mapping. Based on the source specification and category, the asset will be mapped to a CAM Category.
- **Child Components** - Extracts Components from the legacy system, the specification and source category. CoLA will review each asset to validate that the specification and source category are accurate and will make adjustments to the mapping. Based on the source specification and category, the asset will be mapped to a CAM Specification. Additionally, Unit Association will be used to link the component to a parent asset, creating a complex asset made up of multiple Spec Types. The Specifications of the Parent and all children will be joined to form valid complex asset combinations.

CoLA will be responsible for reviewing each template and completing all required fields. AssetWorks will provide a description of the contents of each field, its format and valid values (depends on field type and rules). Fields that are not required can be populated to provide additional detail to the record.



Where references are modified or new references are introduced, it will be CoLA's responsibility to update the other templates where the references are found, or for providing AssetWorks with a cross-walk table showing the old value and the new value for the field. For example, if a new Category code is being used, the Category on the Asset Template record must be updated to the new code, or an 'IS-WAS' mapping on separate table must be provided.

It is highly recommended that once CAM is deployed, the Category codes in CAM be synchronized with the source codes in the legacy system, and that the CAM Category code be assigned to the units in the legacy system.

Data Mart

The CAM Data Mart contains a series of journal tables containing historic transaction data from the legacy system. The Data Mart is used to support Life-Cycle calculations and other analytic functions in CAM. Once CAM is in production, an interface with the legacy system will be used to update the CAM Data Mart. While the interface can also be used to initially load the Data Mart, it is may be more efficient to initially populate the application through a conversion process. AssetWorks will review CoLA's historical records and make recommendations on what the best approach to populate the initial data may be.

The following considerations and assumptions will apply to each of the journals in the CAM Data Mart:

Maintenance Journal – The Maintenance Journal includes individual job-level transactions loaded from the legacy system. Each journal transaction will include at a minimum the asset, system-assembly, location, date, reason, labor hours, labor cost, part cost and commercial cost. These transactions are typically loaded from the legacy maintenance system and generally do not require manipulation before processing. A review of reason codes will be made to determine which costs are maintenance and repair, non-maintenance, accident/damage, or capital improvements. This will be used to classify the costs in CAM. If detailed transactions are not available from the legacy system, periodic or life-to-date costs can be used to load historical values.

Usage Journal – The Usage Journal capture historic meter readings by type of meter and reading date. In FleetFocus this comes directly from the Meter Journal and is converted based on the meter type to one of the Usage Journals in CAM: Distance, Time, or Count. If detailed transactions are not available from the legacy system, or if the meter journal only contains recent history, periodic or life-to-date meter or usage amounts can be used to construct a Usage Journal in CAM.

Energy Journal – The Energy Journal in CAM is made up of fuel transactions, containing the asset, date, meter if available, type (diesel, NCG, electricity, etc.), quantity and cost. The transactions would come from either the legacy maintenance system or a fuel management system. If detailed transactions are not available from the legacy system, or if the fuel system only contains recent history, periodic or life-to-date fuel quantity and cost amounts can be used to construct an Energy Journal in CAM.

Capital Journal – The Capital Journal contains historical purchase and capital improvement costs. This includes asset or component number, purchase cost, date, vendor plus some additional attributes about the transaction. The Capital Journal may also contain depreciation, adjustments and disposal data as well. The journal should have at a minimum the original purchase cost of the asset, but if available any capitalized improvements and a breakdown of costs by asset or component. This data may come from the legacy system if captured, but may also come from a fixed asset or procurement system. A template may be used to capture data not contained in FleetFocus and used to establish the historic purchase cost of assets not created in CAM. Once CAM is implemented, the Capital Journal will be populated as units are acquired and disposed in CAM.



Data Loading

AssetWorks will be responsible for processing the templates and populating CAM. CoLA will provide the templates to AssetWorks who will execute the CAM Conversion Utility populating the Sandbox, or test instance, with loaded data. CoLA will be responsible for reviewing the loaded data in CAM and verifying that the templates were properly populated and that the data conversion accurately loaded the data.

If errors are identified, AssetWorks and CoLA will determine the source of the error and make changes to the templates, and/or conversion scripts. CoLA will have the responsibility for modifying and correcting the template and/or transformation maps. AssetWorks will be responsible for updates to the conversion script. The Sandbox data will be cleared and the conversion process executed to reload the table from the updated templates and scripts.



The table below describes selected CAM reference and master record tables and the FleetFocus source for this data.

CAM Table	Data	FleetFocus M5 Source	Notes
Addresses	street, city, state/province, country, zip	<i>emp_main, vendor, loc_gen</i>	Distinct list of those used on those tables
Asset attributes	attribute, value	<i>unit_item</i>	Only for items that appear in master list
Assets	number, in/out-service info, domicile, departments	<i>unit_dept_comp_main, unit_asgn_hist</i>	CAM components become assets except for non-primary ones on complex assets. Components and assets are linked many ways for primary meters, primary energy type, etc.
Attribute list (master)	attribute, description, mandatory, field type	<i>item_list</i>	Where not disabled and where actually used on a tech spec or unit.
Capital journal	component, date, amount, transaction type	<i>unit_capital_jnl</i>	
Categories	code, description, LCM parameters	<i>category, class1, or other grouping</i>	SQL varies depending on the customer's choice of grouping.
Category attributes (valid for category's assets)	attribute, mandatory, data type, validations	<i>item_list, item_valid</i>	List of attributes used on any M5 unit that belongs to the CAM category. If M5's item list says it is validated, M5's validation list is brought over. If M5's item list says it is mandatory, the flag is cleared if any of the assets don't have it.
Components	number, spec, spec type, serial number, owning department, in/out-service info, meters and types, capital	<i>unit_dept_comp_main</i>	Meters are scrubbed (not negative or >999999). Meter is put into distance or time meter for <i>meter</i> and/or <i>meter2</i> based on M5 MCC. M5 units are all brought over; M5 components only if used for complex category examples. Capital (depreciation term, book value, etc.) put in capital record.
Departments	code, description, address	<i>dept_main</i>	After import, contacts are linked to matching values in <i>people</i> .
Downtime journal	asset, date, duration	<i>unit_downtime</i>	Operational downtime only
Energy journal	component, date, energy type, meter, LTD usage, qty, cost (with and without markup)	<i>f_unit_prod_chg, f_comm_prod_chg</i>	Meters and usage are scrubbed for rationality



Energy type	code, UOM, description	<i>prod_gen</i>	
Locations	code, name, address	<i>loc_gen</i>	After import, address and contacts are linked to matching values in <i>addresses</i> and <i>people</i> .
Maintenance journal	component, date, system, cost (with and without markup), flags for target and accident and warranty	<i>o_comm_chg, o_labor_chg, o_part_chg, o_job, job_visit_reason</i>	Capital jobs excluded
Meter journals (3)	component, date, meter, LTD usage	<i>meter_jnl</i>	
Meter types	type, description, conversion factor	hard coded	
People	name, phone, email	<i>emp_main, vendor, dept_main</i>	Distinct list of those used on those tables, including only those with a first and last name, and omitting last names that start with a number as some customers put phone numbers in the name.
Spec combinations (for asset requests)	category, spec		Built based on which assets have which components' specs.
Spec options	spec, option code and name, amount	<i>category_item</i>	Specs populated based on what M5 category the M5 tech spec had.
Spec type attributes (valid for type's specs)	attribute, mandatory, data type, validations	<i>item_list, item_valid</i>	List of attributes used on any M5 spec that belongs to the CAM spec type. If M5's item list says it is validated, M5's validation list is brought over. If M5's item list says it is mandatory, the flag is cleared if any of the specs don't have it.
Spec types	description, meter types		Hand-crafted for each customer based on how assets in each CAM category break down in terms of meter and common usage, plus one or two complex examples. Sample "onesies": vehicle (KM), vehicle (HR), vehicle (dual), equipment, machinery, trailer, boat. Sample complex for a bus: chassis, engine, transmission, seat. Spec type combinations are assigned to categories by custom script. Type is flagged as asset's primary energy component if M5 spec takes fuel.
Specs	code, description, mfr, year, make, model, meter type, energy	<i>tech_spec, spec_prod</i>	For categories with one spec type, specs are assigned their types based on what M5 category had the M5 tech spec. Specs are assigned to types for complex categories manually. Requests and



	type		orders are allowed only for specs whose model year is null (requesting only) or is 2013 or later.
User Class 1-5	Code, description		Used as an alternate source for Category
Vendors	code, name, address, contact	vendor	
VMRS systems	system, description	unit_sys	Not assemblies.

Deliverables for Data Loading Services

- Data Element Mapping Document
- Data Templates
- Data Loading Scripts
- Loaded Data

CoLA Responsibility for CAM Data Loading Services

- Participation in the data mapping design discussions
- Review and acceptance of the Data Element Mapping Document
- Extraction of data from the legacy system into the agreed upon format
- Loading of legacy data on to the Data Templates
- Submission of the Data Templates
- Timely review and validation of loaded data
- Documentation of data errors

CAM Application Training

AssetWorks will conduct Application Workshop sessions for CoLAsystem administrators, core project team members and key system users in the various CAM application functions. The goal of these sessions is to familiarize CoLA with application functionality and work-flows that the application can support.

Application Training will also serve as primary training for most of the principal CAM users, except for those field users that will have limited use of CAM. AssetWorks recommends that CoLA designate internal CAM Application Trainers that will participate in the training and will provide training and support to new users and to casual CAM users.



Application Training Workshop

The actual topics of this training will depend on the functionality that is deployed and will be utilized by CoLA. Before the training is scheduled, the AssetWorks Project Manager will provide a training agenda agreed to by the Project Team that will detail the specific topics for each day of training, as well as schedule for the training session.

As of October, 2013, the following functionality will be addressed in Application Training:

Module	Functionality
Analytics & Reporting	Life-Cycle – Equivalent Annual Cost Models Dashboards
Procurement	Asset Selector List Asset Requests Request Approvals Purchase Orders Receiving Assets Accepting Assets Asset Invoicing

CAM User Training Materials

AssetWorks will provide CoLA with our standard user training guides for the CAM application in Word format. AssetWorks will utilize the standard documentation during the training.

It will be CoLA's responsibility to customize the documentation and distribute the documentation to users following the training.

CAM utilizes on-line help that can include videos to demonstrate CAM functionality. Standard CAM help videos will be distributed with the application. Custom CAM help videos can be developed with assistance from AssetWorks or by CoLA. AssetWorks assistance is required to load the videos into the application. Custom videos will only be available initially to customers that host the CAM application.

Deliverable for Application Training

- Application Training Workshop
- Standard User Training Materials

CoLA's Responsibility for Application Training

- Provide facilities to conduct Application Training workshops.
- Participation in and feedback during Application Workshops.
- Customization and distribution of standard CAM user guides.
- Conduct User Training sessions for casual CAM users (i.e. Asset Requests)



CAM Testing

A Readiness Review is used to verify CAM in a controlled environment to ensure that the application is ready for deployment. The purpose of this review is to walk through the work-flow process and using a test environment verifying that the processes and system are functioning in accordance to the specifications for the tested function.

During this review, the focus will be on:

- **Data Loading/Conversions** – Was the legacy data correctly mapped and transformed into CAM? Are there missing data elements that have not been converted that are available from an electronic source, or that need to be manually loaded?
- **Application Configuration** – Has the application been configured correctly to support planned work flows and is the data processed according to the expected configuration? Are the user roles correctly defined and authorizations assigned to meet expected work flows?
- **Proposed Workflow** - Do the proposed workflows efficiently support real-life operations? Are the proper procedures in place to support the collection and entry of information?
- **Interfaces** – Do the interfaces between CAM and the legacy asset system work properly? Do interfaces with other external systems function as designed?

A pre-production test environment will be established to test application settings and functionality in a controlled environment using CoLA data and configuration settings. This approach assumes that all data entered will be test information and that the test environment will not be the system of record.

Prepare System Test Plan

AssetWorks will provide our standard System Test Plan that consists of the following primary functional and data validation tests. Additional testing items may be required based on CoLA planned deployment of the application and its modules. CoLA will modify the standard test plan to include any specific processes not addressed.

AssetWorks will review and recommend methods to test the additional requirements

If enhancements or interfaces are required to support any of the planned work-flows, CoLA will be responsible for testing these items following delivery and installation of the completed item in a patch or upgrade release. Enhancements or Interfaces will not be include in Test Plan; separate test scripts will be provided for each development item based on the item's specifications.

Readiness Review Workshop

The actual testing will be the responsibility of CoLA with AssetWorks participating in a review of the results at the end of the task. CoLA will be responsible for executing the test plan using sample CoLA data. CoLA will document for each item the data used during the test and the outcome of the test.

Where the results of the test did not meet expectations, these items will be reviewed with AssetWorks to determine if the data entered was invalid; if the application requires additional configuration; if the application must be reconfigured and if the failure was caused by a failure in the application code.

AssetWorks will consult with CoLA on the best method for correcting the identifying issues. Issues discovered during this initial testing phase that are attributed to problems with the CAM application will be documented as items in our software management system and addressed by the development team. Any items requiring



modification to the application code will be scheduled into a planned patch or release depending on the severity of the issue and its impact to CoLA's ability to go live.

Deliverable for Application Readiness/Testing Services

AssetWorks Standard System Test Plan

Readiness Review Workshops

AssetWorks review of and response to issues documented during the Readiness Review

CoLA's Responsibilities

Approve the Test Plan

Modify standard test scripts provided by AssetWorks as necessary in time for test execution

Participate in Readiness Review Workshops

Perform application testing

Document test results

Work with AssetWorks to remediate/resolve testing issues

CAM Deployment

The final task is the actual production roll-out for each location. This task requires the completion of Application Training, the completion of any pre-production testing, and the CAM system to be "live" on its production environment.

The CAM application will be rolled out at once for all locations. Prior to the production deployment, AssetWorks will be on site, staging and preparing for the system roll-out/cutover. This time includes final site testing of hardware and system readiness and review of cut-over procedures with user personnel.

The process of bring CAM live will be the publishing of the Production URL to the CAM user community. Users will at that point have the ability to begin using the CAM application to implement work-flows and utilize the data available in the application. AssetWorks will be available during the initial deployment period to respond to user questions and address any issues.

Deliverable for Production Deployment Support Services

- Live production environment and operations.

CoLA's Responsibility

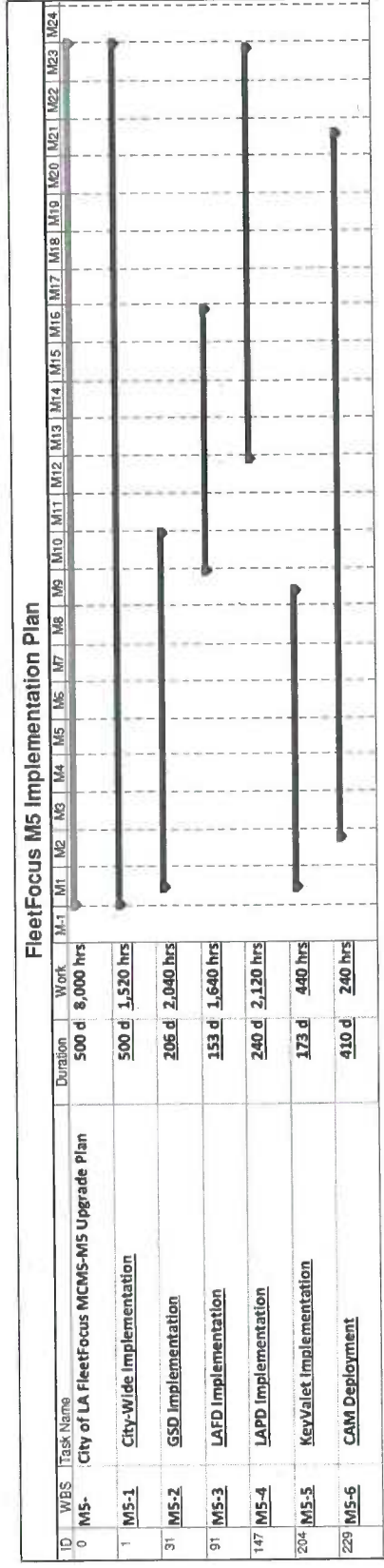
- Identify operations issues and notify the AssetWorks.
- Identify ad-hoc training needs and notify the AssetWorks.
- Perform the cutover to deploy CAM CoLA end users.





Proposed Timeline

The following graph depicts the proposed timeline for this project. Please see the complete Microsoft Project document for a complete project plan. All tasks described herein assume the durations and timelines represented below. A change to the schedule may result in a change to the implementation costs.



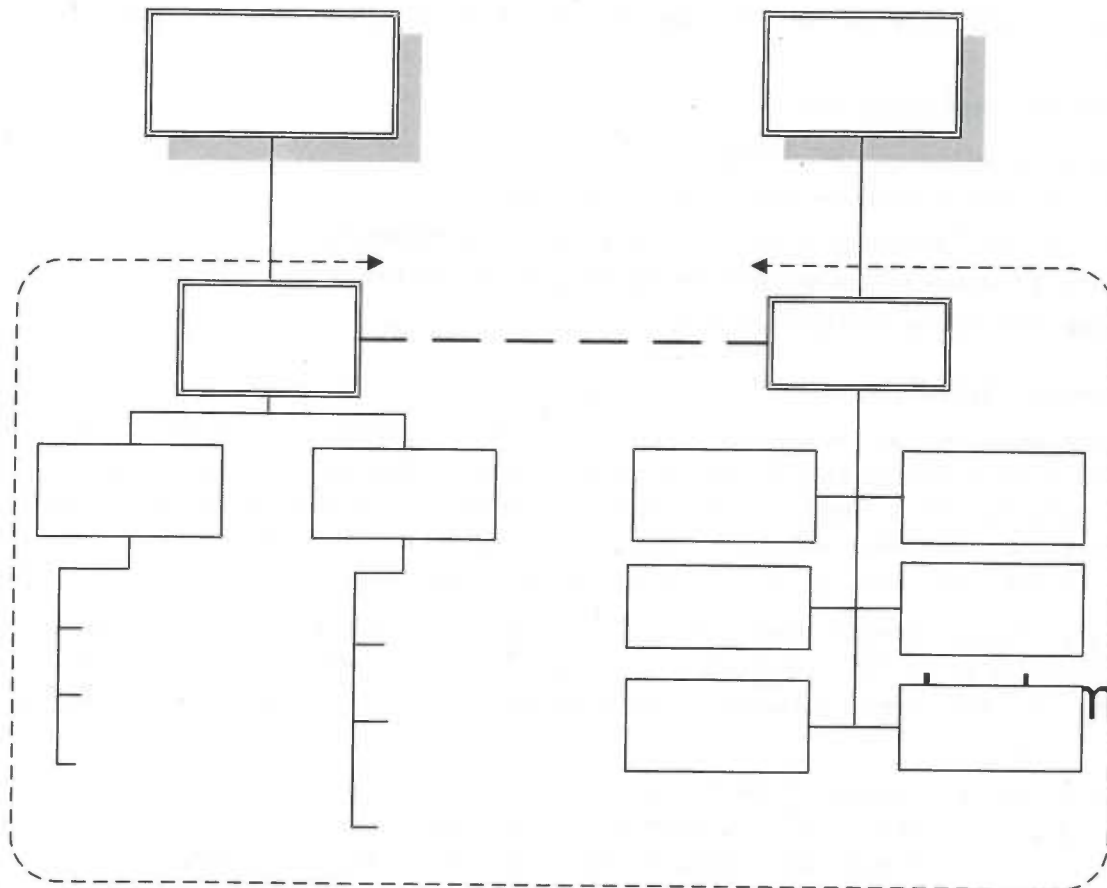
Project Organization

AssetWorks Project Team

The AssetWorks project team is a team of highly experienced AssetWorks staff who has been "field hardened" in fleet operations and real implementations. Many AssetWorks senior managers have been with the company since 1979. Most of the AssetWorks Professional Services employees have fleet operations backgrounds as Fleet Managers, Shop Supervisors, Mechanics, and Inventory Managers. This real world experience is invaluable in helping our clients implement the application and our ability to understand their needs.

The proposed project team will consist of the following key positions from both organizations:

FleetFocus



AssetWorks
Project Director

Implementation F

Project Director

The AssetWorks Project Director will have the ultimate responsibility for the success of CoLA's implementation. The Project Director reports to the Program Manager and will have direct oversight over the Project Manager and day-to-day operations. The Project Manager will oversee the AssetWorks Project Team, including the on-site implementation team and the AssetWorks development and support resources. The Project Director will also review and approve all project billing and is available to meet periodically with CoLA's executive team to review the project status, discuss challenges facing the project, and identify opportunities to advance the project. The Project Director will also be the first to handle any issue escalations, with backup from the Program Manager. The Program Manager has sole responsibility within AssetWorks for accepting all contract change orders.

Project Manager

Every AssetWorks software implementation will have a dedicated Project Manager that is assigned to the project from start to finish. The AssetWorks Project Manager is the principal AssetWorks contact, and has day-to-day responsibility for the successful completion of the project and will report to the Project Director. The Project Manager is responsible for directing the day-to-day activities of the project and managing the rest of the project team. The Project Manager is responsible for coordinating resources and activities to ensure that the project is completed successfully and on schedule. The Project Manager is also the primary point of contact for the customer.

Project management activities include:

- Develop Program Implementation Schedule
- Coordinate all internal resources necessary for project implementation.
- Monitor quality of performance in design, coding, testing, training and implementation efforts.
- Support project team inquiries and direct AssetWorks support group efforts as necessary.
- Provide regular Management Update Reports.

Implementation Specialists

Implementation Specialists are responsible for executing the training plan developed jointly by CoLA and the AssetWorks project manager and for assisting CoLA with setting up and configuring the application. The Implementation Specialists will also assist with the Business Process Review, the work-flow analysis and design, and developing any custom documentation. In smaller implementations such as this, the Project Manager may also serve as the Implementation Consultant and conduct all training sessions.

Prior to any involvement with CoLA, the Implementation Specialists will be apprised of any decisions between the Project Manager and CoLA. This information is critical for them to understand what information should be presented and whether there are any topics that should be avoided related to functionality that the customer will not be implementing.

During any training or configuration session, the Implementation Consultant will keep a log of all pertinent questions that may indicate changes in the direction of the implementation or possible issues. Once a training session is complete, the Implementation Consultant will discuss with the AssetWorks Project Manager the results and any issues that may have occurred. Because the Implementation Consultant typically meets with a larger number of customer personnel, it is important that functionality decisions made outside of any training session be made known to them.



After initial sessions with the customer, it is typical for the customer to contact the Implementation Consultant for either questions or advice on functionality. The Implementation Consultant will communicate back to the AssetWorks Project Manager any and all discussions.

Operations Consultants

For some projects AssetWorks may assign internal Fleet Operations Consultants or contract with independent Operations Consultants to assist with the implementation. Operations Consultants are all experienced fleet management and technical professionals that work independently or are associated with an AssetWorks business partner, who have been trained and certified by AssetWorks to provide project implementation services.

Operations Consultants are principally used to support tasks that require a large number of on-site personnel for a limited duration or when a client requires dedicated support resources for an extended period. Also Operation Consultants may be assigned to directly manage selected project tasks where a client's project budget dictates a more economical resource.

Tasks that may be assigned to an Operations Consultant include: data collection and data entry; operations reviews; configuration assistance; documentation development; user training; and site roll-outs. Operations Consultants report directly to the Project Manager.

Technical Engineer

The AssetWorks Technical Engineer is responsible for the initial installation of the system at the customer site. Activities include, loading the test, training and production databases; configuring application server; installing client workstation software; initial operational system test; and providing technical software installation training to the customer's technical representative.

Software Engineers

Software Engineers are assigned as needed to the project to complete any system modifications, interface programming, and developing custom reports. The Software Engineers work under the direction of the Project Manager and the Director of Technical Services.

Data Conversion Specialist

The Data Conversion Specialist is responsible for completing much of the data conversion. Duties include assisting with developing the data conversion plan, writing the conversion scripts and executing the data conversion.

Recommended CoLA Project Team

To best facilitate the implementation, AssetWorks assumes CoLA will adequately staff the project with sufficient resources to support the project's successful completion and that all appropriate resources will be committed to the project as of the project start date.

AssetWorks recommends that CoLA resources include:

Executive Steering Committee

The role of the Executive Steering Committee will be to participate in setting the goals and scope of the project and to participate in periodic status meetings with the Project Team. The Steering Committee will provide general project oversight and guidance to the Project Team relative to the organizations overall goals and objectives.



Project Manager

This is the point person within CoLA who can address specific project issues and serve as the main point of communication between AssetWorks and CoLA.

Operations Workgroup

A small group of experienced stakeholders from CoLA that can come together to define what functionality FleetFocus™ is to provide; determine what information is to be gathered and how it is to be collected; define the standards for setting up codes and other corporate references, and for developing the standard work-flows to rolled-out to each location. A typical customer project team consists of personnel from the following job classifications, although in smaller implementation one individual may represent multiple areas:

- Shop supervisor/foreman
- Acquisitions/Procurement Specialist
- Parts storeroom supervisor/specialist
- Accounting / Billing Specialist
- System Administrator
- Training Specialist
- Technical Specialist

It is important that this team remain intact throughout the entire implementation and should attend each training session to obtain a consistent representation during all project tasks.

Technical Support

FleetFocus™ is easy to install and easy to maintain, since the installation is done once on the server. The following technical resources are recommended:

- **Application Specialist** – This required resource must be familiar with Windows IIS-based web applications and VB and .Net components. During the installation, they will assist with the creation and configuration of the applications web site. After the installation they will be responsible for applying application upgrades, installing new releases, and maintaining the overall FleetFocus™ application. This resource will serve as the principal technical resource supporting the FleetFocus™ application and will be AssetWorks' primary technical contact.
- **Database Administrator** - Required for assisting with the installation of FleetFocus™ and configuring the initial application database instances. After installation, the DBA will perform regular database backups, apply database upgrades, and periodically run table maintenance scripts. The DBA will also be called upon to import tables and records during the data conversion process.
- **Network Engineer**—A resource familiar with Windows TCIP networking and security is required at the start of the implementation to assist with configuring the servers, connecting the servers to the network, and managing firewall settings. This resource may also be needed to establish and maintain network connectivity to user workstations. After installation these resources may be called upon to handle network and security issues related to FleetFocus™ and user workstations.
- **PC Specialist**—This resource maybe needed to install and upgrade Windows and IE on user workstations.



Training Facilities

AssetWorks will provide on-site training in a classroom environment suitable for training. CoLA will be responsible for providing and preparing the training facility. AssetWorks recommends class size to not exceed 12 users to insure proper attention can be given to individual users and maintain the needed pace to insure training sessions do not run over. The training facility should include hardware comparable to that found in the actual work place. Some end-user training can take directly in the storerooms or on the shop

Logistical and Scheduling Support

AssetWorks will need assistance from CoLA to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.



Assumptions

The following general assumptions apply to this proposed Statement of Work between AssetWorks, INC (AssetWorks) and City of Los Angeles (CoLA):

General

1. Professional services will be provided on a fixed cost basis. The actual hours delivered may be less than or greater than the estimated hours, however AssetWorks will only bill the agreed upon fixed amount. All professional services delivered will be invoiced at the beginning of each month following their delivery or upon previously agreed upon milestones.
2. Only those optional modules identified in the accompanying license agreement are to be implemented and are included in this Statement of Work.
3. Optional modules purchased after implementation has begun will require a change order or separate statement of work for services related to installation, configuration and training.
4. This Statement of Work does not include any costs associated with third party vendors or software that may be needed to complete the implementation.
5. AssetWorks is the author, owner, distributor and sole source provider of fleet management software, professional services and maintenance services for the FleetFocus™ family of products which includes FASuite, MCMS, M4 and FleetFocus™. Use of the products is subject to the Software License Agreement.

City of Los Angeles Resources

6. CoLA will provide the resources described in this Statement of Work to insure a successful implementation of the products.
7. CoLA will appoint a single point of contact for the duration of the project. This person should have project management responsibilities and decision-making authority. This person will be the focal point of contact for AssetWorks' Customer Support department.
8. All key CoLA project team resources will be committed to the project as of the project start date.
9. CoLA commits to training appropriate functional and technical resources as required.
10. CoLA is responsible for all manual data entry.
11. CoLA will have all of the necessary and appropriate personnel at all of the meetings for the purpose of defining the requirements of the system.
12. AssetWorks will provide on-site training to CoLA (as outlined above) in a classroom environment suitable for training. AssetWorks recommends class size to not exceed 12 users to insure proper attention can be given to individual users and maintain the needed pace to insure training sessions do not run over.
13. CoLA will be responsible for preparing the training facility. The training facility should include hardware comparable to that found in the actual work place. Some end-user training can take directly in the storerooms or on the shop.
14. All training sessions will be based on standard application training materials. CoLA will be responsible for customizing training materials to meet its implementation requirements.
15. CoLA will make appropriate technical resources available to AssetWorks' consultants.
16. In the event that CoLA schedules on-site services and due to circumstances within CoLA's control AssetWorks' scheduled personnel are unable to perform such services, AssetWorks will be entitled to payment for each such scheduled personnel on the basis of an 8-hour day.



17. AssetWorks will need assistance from CoLA to coordinate training and roll-out schedules, communications with field personnel and setting up training sites.

Infrastructure

18. CoLA will provide a project work area and infrastructure at the centralized implementation location appropriate for the size of the combined CoLA/AssetWorks project team. This infrastructure should include desks, chairs, telephones, and workstations with network access to printers and to the applications and implementation databases.
19. AssetWorks' consulting estimates do not include installation and/or configuration of any computer hardware and peripheral equipment.
20. CoLA will be responsible for installing and configuring computer hardware and peripheral equipment such as printers and bar code equipment (if applicable).
21. CoLA will be responsible for establishing access to the FleetFocus™ Application, Business Objects Enterprise, and DBMS servers, providing all supporting software, hardware, and connectivity for the application server.
22. The Web server must use Microsoft IIS.
23. Acquisition, installation, testing, support, and tuning of any additional required application software, hardware, RDBMS, other software, peripherals and communications infrastructure will be the responsibility of CoLA.
24. CoLA will verify that the hardware environment is installed, configured and operating over the network before scheduling the Software Installation.
25. CoLA is responsible for providing browser access to the FleetFocus™ application.
26. CoLA is responsible for providing and maintaining TCP/IP connectivity with sufficient bandwidth from all user workstations to the FleetFocus™ servers.
27. System, server, and workstation backups are the responsibility of CoLA. This includes the development and execution of the system backups and recovery programs.
28. CoLA is permitted to implement a disaster-recovery environment, however unless specifically included in this proposed Statement of Work, AssetWorks is not responsible for the installation, configuration or support of this environment.
29. CoLA will receive all standard, out-of-the-box reports at no extra cost; however CoLA is responsible for providing the recommended Business Objects licenses to support the proposed Report Server infrastructure. A single test and production reporting environment will be implemented.
30. CoLA will implement a single production FleetFocus™ database. A test database instance will also be implemented.
31. CoLA will implement this solution such that all assets will be in a single production FleetFocus™ database. Only one "Company" is to be implemented as part of this Statement of Work. Additional database "Companies" will require a change order.
32. CoLA personnel assume the responsibility for applying software patches.
33. The following information technology services are not included in this Statement of Work: network connections; telecommunications network(s); operating system, network and database administration; disaster recovery planning; the acquisition, installation, testing and tuning of any required hardware, operating software, peripherals and communications infrastructure.
34. If CoLA elects to have AssetWorks host the application or licenses the FleetFocus™ On-Demand SaaS service, the Software Installation phase and NHDO technical support described in this proposed Statement of Work are no longer required. A separate start-up fee will be invoiced following the contract execution for the installation of CoLA's AssetWorks hosted site.



Project Management and Risk Factors

35. CoLA and AssetWorks will agree on scope, services, and deliverables for optional modules and services prior to the Notice to Proceed.
36. CoLA project manager will be responsible for obtaining any required authorizations, approvals and/or signoffs by CoLA related to project deliverables and project progression in a timeframe in alignment with the project work plan. Delays to this process as well as any CoLA tasks not completed within the work plan timeframe will be subject to the Change Order Management process, delayed deadlines, and increased services fees.
37. This Statement of Work does not include the expenses associated with CoLA or CoLA resources assigned to the project.
38. CoLA remains responsible for all integration effort not described in this Statement of Work
39. The project schedule is contingent upon the timely attainment of several external milestones that are outside the control of AssetWorks. Examples include but are not limited to the acquisition of the requisite software licenses and hardware and the approval of requisite capital appropriation requests as required.
40. Circumstances may necessitate changes to the tasks and/or time estimates, at which time AssetWorks and CoLA will discuss these changes in good faith at their earliest opportunity.
41. This proposed Statement of Work includes implementation support for only those optional modules, interfaces, and modifications listed in the task list. Any change to the proposed Statement of Work, particularly the implementation services, data conversion, interfaces, and application modifications, will be documented and follow the same procedures for new enhancements or change orders.
42. Unless otherwise noted, all integration, enhancement and report development effort quoted in this proposed Statement of Work is an **ESTIMATE** based on AssetWorks' experience providing similar services for other clients based on our current understanding of the requirements. AssetWorks will develop a detailed Development Specification and firm fixed cost quote for all services before proceeding with any development.
43. This Statement of Work includes services to determine CoLA's requirements and preparing the development specifications and quotes for only those development items identified in this Statement of Work. Any requirement analysis and specification work for additional items not identified in this Statement of Work would be done on a time and materials basis.

Travel

44. AssetWorks will bill CoLA for all actual travel expenses directly attributed to on-site services delivered during the project in accordance with CoLA published travel reimbursement policies and any statutes governing the reimbursement of business travel expenses.
45. Unless otherwise noted, actual travel expenses will be billed on a monthly basis following the delivery of any on-site services.
46. Travel expenses are expected to be reimbursed as invoiced and are not subject to any project hold-back or payment deferrals.
47. AssetWorks staff members that are scheduled on-site for consecutive weeks will have the option of returning home at the conclusion of the scheduled work week or, with approval from CoLA, stay thru until the start of the following work week. Expenses incurred during the intervening period will be reimbursed up to the cost of the travel expenses that would be incurred returning home between the work weeks.
48. AssetWorks will bill CoLA for all expenses for travel on-site to provide planned services for which CoLA is not prepared to support (e.g. Meeting canceled due to weather; schedule participants are unavailable, scheduled facility is unavailable, etc.)
49. All travel costs provided in this Statement of Work are estimates and subject to revision based on actual airline, hotel, rental car and local market conditions.



Procedures for Handling Change Orders

Any change to the proposed statement of work, particularly the implementation services, data conversion, interfaces, and application modifications, will be documented and follow the same procedures for new enhancements.

For instance, any software modification, interface or conversion plan will be included in a functional specification developed by AssetWorks. AssetWorks will work with CoLA to understand the specific requirements and will create a detailed functional specification. Each specification will be reviewed with CoLA Project Team with the final action item being CoLA sign-off so that the changes can proceed to a development stage. Once development has been completed, any software changes will pass through a detailed quality assurance phase. Once delivered to CoLA, AssetWorks will review the changes that will conform to CoLA approved specifications. Upon testing and review, AssetWorks will secure CoLA sign-off on the final software changes.

Sole Source Provider

AssetWorks is the author, owner, distributor and sole source provider of fleet management software, professional services and maintenance services for the FleetFocus™ family of products which includes FASuite, G2K, MCMS, M4 and FleetFocus™.

AssetWorks is solely authorized or certified to provide this service.

Confidentiality

This proposed Statement of Work (SOW) contains CONFIDENTIAL INFORMATION of AssetWorks, Inc. In consideration of the receipt of this document, CoLA agrees to not reproduce or disclose this information except to CoLA employees directly involved on a "Need to Know" basis





Appendix A – Proposed Interfaces

General Services Division Requirements

Line	Description of Requirements by Categories	PRIORITY	YES	NO	Partial	Modify	Notes
1.1 General							
1	Create a customized implementation plan specific to GSD needs. Provide project management and administrative services to execute the implementation plan.	M	YES				AssetWorks will develop a Statement of Work specific to GSD requirements. AssetWorks has proposed an initial implementation plan with a separate phase for GSD. AssetWorks will be happy to meet directly with GSD to develop a more specific SOW based on the requirements stated here and other requirements as presented by GSD.
2	Key Valet Implementation at seven CoLA pool locations including configuration, administrative, and end user training.	M	YES				AssetWorks will install up to 7 KeyValet controllers at City sites. The services to support those installations are identified in the SOW.
3	Unit maintenance history and associated costs shall be converted for the entire life of the unit.	M	YES				AssetWorks will convert work order history for all active units and units sold in the last 7 years. AssetWorks recommends GSD identify which units costs will require detailed transaction records and which can be summarized by fiscal period or life-to-date amounts in unit history.
4	The selected Proposer shall provide system, technical, maintenance, and user documentation, including online instructions, for all supplied or required hardware and software, also documenting any customization or upgrades.	M	YES				AssetWorks will provide to COLA all standard FleetFocus documentation in an electronic form, our standard on-line help documentation and access to our Support Website where additional support materials and documentation can be download. AssetWorks will supply documentation for AssetWorks supplied handheld, KeyValet and fuel hardware purchased by COLA. Release notes are published with each new version release which will document changes to the application deployed in the release.



Line	Description of Requirements by Categories	PRIORITY	YES	NO	Partial	Modify	Notes
1.2 System Requirements							
1.2.1 Basic Features							
1	Core M5 system features and modules specified by CoLA will be provided, installed, tested and deployed fleet wide.	M	YES				AssetWorks is including in the Statement of Work the deployment of all purchased FleetFocus modules. A testing phase is included to test the application prior to production deployment. Following testing, AssetWorks will assist the City with a phased rollout of the application across each of the City's fleet operations.
2	Specific system administrative training, train the trainer and end user training will be provided for each systems feature and module prior to rollout.	M	YES				AssetWorks is including in the Statement of Work a comprehensive training program that includes: Key-User, Application, System Admin and End-User Trainer training sessions. AssetWorks will develop a training program with each fleet for training end-users by functional area.
1.2.2 Interfaces							
	See Attached Document "CoLA FFM5 Interfaces and Enhancements 6-3-13"	M				Custom Mods	AssetWorks has included in the Statement of Work a response to the CoLA FFM5 Interface and Enhancements document, describing our approach to each identified interface and enhancement
1.2.3 System Administration							
	See Attached Document "CoLA FFM5 Interfaces and Enhancements 6-3-13"	M				Custom Mods	AssetWorks has included in the Statement of Work a response to the CoLA FFM5 Interface and Enhancements document, describing our approach to each identified interface and enhancement
1.3 Security							

Line	Description of Requirements by Categories	PRIORITY	YES	NO	Partial	Modify	Notes
1	1. The selected Proposer shall host M5 in a secure environment until such time that the CoLA transitions system administration and security to ITA. Note: Due to the confidential nature of the data, Data Center security features should include video surveillance, card and/or biometric scanners, secured equipment racks, climate control, fire suppression, and generator backup.	M			YES		AssetWorks is proposing to host the FFM5 application in our Wayne PA data center until such time that the CoLA instructs AssetWorks to migrate the application to a CoLA data center. Our Wayne PA data center is a secure facility with many of the features described and undergoes regular security audits from internal IT, US Department of Justice, and independent auditors and security analysts. Additional security controls can be added in accordance with AssetWorks proposed hosting terms.
2	The proposed M5 system to provide all security functions related to M5 system access rights and privileges to the screens as what was available in MCMS.				YES		The MCMS and FleetFocus M5 security models are different and a full 1:1 feature/functionality map is not possible, particularly as the nearly 30 year mainframe technology of MCMS is different from the web application technology of M5. M5 Security Model has its own set of security functionality that includes separate users and user roles. User Roles that define multiple user security functionalities that include: Menus, User Privileges/Authorizations, Locations, Department Access, Reports, and KPI. System Flags, field level security, password controls and other security features exist in M5 to limit users accessibility and data access. In many ways the security features in M5 exceed those available in MCMS. AssetWorks recommends CoLA identify a minimum set of security requirements to determine if FleetFocus M5 will comply with those expectations.
1.4 Training and Documentation							

Line	Description of Requirements by Categories	PRIORITY	YES	NO	Partial	Modify	Notes
1	The selected Proposer shall provide system, technical, maintenance, and user documentation, including online instructions, for all supplied or required hardware and software, also documenting any customization or upgrades.	M	YES				AssetWorks will provide to COLA all standard FleetFocus documentation in an electronic form, our standard on-line help documentation and access to our Support Website where additional support materials and documentation can be download. AssetWorks will supply documentation for AssetWorks supplied handheld, KeyValet and fuel hardware purchased by COLA. Release notes are published with each new version release which will document changes to the application deployed in the release.
1.4 System Support							
1	Specific systems support, training, implementation planning shall be provided as described in the Assetworks Statement of Work Document dated May 9, 2013.	M					All AssetWorks services will be described in the latest version of the Statement of Work, which will be referenced in the Professional Services Agreement.

Los Angeles Fire Department Requirements

Line	Description of Requirements by Categories				Priority	YES	NO	Partial	Modify	Notes
Section A	Asset Management									
1	Must track vehicle life cycle from procurement to disposition.				M	Y				Supported with CAM & M5, CAM Modules: Planning, Procurement, Remarketing
2	Must track all vehicle life cycle costs such as purchase price, depreciation, operating expense, maintenance charges, salvage value, and replacement cost.				M	Y				Supported with CAM & M5
3	Must record, search, retrieve, analyze, and report all user specified vehicle information such as contract specifications, unit identification numbers, year, make, model, in service date, fuel type, replacement part numbers, associated component information, and warranty term and expiration dates, and vehicle vocation history.				M	Y				Supported with CAM & M5
4	Must create vehicle replacement schedules based on lifecycle data				M	Y				CAM Module
5	Must track sub fleets by user defined criteria and parameters such as make, model, year, type, and status.				M	Y				Supported with CAM & M5
6	Must track vehicle assignment and location with GPS tracking and create vehicle location reports.				M	Y				M5 with Telematics module and NetworkFleet adapter is capable of recording time stamped latitude and longitude in M5 database
7	Must track vehicle use by time, miles, hours, and fuel consumption and create reports that show vehicle usage.				M	Y				Base M5
8	Must have motor pool management module to control pool vehicle assignment, location, recovery, and keys.				M	Y				M5 Motor Pool Module
9	All vehicle data to be cross referenced and revolve around				M	Y				Included

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
10	vehicle shop number						
11	All vehicle data and repair history to be portable Must have ability for driver to manually update vehicle assignment and / or location	M H	Y Y				Included M5 tracks assigned operators, parking locations
Section B	Maintenance Operations						
1	Must create, track, and manage sequentially numbered work orders and trouble tickets.	M	Y				Trouble tickets = Work Requests
2	Must process and manage work requests - i.e. trouble requests.	M	Y				
3	Ability to monitor and produce status reports on campaigns and safety recalls.	M	Y				
4	Ability to monitor and produce status reports on Smog Checks, standard jobs, and preventive maintenance inspections.	M	Y				
5	Ability to capture labor and parts and produce relevant reports.	M	Y				
6	Ability to monitor and produce status reports on vendor repairs and warranty service.	M	Y				
7	Ability to track, monitor, and analyze vendor repair costs and performance.	M	Y				
8	Must create, track, and manage sequentially numbered warranty claims.	M	Y				
9	Must create, track, and manage sequentially numbered customer invoices.	M	Y				Invoices = Work Order Number, Work Order Invoice report
10	Must capture driver performed inspections and maintenance with on line or downloadable vehicle inspection check lists.	M	Y				Checklists as attachments. Future functionality will include inspection via a mobile device
Section C	Work Order Management						
1	Must process and manage work orders to monitor, track, and control pending repairs (Vehicles waiting to come into shop)	M	Y				Managed as Work Requests until Work Order opened when vehicle enters shop, Work Request linked to WO

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
2	Must process and manage repair estimates	M	Y				
3	Must process and manage work orders to monitor, track, and control current repairs (Vehicles in shop)	M	Y				
4	Must process and manage work orders to monitor, track, and control completed repairs.(Vehicle repair history and customer invoices).	M	Y				
5	Ability to monitor and produce status reports on frequency and type of defects and repairs.	M	Y				
6	Ability to document, search, analyze, and create historical and current vehicle condition reports. This feature to capture and process data on: -vehicle defects reported -backlog of pending repairs -vehicle repairs requested by end user -vehicle repairs performed -vehicle repairs in process -parts and components replaced or installed	M	Y				
7	Ability to document, archive, search, analyze, and create historical and current vehicle status reports. This feature to capture and process data on: -When vehicle are placed out of service. -How long vehicles are out of service -Estimated time to completion -Status of work in progress. -Apparatus availability – number of vehicles out of service and number of vehicles available by defined parameters. This feature must have ability for user to create and define specific status codes such as "in process," "delayed," "on hold," "waiting for parts," "waiting to come into shop", etc. and must be a dynamic searchable field.	M	Y				Unit Availability functionality is used to manage availability tracking and status reporting. Can be integrated with Dispatch system..

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
8	Ability to document, search, analyze, and create reports on current and historical work load: -Trouble tickets assigned to a particular vehicle -Trouble tickets assigned to a particular repair order -Trouble tickets assigned to a particular Shop. -Trouble tickets assigned to a particular employee. -Trouble tickets by status (active, in process, completed) -Types of repair (in and out or change over, emergency or non emergency, Scheduled, or non-scheduled, System / component to be repaired) -Campaigns and safety recalls (Campaigns completed, Campaigns pending) This feature must have ability for user to create and define specific status codes such as "in process," "delayed," "on hold," "waiting for parts," "waiting to come into shop", etc. and must be a dynamic searchable field.	M	Y				Job Status codes can be user defined
9	Must be able to document, search, retrieve, analyze, and report repair requests and vehicle defects that are called in. This data to be referenced in sequentially numbered trouble tickets that can be assigned to a specific repair order, shop, mechanic, vehicle, or other user specified parameters and allow for comprehensive documentation of circumstances related to incident such as date, reported by, priority code, etc.		Y				Work Request Incidents can be used to track user reported defects and issues. Incidents converted to a work request and added to a work order.
10	Must be able to input, document, search, analyze vendor invoices and work order information and link these and other documents to corresponding vehicles. Said data must be fully searchable and retrievable by vendor, vehicle, key word, or repair order.	M	Y				
11	Labor codes to translate to "read-able" repair stories	M	Y				Job codes for a Job Description i.e.: "Replace Front Left Brake Pad"
Section D	Inventory Management						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1	Must have inventory management tools and the ability to interface (bi-directional) with Department's materials management programs (i.e SMS)	M	Y				
2	Parts inventory module to have a robust on-line user friendly catalog and procurement feature that includes product search, item description, digital image, availability, price, shopping cart, order tracking, inventory control, financial controls, and automatic reordering.		Y				Single user defined catalog for each company, with individual location having own subset of catalog of parts available to that location.
3	Ability to document, search, analyze, and create reports on auto parts inventory. This feature to capture and process data on: -Master parts catalog with ability to link digital images of all inventory items for user reference. -Parts locator guide -Physical inventory -Stock and non stock items -Vendors and contracts -Used, new, and rebuilt parts -Inventory locations	M	Y				
4	Must allow designated users to assign inventory and non inventory parts and materials to work orders such as stock items issued by GSD Parts, buyouts, items purchased with purchasing cards or petty cash, and used or rebuilt parts.	M	Y				
5	Must allow authorized users to approve parts assigned to work orders and then generate manual or automated billing and payment prompts that will automatically interface with City's SMS system or that can be manually submitted to and processed by Parts Department personnel for charge back.	M	Y				See proposed SMS Parts interface.
6	Parts to be charged to work order by mechanic, reviewed and approved by supervisor, then billed by Parts Department. Intent is for Parts department to only charge for parts that are assigned to work order, and approved by supervisor		Y				

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
7	Must track and control automotive parts cores, returns, and core credits and process this data to corresponding work order.	M	Y				Core tracking functionality
Section E	Fuel Management						
1	Must have fuel management tools and the ability to interface with other fuel management systems such as E J Ward.	M	Y				See proposed EJ Ward Fuel Interface
2	Ability to document, search, analyze, and create reports and statistics on historic and current fuel use and fuel transactions. This feature to capture and process data on: -Date and time of fill up -Fuel site location -Vehicle, driver, and Department or assignment associated with vehicle. -Vehicle odometer reading -Miles driven since last fill up	M	Y				FuelFocus module tracks fuel transactions captured from FuelFocus ICU or through a fuel interface can support this level of reporting
3	Ability to generate fuel reports and send out alerts to fleet owners when unusual fuel transactions occur.	M	Y				Can be supported with Fuel Interface Reject Manager and/or dashboards or ad-hoc exception reports
4	Real time server to allow fuel transaction data to instantly upload to data base.	H					EJ Ward Interface will be a batch process. Real-time is only supported with FuelFocus hardware installed at Fuel Island
5	Web based fuel management software so fleet owners can process and generate user-friendly queries, reports, and dash board metrics.	H	Y				FuelFocus module is included with M5
6	Ability to authorize fuel transactions at fueling sites by scanning employee badges into fuel control terminal.	H	Y				Only supported with FuelFocus Hardware installed at the Fuel Island. Employee authorization an EJ Ward responsibility. FleetFocus will reject invalid employees if Employee Fuel Cards are maintained in FleetFocus

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
7	Ability to utilize existing vehicle information transmitters (VIT, Conceiver) that will automatically upload vehicle information into the fuel management system data base whenever vehicle fuels at a fuel site that is equipped with a compatible fuel control terminal. Historic and current fuel information will be integrated into Assetworks fleet record.	H	Y				AssetWorks FuelFocus VIB units are comparable with EJ Ward Conceivers and can be used inconjunction with FuelFocus hardware to automatically upload vehicle data during fueling. Conceivers can also be read from a FuelFocus ICU. Historical fuel records can be converted through the same fuel interface process.
8	Must be able to document, search, analyze, and create reports on other fleet related consumables such as diesel emission fluid, motor oil, and anti freeze	H	Y				Supported when additional fluid types are managed as products
Section F	Financial Information						
1	Ability to document, search, analyze, and create reports on vehicle lifecycle cost. This feature to capture and process data on: -Vehicle Identification Number -Vehicle purchase price -Funding Source -Purchase Order Number -Depreciation -Salvage value -Maintenance labor -Maintenance parts -Vendor charges -Fuel -Charge-backs	M	Y				CAM and M5 will support this requirement. Vehicle procurement and disposal will be recorded in CAM and loaded into M5 via integration. Maintenance and operating transactions will be in M5. Billing will occur in M5
2	Warranty administration – ability to create and track warranty claims and perform accounting functions to monitor and control amount of claims submitted and / or paid.	M	Y				
3	Must have internal clock feature to track time on work-orders or tasks and record updates (timestamp)	M	Y				Uses one of several labor tracking methods to capture labor in real-time
4	Must be able to analyze labor and material costs and produce relevant financial reports based on user defined parameters.	M	Y				

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
5	Must be able to input 3rd party invoice information and link to corresponding work order and vehicle unit number	M	Y				Commercial work is recorded on any work order.
Section G	Employee Performance and Shop Efficiency						
1	Ability to document, search, analyze, and create reports on shop and employee performance, efficiency and productivity.	M	Y				
2	Ability to track and analyze employee labor by work order, vehicle, system code, labor code, work accomplished code, etc.	M	Y				
	System to have ability to check employee time entry and alert if time is not entered by user determined deadline.		Y				Dashboard can be used or Current Labor Query
3	Must be able to process labor data to provide productivity and efficiency reports by employee and shop location	M	Y				
4	Must be able to process labor data to provide average time guidelines for defined job, system, and work accomplished codes and flag anomalies.	M	Y				
5	Ability to document and track employee training, training needs, certification, and ability to alert employees and management of upcoming training events, or expired certification/licenses and send reminders via email or texts	M	Y				Employee training functionality is included in base M5
	System to have ability to scan and link employee training certificates		Y				
6	Ability to assign jobs to employees with appropriate certification or license.		Y				Supported in m5. Requires defining resource types on employee and standard jobs
7	Must be able to code employee labor as straight time, overtime, and on-call time.	M	Y				Requires use of Time Types on labor tasks
8	Must track and alert on customer come backs and mechanic do-overs for repairs recurring within 90 days or 4000 miles or as specified by user.	M	Y				Repeat Repair module
Section H	Analytics and Data Reporting						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1	Must be able to produce standard reports and provide tools for ad hoc reports. For all reports, users must be able to define data sort, selection, inclusion, exclusion, and range criteria. Reports must be able to be configured to run based on user established data parameters at specific times or at regularly scheduled intervals, the results of which can be distributed based on user defined requirements.	M	Y				Ad-Hoc reporting module is included in proposed configuration. Standard reports can be scheduled based multiple time intervals
2	System to offer intuitive and user-friendly reporting features including: -Standard reports -Report distribution -Report scheduling -Ad hoc queries	M	Y				
3	Analytic features available inside and outside of Asseworks: -Dashboards showing real time key performance indicators, unit availability, performance measures and metrics to show data trends over time	M	Y				
4	Must produce analytical report showing employee overtime charged to vehicle, work order, or on call incidents.	M	Y				Labor Journal with Time Types captured on labor transactions
5	Must produce analytical report showing repair incidents by type - such as "in and out" repairs, "change over" repairs, PM's, emergency repairs, and on call repairs.	M	Y				Based on job and work order visit reasons
6	Must produce analytical report showing number of PM services pending and completed - based on user defined parameters.	M	Y				
7	Must produce analytical report showing number of smog checks pending and completed - based on user defined parameters.	M	Y				
8	Must produce analytical report showing daily in and out repair appointments by shop, employee, and date range	M	Y				

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
9	Must produce analytical report showing all parts billed to repair orders daily or by date range. Parts reports should differentiate between stock over the counter issues and buy outs	M	Y				
10	Must produce analytical report showing all trouble tickets by status, date range, shop number, repair type, system code, or priority.	M	Y				
11	Must produce analytical report showing all vehicles in shop daily or by date range by vehicle type, shop location, and other user defined parameters.	M	Y				
12	Must produce current, trending, and historic analytic reports showing fleet inventory, fleet availability, shop daily progress report by vehicle, trouble ticket report (pending and back log repairs), vehicle cost per mile, vehicle comparison by user defined criteria, parts usage and expenditures by vehicle, group, shop, mechanic, etc, fuel usage and fuel cards by vehicle, vehicle labor backlog, labor trends, MRU's, number of vehicles out of service, shop productivity including mechanic utilization and mechanic efficiency, fleet life cycle analysis, and after hours emergency repairs, warranty terms,	M	Y				Supported through CAM Data Mart and M5 PMM modules, as well as standard reports
13	Training / tutorial feature for learning, understanding, and using system analytics and reporting features (including help wizards and how-to example)	M	Y				Training Workshops included in SOW
14	The system supports industry standard reporting, analysis and extraction tools (i.e. Crystal Reports, SQL Server 2005/2008/2012 Reporting Services, etc.).	M	Y				ODBC based reporting applications are supported
15	The system provides user-friendly ad hoc query tools that allow users to enter search/filter criteria, parameters, ranges, and scope of the report. Run ad hoc queries are based on any type of data elements.	M	Y				Over several dozen on-line query screens available with multiple parameters for filtering data. Date grid can be copied to clipboard and pasted in XLS or DOC files
16	The system provides an easy to use, user-friendly, feature-rich ad hoc report facility and provides users with ability to save an unlimited number of reports and queries in either	M	Y				Included Ad-Hoc reporting module

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	private or shared public libraries.						
17	The reporting and analysis function are geared towards different classes of users: a) Mechanics b) Supervisors/Managers c) driver / operator", d) Clerical/Accounting users, e) system administrators and, f) other distinct user classes. Access to reports will be restricted based on access rights.	M	Y				User defined reporting menus and KPI groups support assigning specific reports and measures to varying roles
18	The system produces pre-defined (canned) reports that are necessary to manage and monitor workflows which may be run and refreshed on-demand. Users, based on access rights should be able to find, select, run, view, and print standard reports from the inventory. Refer to section H, line 12 for a non exhaustive list of predefined reports	M	Y				Over 200 Standard, pre-developed reports are available
19	Refer to section H, line 12 for a non exhaustive list of predefined reports	H	Y				
20	The system provides a robust search engine to search for records by any field and parameters.	H	Y				List of Values allows users to search by code and reference, plus available attributes for any referenceable field
21	The system administrators have the ability to modify existing reports and create additional reports.	H	Y				
22	The system ad-hoc or preprogrammed query data provides the ability to export data in an array of other formats, including: a) Microsoft Access, b) Microsoft Excel, c) Text, d) CSV, and e) XML.	H	Y				Standard reports: PDF, XLS, DOC, TXT, RTF. Ad-Hoc: adds XML and CSV to those options
23	The system provides audit trail to record all changes to all the fields and timestamp in the record. The audit trail is viewable to administrators and authorized users.es	H	Y				All records record Change Date, Change Login User
24	Provide reports and database level security and control on Department's sensitive information to only authorized personell (Department and Citywide)	M	Y				requires use of Company database and Department Access Functions
Section I	Work Flow Management and Communications						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1	Must facilitate communication between end user, fleet owner, shop management, and repair staff via internal applications such as repair orders and trouble ticket and via external applications such as email and text notifications, etc.	M	Y				Notifications and dashboards can be used to alert users to particular conditions
2	Must provide user specific Internet based portals for fleet managers, shop supervisors, mechanics, vehicle operators, and parts procurement staff.	M	Y				FleetFocus and CAM are browser based applications
3	Must allow for reporting and viewing of vehicle defects and repair requests by drivers and operators through web based customer service portals.	M	Y				Customer Portal. Upcoming mobile modules
4	Must allow end users to send and receive comments to and from Shops electronically via email or on line.	M	Y				Outbound Email notifications are supported
5	Must allow end user to report vehicle defects and attach descriptive photos (if applicable) and schedule repair appointments on line.	M	Y				Work Request Incidents
6	Must allow fleet owner to send automated service reminders and appointment confirmations via Email and text to end users.	M	Y				
7	Must allow end user to view defined vehicle history content and vehicle status and progress reports on line.	M	Y				
8	Must allow fleet owners to communicate work directives to mechanics through assignment of trouble tickets to various shops and / or mechanics.	M	Y				Employee job assignments of work order jobs and/or work requests
9	Ability to flag a fleet record to notify user that there are additional information, comments, posting, and specific instructions for that vehicle.	M	Y				
10	Must be able to produce customer invoices and work orders showing repairs made, parts used, and charges billed.	M	Y				
11	The system provides automated workflow management, which can automatically forward tasks to a group or staff member to ensure timely follow-up, approval, and closure on assignments.	M					CAM supports work-flow management for vehicle procurement. Limited work-flow functionality in M5

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
12	The system provides notification and messages to prompt action from appropriate personnel.	M	Y				
13	The system provides an automated schedule/calendar.	M	Y				
14	User Web-Portal: Provides 24 hour-a-day, seven-day a week, real-time, direct access to the LAFD via the Internet for customer to view information, schedule, status, approval, notes, and comments and able to print any of this information directly from their location.	M	Y				
Section J	Mobile Data Capture Module						
1	Goal: The LAFD would like to implement a field data capture module with an appropriate technological solution that would enhance its services, improve the efficiency of its operations, and would enable personnel to obtain data and information and wirelessly transmit such information to the database for processing.	H	Y				MobileFocus is a store-and-forward Windows Mobile device based application that supports basic work-flow, inventory and asset functions. New Mobile modules and applications for any mobile device are in development and will be made available as optional modules upon release.
2	Portable computer devices must provide field data entry and look-up via wireless or Bluetooth technologies. Any mobile devices supplied must be easily handled and carried.	H	Y				MobileFocus devices can support WiFi and Broadband networks
3	Standards: The LAFD prefers to standardize on ruggedized and semi-ruggedized mobile devices that withstand rough environment which are suitable for field environment that remains functional under the following conditions: drop-shock, moisture, dust, etc... The device provides both data restoration and protective features.	H	Y				Any devices supporting Windows Mobile 6 can run MobileFocus software. New mobile applications will be HTML5 and run on device browser.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
4	Data synchronization: All mobile devices wirelessly communicate with a single central application and database server. While connected, the mobile devices can transfer newly collected data to the central server via wireless connection. The mobile devices are capable of data locally up to one month after it has been entered so that the unavailability of the central repository will not cause any data loss. The application can be configured to delete the data after each data synchronization up to one month after it has been recorded by the Mobile device. The system provides synchronization of all, or specific data fields at predefined intervals. Timely data update is essential for field personnel to obtain and process information in a accurate manner.	H	Y				MobileFocus supports a Store-and-Forward functionality that synchronizes the device with application in real-time when connection is available. Or stores data on device until a new connection is established.
5	The mobile device's will reside on non-volatile storage media.	H	Y				Depends on device
6	The mobile device's provide the capability of sending and receiving information via encrypted hard-wired and wireless means.	H	Y				
7	The mobile device provides a) a large enough screen to support usage by all employees, including those with slight visual impairments; b) the ability to be viewable in direct sunlight and from different angles; c) The ability to adjust screen brightness and contrast	H	Y				Depends on the device
8	The mobile device provides support the City's WAN Standards and various wireless providers.	M	Y				
9	The mobile device provides the ability to integrate with digital cameras and attach digital photos to work-order/tasks.	H	Y				Depends on the device
Section K	System General Features						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1	Must be able to automate with bar coding, touch screen, and remote processing solutions. These features must be able to be utilized for various system functions including parts inventory management, labor capture, employee time and attendance, mobile work order processing, and vehicle condition and repair request reporting.	M	Y				Bar-coding and touch screen is supported
2	Must have robust key word search function in all system applications and data base.	M	Y				Keyword search on menus and via list-of-values functions
3	Must have free form comments section for every asset.	M	Y				Multiple notes fields on Assets
4	Must have spell check for all text fields with ability to add new words and terms	H	Y				Chado Spell Checker is integrated with notes fields
5	System to have clock feature to show elapsed time between repair events - i.e elapsed time between when vehicle arrives for repair and when repair is completed.	M	Y				Time in and time out is recorded for labor, jobs and work order. Elapsed time can be determined
6	System to have internal "bulletin board" or blog feature for authorized users to post and view tech tips, maintenance tips, service alerts, and other universal fleet related information	H					Not included
7	System calendar and appointment schedule to be controlled by shop supervisors - i.e. shop management will dictate which dates are available for appointments. Calendar / appointment application to have "cancel" feature that will prompt any person canceling a scheduled appointment to note why appointment was canceled via predefined reasons in a drop down menu. Must be able to document, search, analyze, and create reports on canceled repair appointments.	H					Future development item
8	The system allows users to attach supporting files electronically to a fleet record.	M	Y				Files can be attached to multiple record types
9	The Graphic User Interface (GUI) allows multiple methods of data entry (integration), including but not limited to: a) Gloved finger (touch screen capability); b) Stylus/writing recognition; c) Software keyboard; d) Digital Camera; e) Hardware keyboard attached to docking device; f)	H	Y				Digital Camera and Video cam files can be attached, but input from these devices to application records is not supported

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	Hardware keyboard built into field unit; g) Scanner; h) Card Reader (driver license, credit card, etc); and i) Video Cam.						
10	The application allows easy access to and intuitive workflow of all data, sections, and screens.	H	Y				
11	The application provides a visual indicator that identifies mandatory fields and error messages on the user's interface.	H	Y				
12	Online Help: The system provides access to reference documents (i.e. procedure, protocol, ordinances, code information).	H	Y				
13	The application provides easy access to pertinent and frequently used information	H	Y				
Section L	Integration to other Systems						
1	The system provides data updates (new or changed data) to the central database repository at predefined intervals via either wired or wireless connection. This applies for Mobile Focus Module	H	Y				
2	The system provides the capability of interfacing with commercially broadband wireless service providers.	H	Y				Depends on device and carrier
3	The system provides automatic notification of verification/data failures to the system administrator.	H	Y				
4	Ability to interface with existing and/or future LAFD Computer-Aid-Dispatch (CAD) system and databases and allows bi-directional data exchange between the two systems.	D	Y				Optional interface can be developed
5	Ability to integrate with the planned Automatic Vehicle Locator (AVL) solution being implemented for LAFD 911 Dispatch (Adashi Optimetrics solution)	D	Y				Optional interface can be developed
6	Ability to interfacing with LAFD's GIS and GPS systems and	D	Y				Optional interface can be developed

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	databases.						
7	Ability to interface City's Email system and calendar for automatic notification and scheduling purposes.	M	Y				SMTP email integration is supported
8	Ability to interface bi-directional with City-wide Supplies Management System (SMS)	H	Y				Optional interface can be developed
9	Ability to interface with third-party parts vendor network to look-up and order needed parts. This will streamline the ordering process.	D	Y				Optional interface can be developed
10	The system is capable of interfacing with the Citywide Financial System and Citywide Payroll System (PaySR) to track and record labor hours with workorders and related activities.	D	Y				Optional interface can be developed
Section M	Security & Access Control						
1	The system architecture integrates with MS Active Directory and SQL Server 2005/2008/2012 Security protocol.	H	Y				
2	The system provides data entry access to application and mobile devices and are authenticated via Application Security Control. The system also provides control on privileges for viewing, editing or printing of records via an application access control module.	H	Y				
3	The application provides role-based security based on functional responsibilities.	H	Y				
3	The system administrator is able to control the type of access authority granted for a particular role (view, edit, create, etc.) by functional groups (Mechanic, Supervisors, Clericals, Managers, System Administrator, etc.). Individual users are allowed to be in one or more security groups.	H	Y				
Section N	Configurable Business Rules & Process Automations						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1	The system provides an easy-to-use mechanism to modify system functionality so that the system can adapt to changes in business rules, forms, policies, and practices. The system administration of the system provides a standard method of modifying the following areas: a) system settings; b) drop down lists; c) pop-up messages; d) checkbox and radio button lists; e) user fields and defaults; f) field labels; g) required fields; h) data validation; i) multi-level and conditional mandatory fields; j) customize the data collection, update, and reporting tools to reflect federal, state, and local requirements. This process requires no special programming skills, programming services, or interference with any upgrades provided by the vendor per the support and maintenance agreement.	H	Y				
2	The system provides the system administrator with the ability to specify required fields.	M	Y				Limited controls for turning on/off requirements for selected fields through System Flag functionality
3	The system provides the system administrator the ability to create additional fields.	M	Y				Limited to Items and Attributes for Key Reference objects
4	The system provides the system administrator the capability to configure and control automated workflows.	M	Y				
5	The system provides the system administrator the ability to create new screens, processes, and a customized GUI layout.	M	Y				Limited to screens supported with Screen Designer
6	The system provides the system administrator the ability to customize the order in which the software tabs through the input fields.	H	Y				Limited to screens supported with Screen Designer
7	The system provides the system administrator the ability to create screen templates that are group/role based (i.e. Shop Supervisors, Mechanics, Data Entry Clerks, Accounting Clerks, etc.).	M	Y				Role based screen menus
8	The system provides standardized code, terminology and protocols as dictated by and consistent with state and national standards.	H	Y				
Section System Administration							

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
0							
1	The system shall be overseen by a system administrator who will be responsible for security and ensuring that system and its data integrity are maintained.	H	Y				
2	The proposed solutions provides diagrams of the system infrastructure (server hardware, operating system software, database management software, application software, etc.).	H	Y				
3	Must be Windows & Zero-Client Web-based. All upgrades and maintenance are applied at application server.	H	Y				
4	System must be browser-independent which is compatible with City standard browsers (Internet Explore and FireFox)	M	Y				Available to non-IE browsers in version 3.1
5	The system provides the system administrator the ability to check the status of devices in circulation (e.g. the administrator may want to find out how many devices are currently connected).	H	Y				
6	The system provides alerts to the system administrator of system events, such as server shut down or abnormalities.	H	Y				
7	The system provides the ability to perform system upgrades with minimal interruption to either user operation and normal system usage.	H	Y				
8	The system provides the system administrator the ability to perform operating system upgrades on Mobile devices remotely.	H	Y				Requires remote management software
9	The system provides the system administrator an automated mechanism that deploys system modifications, updates and enhancements (including mobile devices) with minimal impact or outage to the production environment users.	H	Y				
10	The system provides updates to peripheral devices with new modifications when users log onto the mobile field device. This applies for Mobile Focus Module	D					

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
11	The system provides a feature (activated only by the system administrator) that will notify all users of changes to the system upon their initial system log-on following the implementation of the changes.	M					
12	The system provides the system administrator the ability to time the release of the updates.	M					All updates are deployed upon application of patch/release
13	The system provides configurable parameters for time out.	M	Y				
14	The system provides configurable default values.	M	Y				
15	The system produces messages that are clear, readable and apparent to administrative users. Whenever practical, the system provides the administrative users an explanation of the error, what caused it, and a recommended course of action.	H	Y				
16	The system provides the system administrator a log of all application error messages to a file with a configurable maximum file size and retention period.	H	Y				
17	The system provides capabilities for backup and restore for both application and data as required for business continuity.	M	Y				
18	The FD requires minimum of one week notification on scheduled maintenance that requires the application to be off-line. In addition, AssetWorks will be required to notify FD on outages, system problems, and software bugs and provide the timeframe for the fix.	M	Y				AssetWorks schedules in advance all monthly standard maintenance. Emergency Hot Fixes may be applied without notice

Los Angeles Police Department Requirements

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1.1 General							
1	Maintain existing functionality: a. AssetWorks, M5 will be consistent with LAPD's current MCSM system. b. Current work process recently developed as described in AssetWorks document titled <i>FleetFocus MSMS-MCMS/SMS Parts interface mods Phase 1</i> shall remain consistent in M5.		YES		Partial		FleetFocus M5 is AssetWorks latest generation Fleet Management system that includes all standard functionality needed to support large urban fleet operations, as well as optional modules to support fleet analytics and management. Nine of the 10 largest US Urban fleets are AssetWorks customers using a version of the FleetFocus system. Because the two applications are two generations apart and developed on widely different technology platforms, the applications have different user interfaces, data models and business rules. FleetFocus does deliver the functionality needed to manage vehicle maintenance, parts inventory, fuel transactions, and the overall assets. AssetWorks has successfully migrated multiple MCMS customers to the M5 application without a loss in basic fleet operations functionality or capability. AssetWorks is including in its proposed Statement of Work, the development of a parts interface based on the current MCMS/SMS process. We understand the City's comfort with the current process and reluctance to further automate the current process, but AssetWorks has developed multiple part interfaces that provide a higher degree of sophistication and automation that could be more efficient. AssetWorks will develop a detailed

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Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	g. All delays reported by the AssetWorks project manager shall include the impact of the delay and describe or suggest measures to get back on schedule. h. After production cut-over, AssetWorks shall assign a full-time support team to the project for the first full month of operations.		YES				See Statement of Work - Project Management
			YES				Post Implementation Support to be added as additional task
3	Documentation: AssetWorks shall provide electronic and hard copy documentation for the delivered M5 system. Documentation shall take the following forms: - System administration documentation - A design specification detailing system functions as well as the design of the database. - System document Listing each data entry field, identifying permitted data types, ranges or values, and relationships with other data fields. - User manual	M	YES				See Statement of Work - Training Preparation/Documentation
		M	YES				The application Table Layout guide or data dictionary is available on-line from the AssetWorks Support Website. AssetWorks does not deliver a printed version of the document as it is in excess of 1000 pages and the document is updated with each release and patch. The on-line version is updated routinely. The Guide also includes layouts for standard database views developed by AssetWorks and a Key map.
			YES				

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	A document (pdf) describing all system functions, with procedures for how to use them. On-line help A context sensitive help system with task-related information specific to each application screen	H	YES				See Statement of Work - Training Preparation/Documentation. AssetWorks will provide our standard user guides. FleetFocus has an on-line help functionality built with Robo-Help which includes a search feature and index. Users can customize screen help as needed.
4	Production Cut-over and Operations The following requirements apply to production cut-over and on-going operations. - AssetWorks shall incorporate all approved recommendations for running the application as part of establishing the production environment for cut-over. - AssetWorks shall review and recommend the establishment of the LAPD's system maintenance periods in a system that operates on a 24/7 basis. - AssetWorks shall assign an on-site team to provide post-implementation support services for one month after the system goes live.	M	YES				See Statement of Work - Production Deployment Will add a task to the Production Deployment to develop a system maintenance plan Will add a task for Post Implementation Support
5	Testing The following requirements are related to testing. - LAPD shall be responsible for: - Working with AssetWorks to develop a User Acceptance Test (UAT) plan and scripts. - Populating data for acceptance testing. - Executing the UAT. - Reporting and tracking test incidents for AssetWorks to resolve.	M	YES				See Statement of Work - Application Readiness Review

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	b. AssetWorks shall be responsible for conducting all regression testing of software enhancements incorporated into the baseline COTS solution as part of an Integrated System Test. c. During acceptance testing, AssetWorks shall provide LAPD staff with technical support in operating the COTS solution (such as running offline jobs and generating reports). d. AssetWorks shall plan and execute Performance Tests in the environment (hardware and software) targeted for production operations.		YES				AssetWorks QA group will conduct testing of all enhancements as part of the product development. AssetWorks has an automated QA application that conducts standard process tests to insure application integrity when new modifications and enhancements are introduced. See Statement of Work - Application Readiness Review. AssetWorks will have staff on-site to assist with the Readiness Review. It should be noted, the FleetFocus has no off-line jobs or reports that cannot be scheduled from within the application. Will add task to the Statement of Work for Production Performance Testing.
1.2 System Requirements							
1.2.1 Basic Features							
6.	In-Stock Parts Management and Charge out: The parts management module shall at the minimum replace or provide system functional features equal to the existing system in MCMS, including all new LAPD customization. The system shall provide the following at a minimum (see detailed documentation attached): a. Data entry to Repair Orders (RO) shall be capable from barcode of Parts and materials that are scanned directly into RO b. RO part entries shall be approved by a supervisor (not the same as RO approval),	M	YES				FleetFocus M5 includes a fully functioning Inventory Management module that is capable of managing automotive parts inventory and is fully integrated with the Work Order functionality of M5 Barcode scanners can be used to See M5-MMS Interface. System flag to add approval flag to each part line. Current approach is to review parts after work order is completed as part of the overall work order close process. Edits can be made up until the work order is closed. A modification would be needed for line-by-line approvals

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
c.	Approved items shall be extracted by and interface program (similar to the existing system),					Modify - Interface e	See M5-MMS interface. Sent date from PART_JNL for Issue to WO Only to select which parts to send with flag to indicate record was sent. Issues to DEPT, UNITS, or ACCOUNTS would require approval from PART ISSUE screen
d.	PDF report (see sample #1) shall be generated from the Extracted file					Modify - Interface e	See M5-MMS Interface. Can be setup as a standard report which can be scheduled and email
e.	Provide a Duplicate excel report (for FTP purpose per sample #2),					Modify - Interface e	See M5-MMS Interface. Can be setup as a standard report which can be scheduled and email
f.	Mail each extracted report to designated personnel.					Modify - Interface e	See M5-MMS Interface. Can be setup as a standard report which can be scheduled and email
g.	After the report items are entered in Supply Management System (SMS), the returning interface transactions shall update each part line item cost and charge the system.					Modify - Interface e	See M5-MMS Interface. File returns with Price from MMS.
h.	If no match is found in the RO, the returning transaction shall go to the error screen.					Modify - Interface e	See M5-MMS Interface. Reject Manager. Can't close WO until part lines have \$
i.	Errors with part numbers and part quantity, or combination of both shall only be corrected by SMS corrected transaction (this makes sure the SMS and VMS systems have the same inventory corrections).					Modify - Interface e	See M5-MMS Interface. Reject manager - QTY cannot be edited by LAPD, SMS must send a new transaction
j.	Other errors such as vehicle ID and RO number can be corrected at the supervisor level and the transaction should post to the RO.					Modify - Interface e	See M5-MMS Interface. Reject Manager. All errors will have a code and users can correct on-line

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
k.	All error corrections shall be journaled in the VMS for future reference and audits.					Modify - Interface	See M5-MMS Interface. Reject Manager. All errors are journaled and remain visible on Reject Manager until processed or cleared
	The parts module shall create a mirror image of non-stock inventory part description containing the following information:						Manual entry of new parts
	l. 12 digit SMS umber (parent),		YES				Master Part no
	m. VMS provided number (parent),		YES				ATA Cross Ref
	n. UPS code (child) part description,		YES				XREF - User, Alias, or Vendor
	o. Subassembly code.		YES				ATA Cross Ref
	p. Provide a function to link SMS part numbers to UPS codes		YES				XREF - User, Alias, or Vendor
	q. Provide a function to add new SMS part numbers as needed		YES				All new parts can be manually entered on the Part Catalog. A Part Master Upload interface can also be used to load parts from an XLS template into the catalog. The master catalog is shared by all locations
	For more technical specification contact Mike Ellis at AssetWorks and Albert Rad at ITA.						Got him on Speed Dial - Mike will be assigned to the Project
7.	Speedometer calibration system in existing MCSM, including all customizations, must be replicated or an equal system shall be provided in M5. See sample report #3 and screen EIC3160, 3162 for more details (contact Mike Ellis at AssetWorks and Albert Rad at ITA for more information).	M				Modify - Enhanc ement	Additional Enhancement - AssetWorks will either develop a separate screen that is exclusively for Speedometer calibration or will modify our Test Suites functionality in conjunction with Screen Designer to adapt the existing Test Suites functionality for monitoring speedometers. Test Suites are a series of test events that can be recorded separately or linked to a work order. Users can set tolerance thresholds on the tests and results outside the range can trigger follow-up work request jobs to correct the item.
a.	Sample report #3 must be generated for the speedometer calibration system					Modify - Custom	Custom report to be developed as part of the enhancement.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
						Report	
	8. Special Request Tracking in existing MCSM, including all customizations, must be replicated or an equal system shall be provided in M5. AssetWorks recommends using campaign process in M5 to replace this feature. However, LAPD doesn't always attach a work order or RO to the tracking number, and the system is used for tracking internal projects. AssetWorks must demonstrate system feature in their campaign management comparable to the customization in the existing system. For detailed information see MCMS's screen SCF 6300, 6176 and attached documentation (contact Mike Ellis at AssetWorks and Albert Rad at ITA for more information). 9. Data feed to KITS: Provide data feed to LAPD KITS that indicates vehicle status and location. (KITS: Kitroom Inventory Tracking System. A kitroom is a secured room found in all police stations where officers may checkout equipment such as radios, automobiles, tasers, etc. KITS automates check-out/check-in/inventory/reporting processes at kitrooms.)	M				Modify - Enhance ment	See Statement of Work Enhancements - Repair Order Tracking Number. New Project Screen to setup a project, required pre-loaded, or can add on fly to work order.
		H				Modify - Interfac e	New Interface - Linked to Work Order Availability functionality. Send Unit availability status to KITS. LAPD: Study the Department KITS and related systems and provide estimate for this project.
	10. Manage the Law Enforcement equipment (LEE) attached to vehicles as components by ITA through the LAPD portal. ITA shall have limited access to: a. create RO and repair LAPD vehicle LEE b. manage LAPD provided inventory to be used on LAPD vehicles	M	YES YES				LEE will be set up as components in FleetFocus. Components will use Unit Assignment History to link component to main unit Inventory can be linked to different storeroom locations and pulled from any work order. Components can be assigned a Bin

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	c. the cost of LEE repairs and replacement shall be tracked on the RO as components, parts and labor expenditures with specific System and work accomplish codes. d. use the LAPD portal to provide LAPD related services, inventory control, and other related documentations as deemed necessary by LAPD.		YES				Components can have a work order with jobs
	11. ITA performed work shall be included in LAPDM5 KPI reports.		YES				Users can be assigned a role with limited screens, functionality and restricted to specific locations and departments
	12. ITA shall have limited access to review LAPD-ITA related KPI reports.		YES				Work in the LAPD Company can be included in the KPI. Locations and Owner Departments can be used to segregate activity
	13. Convert 5 years of existing (active) vehicle LAPD related repairs, service tickets, and RO costs to M5 from ITA production for historical reference.		YES				Roles can be assigned reports and KPI
	14. Traffic Collision (TC) and Damage (vandalism) (DG) tracking and repair management:	M					Additional Data Conversion - ITS company assets will be converted to LAPD company as components with repair History.
							FleetFocus Accident Module can be used to support TC and DG tracking. The Screen Designer functionality can be used to customize screens to track the required data.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	15. Data Migrations: All TC and DG ROs and related records in asset tracking sections must be properly and accurately migrated from the existing MCMS in to M5.					Modify	Additional Data Conversion to create Accident Reports in M5. TC and DG are visit reasons on work orders. Work orders will be converted as part of the history conversion with the visit reasons translated to Job Reasons in M5. The additional conversion will be to create the Accident Reports in the Accident module. The fields list in 16 and 17 will be part of the accident record and linked to the work order number by the accident number added to the job.
	16. TC and DG Tracking: TC and DG RO must be tracked and field that must be tracked include, but not limited to:						Tracked using the Accident Module.
	a. "DR Number:" and the information when available		YES				Available Field or Accident Item
	b. "DATE:" (for the date of TC); and the information		YES				Available Field or Accident Item
	c. "Serial #:" (officer's SR# involved in TC) and the information if available		YES				Available Field or Accident Item
	d. "Name:" (officer's Name involved in TC) and the information if available		YES				Available Field or Accident Item
	e. "LOC:" (location of the TC) enter the cross streets and available address		YES				Available Field or Accident Item
	f. Enter the BILL TO: field information in EIC3920 (the Domicile of the entity that was using the vehicle at the time of the TC, customer list is available at PIC3320)		YES				Available Field or Accident Item
	g. Enter the DR# STATUS: field information in EIC3910 as follows		YES				Available Field or Accident Item
	i. "0" DR number is not required						
	ii. "1" DR report hard copy has been received and information is recorded on the RO						
	iii. "2" DR number has been recorded but hard copy of report has not been received						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	17. All TC or DG Totaled vehicle information shall be recorded in the asset module section as in the existing system (MSCS EIC1168) and provide the following information at the minimum: a) DR date b) DR # c) Officer or Employee serial # d) Officer's or Employee's Last and First Name e) Officer's assignment Division involved in the traffic collision f) Party Status (Party 1 or 2 from the DR report) g) Book Value source h) Book Value reported i) Estimated repair cost j) Repair Order number k) Additional field for miscellaneous information		YES YES YES YES YES YES YES YES YES YES YES				Tracked using the Accident Module. Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item Available Field or Accident Item
	18. Vehicle Damage log (LAPD Form 15.67.0): Currently all vehicle damages are recorded in LAPD form 15.67.0, and the Department requests the following (see provided document): a) Create a portal/access for all Department designated employees to record the damage online b) After the form is approved, update M5 and create a TC or DG trouble ticket c) Link all associated repair costs to the trouble ticket	H	YES YES YES YES		Partial		Accident Module can be customized with Screen Designer to track damages or a custom screen could be developed to mimic the log and require a log entry whenever a DC type reason is used Accident Module can generate trouble tickets Accident Module can generate trouble tickets Costs are linked to the WO via the Accident Module

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	19. Department vehicle TC and DG subrogation and restitution process and documentation: Design and automate a report generation based on DR# (see above) for the Department provides restitution documentation to City Attorney's Office, District Attorney's Office, Office of Finance, and Legal Affairs Division. The report shall include the following information, but not limited to (see attached examples): a) The complete repair cost assigned to the DR# and/or the case from the RO b) Vehicle Book Value and scrap value based on provided information in the asset module c) Estimated Repair cost based on an UltraMate Mitchell LAPD generated report number	H	YES YES YES			Modify - custom report	Recent functionality added for NYC includes support for tracking and managing accident claims. Custom Report Summarized on Accident Record linked to WO Available field on Unit Disposal, can be added as Accident Item Estimates can be recorded on the Accident Record
	20. Employee information related to fleet operation and emergency contact: The following information in MCMS must be accurately and properly migrated in to M5 (documentation provided): a) MCMS Screen and data EIC7550, 7552, 7553, 7557, 7558, 7559 all fields and information	M			Partial	Modify	FleetFocus maintains an Employee Master Table with details about the employee, including position, payroll, assignments. Additionally employee items can be setup to track other information. Modification to track position assignment history

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	b) Ensure that all screens are properly linked and functionality is updated accordingly		YES				Employee is linked to work orders and all labor capture screens
1.2.2 Interfaces							
	21. Parts management interface between VMS and SMS or FMS for In-stock parts (see #1) and Buy-out purchases shall work as in the existing system with new improvements stated above in In-Stock Management process . Parts procurement module in M5 must work with SMS/FMS purchase order generation system (see ITA and SMS for more information).	M				Modify	See M5-SMS or FMS Interface
1.2.3 System Administration							
	22.AssetWorks shall provide a System Administration module that allows a System Administrator to administrate their own processes. The module will include but not be limited to the functions included in this section. a. AssetWorks shall allow an authorized user to access System Administrator tools. b. AssetWorks shall allow the System Administrator to set parameters and security elements for user passwords including how frequently passwords must be changed. c. AssetWorks shall allow the System Administrator to reset a user's password. d. AssetWorks shall allow the System Administrator to set parameters to log off user after a specified number of failed log-on attempts. e. System Administrators shall have the ability to add additional custom fields to screens, results, reports, and forms in their respective areas of responsibility even after AssetWorks implementation.	M	YES YES YES YES			Partial	System Admin Roles can be setup Application User and system flags Customizations to screens are limited to those screens that incorporate Screen Designer. ITEMS can be added to selected references as UDF. Standard reports can be modified with Crystal Reports.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	Note: This will be particularly useful when LAPD system administrators need to capture additional inventory information that is not already specified on the interface. f. AssetWorks shall allow the System Administrator to add additional custom fields to data fields and forms, including the request form, after implementation. g. AssetWorks shall allow the System Administrator to add all available field types, such as text boxes, check boxes, and drop-down lists. h. AssetWorks shall allow the System Administrator to customize screens based on analytical unit and service provided. i. AssetWorks shall allow the System Administrator to create and add storage locations to the system. j. The System Administrator shall have the ability to change user roles when a role change is requested by: k. AssetWorks shall allow the System Administrator to assign privileges to groups of users. l. AssetWorks shall allow the System Administrator to assign single users to multiple groups. m. AssetWorks shall allow the System Administrator to set defaults on all forms (for example, whether a box is checked by default). n. AssetWorks shall allow the System Administrator to change the wording of data field labels throughout The System. o. AssetWorks shall allow the System Administrator to define users, user groups, and parameters for system access.	H	YES	NO			Additional inventory information can be captured using UDF Items on Units and Parts Add fields to the application is restricted to AssetWorks Modifications to the application are restricted to AssetWorks, except in Screens that are supported with Screen Designer. In these cases modification of field sets and some controls is allowed. All references in the application are user defined Modifications to the application are restricted to AssetWorks, except in Screens that are supported with Screen Designer. In these cases modification of field sets and some controls is allowed.
		M	YES				Role Maintenance
			YES				User Authorizations
		H	YES		Partial		Support for multiple groups: Location, Department, KPI, Reporting System Flags can be set to change behavior of selected fields, but no global ability to set field defaults. Language and text translation is supported
		H	Yes				

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
1.3 Security							
	1. LAPD utilizes Novell/NetIQ eDirectory as its primary user authentication source. eDirectory is compliant with Lightweight Directory Access Protocol Version 3 (LDAP v3). M5 shall support using eDirectory as its credential authentication source. If the proposer faces insurmountable difficulties in using eDirectory as its primary authentication source, this requirement may be satisfied using other on-premises or cloud-based identity provider that integrate with eDirectory, as long as such a provider is approved by the LAPD by verifying the identity provision service as completely functional and meeting all LAPD security requirements.	M				Modify - Enhanc ement	AssetWorks will modify our current single sign-on and authentication process to support Novell/NetIQ. Users that are authenticated by CoLA will be assigned a User in M5 and will log-in bypassing the standard M5 login screen
	2. The Los Angeles Police Department reserves the right to verify each key person's experience and education. LAPD reserves the right to approve any changes in personnel assigned by the selected AssetWorks. LAPD also requires that the selected AssetWorks' staff working on the project undergo a fingerprint-based background investigation conducted by LAPD. This requires that AssetWorks employees who are slated to work on the implementation project, as well as those AssetWorks employees assigned to maintain the M5 system after go-live, must be identified prior to project inception, and undergo the LAPD background check by being physically present for an appointment for a pre-arranged interview at LAPD's Police Administration Building in Los Angeles, California, before work on the project can begin.	M	YES				AssetWorks will agree to have those employees assigned to our Data Center and who will have direct access to the LAPD database and servers undergo a back ground check. AssetWorks will invoice CoLA for all travel expenses and for up to two day for travel and on-site interviews. These costs will be incorporated into the Statement of Work and Project Plan.
	3. Minimum Screening Requirements for individuals requiring access to Law enforcement data:	M					

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	To verify identification, a state of residency and national fingerprint-based record checks shall be conducted within 30 days of assignment for all personnel who have direct access to M5 and those who have direct responsibility to configure and maintain computer systems and networks with direct access to M5. If a record of any kind is found, AssetWorks shall be formally notified and system access shall be delayed pending review by the LAPD of the criminal history record information. When identification of the applicant with a criminal history has been established by fingerprint comparison, LAPD shall review the matter. A Contractor employee found to have a criminal record consisting of felony conviction(s) shall be disqualified. Contractor employees shall also be disqualified on the basis of confirmations that arrest warrants are outstanding for such applicants. AssetWorks shall maintain a list of personnel who have been authorized access to LAPD data and shall, upon request, provide a current copy of the access list to the LAPD Project Manager. All requests for access shall be made as specified by the System Administrator. The System Administrator, or their designee, is authorized to approve access to M5. All System Administrator designees shall be approved by LAPD		YES				AssetWorks does not require background checks as a condition of employment. Employees offered an opportunity to work on the LAPD project will be asked voluntarily to submit to a background check. If an employee refuses, they will be excluded from the project with jeopardizing their employment with AssetWorks.
			YES				System Administration will be the Responsibility of LAPD. AssetWorks does not administer our hosted applications, except from managing the servers and other back office duties. Management of user, roles, system operation and maintenance are the duties of the customer.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
4.	AssetWorks shall support compliance to the vulnerabilities identified in the Open Web Application Security Project (OWASP) Top 10 2010 and 2013 Release Candidate (RC), which identifies the Ten Most Critical Web Application Security Risks. Any browser-based component of M5's software shall eliminate security risks detailed in the OWASP Top 10 2013 RC as detailed by OWASP. AssetWorks shall demonstrate to the LAPD, using a third-party vulnerability scanning service paid for by AssetWorks, that its browser-based software has completely addressed all vulnerabilities detailed in OWASP Top 10 2010 and 2013 RC. If the third-party vulnerability scanning service reports that M5's browser-based software fails any of the tests detailed in OWASP Top 10 2010 and 2013 RC, AssetWorks shall remediate all identified vulnerabilities and be required to demonstrate its software's elimination of vulnerabilities. The mechanism by which this demonstration is made is by having the third-party vulnerability scanning service prepare and deliver a report to the LAPD, indicating the status of M5's software in addressing these common vulnerabilities.	M	YES				All AssetWorks applications are subjected to routine security and vulnerability testing from our Corporate IT and Firewall group. Our Security group uses Nessus to perform audits that find risks identified by the Open Web Application Security Project (OWASP). The Nessus vulnerability scan is run prior to the release of the external IP. All high, medium and critical security issues are remediated prior to release of public IP.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
5.	All LAPD data contained within M5 shall be considered law-enforcement sensitive, and thus shall be encrypted at rest and during transport. Encryption shall be a minimum of 128 bit. When LAPD data is transmitted outside the boundary of AssetWorks' physically secure location, such data shall be immediately protected via cryptographic mechanisms (encryption). When LAPD data is at rest (i.e. stored electronically) at AssetWorks, the data shall be protected via cryptographic mechanisms (encryption). When encryption is employed, the cryptographic module used shall be certified to meet FIPS 140-2 standards. Subsequent versions of approved cryptographic modules that are under current review for FIPS 140-2 compliance can be used in the interim until certification is complete. While FIPS 197 (Advanced Encryption Standard) certification is desirable, a FIPS 197 certification alone is insufficient as the certification is for the algorithm only vs. the FIPS 140-2 standard which certifies the packaging of an implementation. All LAPD data shall be logically separated from any data belonging to any other agency or organization, and, if possible, it is most desirable that systems containing LAPD data are physically separated from data belonging to any other agency or organization.	M				MODIFY	AssetWorks is proposing to make the necessary changes and enhancement to our data center as outlined in the proposed hosting agreement. AssetWorks will use Oracle database functionality to encrypt the database at rest, secure the server in the data center, and separate environments maintained to isolate LAPD from other City and non-law enforcement users.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	6. AssetWorks shall control access to networks processing LAPD data within its facilities; monitor and control communications at the external boundaries of the information system and at key internal boundaries within the system; ensure any connections to the Internet, other external networks, or information systems occur through controlled interfaces (e.g. proxies, gateways, routers, firewalls, encrypted tunnels); employ tools and techniques to monitor network events, detect attacks, and provide identification of unauthorized use; ensure the operational failure of the boundary protection mechanisms do not result in any unauthorized release of LAPD information outside of AssetWorks' information system boundary (i.e. the device shall "fail closed" vs. "fail open"); and allocate publicly accessible information system components (e.g. public Web servers) to separate sub networks with separate, network interfaces	M	YES				Access to the AssetWorks data center is currently restricted in compliance with our SSAE16 certification. The Data Center is its own isolated area with access restricted by key combinations on all doors. Connections to the internet are controlled through hardware and software based firewalls and devices. HTTPS secure sites are used where the customer will pay for the SSL certificates. All devices are set to 'Fail Close". Separate networks and DMZ are used as required to secure access to servers depending on the public nature of the application and its users.
	7. If virtualization technology is used in M5, AssetWorks must ensure that publicly accessible information systems residing on a virtual host shall follow the following rules below to achieve separation: isolate the host from the virtual machine, which means that virtual machine users cannot access host files, firmware, etc.; maintain audit logs for all virtual machines and hosts and store the logs outside the hosts' virtual environment; virtual machines that are Internet facing (web servers, portal servers, etc.) shall be physically separate from virtual machines that process LAPD data internally; and device drivers that are "critical" shall be contained within a separate guest. Additionally, AssetWorks must encrypt network traffic between the virtual machine and host, implement IDS and IPS monitoring within the virtual machine environment, virtually firewall each virtual machine from each other (or physically firewall each virtual machine from each other	M	YES				AssetWorks does maintain virtual environments. To comply with LAPD requirements, AssetWorks is proposing a dedicated virtual environment for LAPD on its own servers, isolated from our other customers and CoLA fleets.

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	with an application layer firewall) and ensure that only allowed protocols will transact, and segregate the administrative duties for the host						
8.	The LAPD database will contain sensitive information pertaining to undercover vehicles. As such, once the undercover vehicle information is loaded into the database, access to the data shall be locked down so that only LAPD employees may view that information. Any staff, whether from AssetWorks or other City Departments, shall not have access to that data, unless explicitly authorized in writing by the LAPD.	M	YES				AssetWorks will comply with this requirement and recommends that LAPO either consider a separate company or instance for Sensitive assets that will provide further isolation of the assets from users with access to the regular fleet. A separate instance would provide the greatest security as only LAPD authorized users could be granted access to this and ODBC other connections isolated.
1.4 System Reports							
1.	The following KPI reports must be duplicated in the new system or a substitute report must be provided that provides the same data elements being measured in an accurate manner (see the attached reports for more detail).	M					AssetWorks has proposed a task to review each fleet operations top reporting needs to develop a reporting matrix and determine how to meet each reporting need. During the task we will evaluate the content and how the reports are filtered to best determine if these reports can be replaced with an existing standard report or online query, modifications to a standard report, a dashboard, or an ad-hoc report. This is usually done following system setup and prior to the deployment of the application. AssetWorks is proposing a budget of hours that can be applied to custom report development or for creating custom KPI and ad-hoc reports

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
a.	FLT-1, Availability reports (3 parts)						FFM5 has a unit availability functionality that uses Operational Classes (Hybrid, BW, Plain, etc.) and user defined organization groups to count availability at a point in time(S). During the WO process, users set the availability status. This functionality can be used to generate similar reports. Currently on-line queries are used to display availability stats. Custom reports can be developed to generate this data in a similar format. Dashboard can be used for daily or current status by location/fleet FLT2A was not readable. On the M5 WO we have a Promise/Due Date field, additionally on the Availability Screen and estimated days out of service can be recorded. This can be used to develop a standard report for the rate of return. FFM5 has standard reports that provide this data. These could be used as is, modified or a custom report created. An ad-hoc report could also be easily developed to mimic this report. FFM5 has a PM Compliance Report By Location and By Department that can provide this same data, as well as a number of other PM stat reports This report can be developed. FFM5 generates Work Requests for future PM jobs based on our Forecaster process. Each different PM service is a job and standards labor times are on the job Custom report can be developed. PMM module can also be used to track annual trends like this Jobs deferred from a Work Order have a status of WR. This can be used with one of several work order reports to select jobs that have been deferred. Custom report can be developed. Need definition of Hold Harmless. If a job reason or status, a standard report should be able to support report
b.	FLT2A and FLT-B Rate of return reports						
c.	FLT-3 Cost of PM service report						
d.	FLT-4 PM completion analysis report by location						
e.	FLT-5 PM forecast report						
f.	FLT-7 Out of service yearly trends by DP						
g.	FLT-9 Deferred work						
h.	HH-1 Hold Harmless vehicle overdue report						

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
i.	LBR-2 and LBR-4 Direct labor and RO acid test ratio analysis reports						Both reports were not readable. FFM5 does have several labor efficiency and productivity reports Custom report can be developed similar in format to the current report. Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results Is this the same as 'j'
j.	RO-4TC Body Shop Work load management						
k.	QI-1 Quality inspections completed						
l.	RO-4 TC Body shop work load (duplicate request, should this item be delete?)						Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results File could not be opened. Custom Report can be developed. Zero meters is often a dashboard. Current Meter report could be used
m.	RO-M1 Non-TC RO Open Finished over three weeks						
n.	RO-M2 Non-TC RO not completed over four weeks						
o.	FM-1 Zero Meter Advancement (ZMA)						Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results Sample not found Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results
p.	FM-2 VIT repairs completed						
q.	FM-3 Fuel transactions per period						
r.	FM-4 VIT override report						Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results
s.	UITL-1 Vehicle Utilization reports						
t.	Toll Road reports (not included)						
u.	RO cost and hours by class-subclass(not included)						Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results

Line	Description of Requirements by Categories	Priority	YES	NO	Partial	Modify	Notes
	v. FLT-AG-1 and 2 Fleet age report						Custom report can be developed similar in format to the current report. Standard report with grouping and filtering could generate similar results

Appendix B – Proposed Interfaces

AssetWorks has considerable experience developing custom interfaces between FleetFocus and external systems, having constructed over 350 different interfaces for the FleetFocus M5 application alone.

A design specification and cost estimate will be prepared for each interface. The cost is based on the number of development days needed to program the interface, test the interface in our development environment, install the interface in the client environment and work with the client to test the interface.

The number of development days required will vary based on:

- If AssetWorks has a similar interface that can be used as the foundation for the new interface.
- Type of interface being developed (i.e.: Batch-Flat File, Batch-Table Driven, Web Service),
- Data/File transfer method(s) supported (i.e.: FTP, XML, event-driven notification, manual file transfer, staging table),
- Users' customization of related functionality in external system,
- Customizations required in FleetFocus™ to support the interface.

There are a few general principles that AssetWorks follows when interfacing to external systems:

- Define one system as the system of record – where the data contained is considered the definitive record and the other system(s) contain a replicated record.
- Maintain detailed fleet-related transactions in FleetFocus™ and pass this data to the external system.
- Interface only high volume transactions and records.
- Use isolated batch interfaces providing for rollback of data in the event of a catastrophic failure.
- All files exported from FleetFocus for input to the external system conform to standard file layouts.
- Unless updated with an interface, the Customer will manually keep all necessary base codes synchronized between FleetFocus™ and external systems.
- External systems will use the FleetFocus™ IDs as a primary (and unique) record identifier for all interfaces.
- AssetWorks and the Customer will mutually agree on the data elements and formats of the transactions to be passed through any staging tables or interim transfer point.
- The Customer will provide for storing FleetFocus™ unique identifiers in external systems where necessary. For example, the Customer will provide fields for the FleetFocus™ request ID and line item number on purchase requests.
- Once any transaction has been processed into the external systems, the work flow will follow the current business process. AssetWorks is not responsible to re-define, tailor, adjust, or configure business processes downstream from the entry into the external systems. FleetFocus™ will “feed” the Customer’s systems



process already defined and implemented.

- The Customer is responsible for all development work required on the external systems to complete the interfaces.

AssetWorks will develop the FleetFocus™ side of all interfaces and integrations. For in-bound interfaces, AssetWorks will develop either a batch loader process or a web-service to load the data via our standard component process. For out-bound interfaces, AssetWorks will develop a process to extract the data in the required format and submit that data to the target system either as a file, thru a web-service or populating a staging table.

All interface development will occur in the AssetWorks development environment. Interfaces loading data into FleetFocus will use sample data provided by CoLA, when available, to test the loading and reject processes. If sample data cannot be provided, AssetWorks will develop a test case of sample data that will be used to verify the interface is working as expected.

Outgoing interfaces will generate sample data in the designated format and layout. If the customer can make the target application available for testing, AssetWorks will submit the output to the target system to verify that the communication methods are working properly and the output is structured correctly. Otherwise, the data generated by the interface will be compared to the layout and format specified in the design document.

The customer is responsible for all development in their source/target system and for maintaining the communication channel with FleetFocus. Unless otherwise indicated, all customizations to third-party systems to support customer interface requirements will be the responsibility of the customer to fund and deliver. AssetWorks will not be responsible for delays in the deployment of an AssetWorks delivered interface caused by CoLA's own development team and/or contractors. Interfaces that have been delivered, but not implemented, due to delays on the part of CoLA or its contractors will be considered accepted by default after 30 days.

Interfaces that require no modification to the FleetFocus™ application can be delivered to the customer as part of a regularly scheduled patch or a customer specific patch. Any Interface that will require modifications to a FleetFocus™ screen or component can only be delivered as part of a scheduled release; or depending on the extent of the change, and with the permission of the FleetFocus™ Product Manager, in a scheduled patch release.

When AssetWorkscustomizes interfaces/adapters or develops new interfaces/adapters for customers, AssetWorks takes full responsibility for maintaining the integrity of that adapter with all new FleetFocus™ release and maintenance updates. If AssetWorks alters the functionality of the FleetFocus application, AssetWorks will take responsibility to update interfaces that are affected by the change in the application component or database. Changes will only be maintained up to the point the data enters or leaves the FleetFocus application.

AssetWorks is not responsible changes to interfaces that occur outside the FleetFocus environment; this includes: changes in network structure or configuration, the server environment, IP addresses/TNS settings, file paths, or similar networking and environment variables outside of AssetWorks control. Any alterations to an interface that change the incoming data structure, or the FleetFocus generated output structure, that is caused by an external application is the responsibility of CoLA to fund. This includes: altering the layout and/or structure of the data being processed; adding, removing, or modifying data fields; new business rules that must be applied when processing data; or changes to the data validation/reject process.



If a customer decides to develop their own interface, AssetWorks takes no responsibility if a FleetFocus™ upgrade or patch breaks an interface. It will be up to the customer to maintain the interface if a change to the FleetFocus™ application occurs that conflicts with the customer-developed interface.



Proposed Interfaces

Interface	Description
SMS (PeopleSoft) Parts Interface	Batch interface for LAGSD, LAPD, LAFD to receive part issues from SMS (PeopleSoft) to work orders. Receives file from Materials Management system which contains the Unit No and RO NO and post issues to work orders. If part numbers don't match manually adds part to MCMS then reprocesses. The current interface does not support passing warranty terms. A recent change to this interface added the ability for a technician to enter a part number and quantity on a work order, which is then sent to SMS electronically where the part is sourced and the work order updated using the original issue interface. Changes were made to the application to add new status codes for the parts and work orders and business rules to manage the processing of the work order with the interface. AssetWorks would develop similar functionality in FleetFocus, but based on the Part Request functionality the will be delivered in version 3.0 in Spring 2013.
EJ Ward Fuel Transaction Interface	Common interface for LAGSD, LAPD, and LAFD to capture fuel transactions from a file downloaded from the EJ Ward fuel management system. Interface only includes the loading of fuel transactions into FleetFocus from a file exported from EJ Ward and moved by the City to a folder for processing by FleetFocus. Does not include exporting data from FleetFocus to EJ Ward. Assumes that fuel receipts will occur in EJ Ward and no fuel inventory will be maintained in FleetFocus
DMV Lookup	LAGSD looks up on City's DMV to validate driver's license data of employees renting vehicles from GSD motor pools and manually adds driver ids to MCMS. FleetFocus™ maintains City vehicle operators as Employees on the Employee Main screen. The current procedure of manually entering drivers on the Employee master is fully supported. An electronic interface can be developed that would update the Employee Main records with updates from the City's DMV system.



Appendix C – Proposed Enhancements

New application code that change existing application functionality or introduce new functionality or features to the application are considered enhancements.

AssetWorks is responsible for developing any changes to application screens, business components, database structure and reports.

AssetWorks will develop each enhancement based on an accepted design specification and cost proposal. The development will follow the design specification which will outline the requirements for the user interface, the work-flow process and the business rules that the functionality must support.

All enhancements are developed in the AssetWorks development environment. Initial testing will be done by the developer in the development environment. Once the development has been completed, the enhancement will be assigned to an upcoming release boundary, either in a new release or as a patch to an existing release.

The enhancement will be moved to the schedule development environment for testing by the AssetWorks Quality Assurance (QA) team. The QA team will utilize design specification to develop the use cases to test the functionality. The QA team and Project Manage may also schedule a WebEx preview of the enhancement to gather CoLA feedback before the functionality is packaged for release.

It is this design specification that will be used to determine if the delivered functionality complies with the intended specification. Future customer requested modifications beyond those agreed to in the original development specification maybe subject to additional development costs and delays in the delivery.

AssetWorks will insure that all AssetWorks developed modifications and enhancements will be compatible with future releases of the application at no additional cost to the customer. If a customer develops an enhancement or modifies the FleetFocus application without AssetWorks approval, AssetWorks takes no responsibility if the enhancement interferes with the default functionality of the application or an AssetWorks developed interface. Additionally, AssetWorks will not be responsible for updates to any Client-developed enhancements that are altered or made inoperable by the installation of an AssetWorks provided patch or new release. It will be up to the customer to maintain the enhancement if a change to the application occurs that conflicts with the customer-developed enhancement.

Proposed Enhancements

Enhancement	Requirement	Proposed Development
Custom Labor Capture Screen	The City uses a customized MCMS labor input screen (EIC3954) that uses labor	AssetWorks is proposing no development for this requirement.



Enhancement	Requirement	Proposed Development
	wedge devices on shop floor to capture time against a work order. The employee scans the RO NO, Employee No, Location, System/Assembly, WAC, and then keys in Hours -Position and Reason are optional.	Th Labor Wedge process in FleetFocus™ M5 that captures the same basic data against jobs on a work order, the difference being the system calculates the time to the job by calculating the between the previous and current entry – log off/log on. AssetWorks expects that this screen will meet the City's current process and no enhancements would be needed
Custom GSD Unit Screens	MCMS has a special LAGSD screens and LAPD screens that combine various unit fields with components (unit Items) as fields to simplify entry. (EIC 1162, 1163, 1164, 1165, 1166– 3 screens linked together as linked pages). FleetFocus™ M5 has a feature similar to MCMS components called Unit Items. Unit Items are user defined and can include a list of valid values. A link from the Unit Main screen displays all active Unit Items and entered values. The current MCMS Component values will be converted to Unit Items in FleetFocus™.	AssetWorks is proposing the Screen Designer module which allows for the development of custom screens layouts for selected application screens. These include Unit Main, Motor Pool Reservations and the Accident Module. Users can use desgin their own screens and incorporate Items to display on the screens as needed. AssetWorks is proposing 40 hours to assist with the design and configuration of custom Unit Main screens for each of the Fleet Operations
Tool Tracking Screen	MCMS (EIC1169) has a custom entry screen for capturing tools used in Parks and Recreation. Tools are units but not all data elements are captured for tool records. Consolidated 3 screens to 1 screen with Tool only fields. Same data can be retrieved from any Unit Screen.	AssetWorks is proposing no development for this requirement. AssetWorks is proposing the Equipment Focus module which supports the setup of tools as assets and tracks the assignment of tools to employees. Equipment Focus defines Asset Types and determines the functionality associated with each Asset Type. Tools and Equipment can be purchased, received, assigned, and maintained using standard FF screens, with special screens for teh check in and check out tools The City also has the option of tracking tools and other assets as components. Components can be associated with a primary unit or managed individually. 3 Components are allowed for each unit licensed.
Part Interface Control Number	The current part interface passes a control number which is displayed on a modified	AssetWorks is proposing no development for this requirement.



Enhancement	Requirement	Proposed Development
	repair order screen.	FleetFocus™ M5 includes a Reference Number field on each part transaction. AssetWorks expects that this field will be used to store and display the interface control number. Cost for this development will be included with the Parts Inventory Interface.
Repair Order Tracking Number	A tracking number was added to the MCMS repair order screen to track costs against a project or internal campaign. The tracking number consists of two fields: Tracking Type (2 Char) and Tracking Number. Tracking numbers are created in MCMS and updated using the standard RO approval process. Multiple RO can be assigned the same Tracking Number and a screen displays all transactions posted to RO with the same Tracking Number. Tracking numbers can be updated on the RO without any debit/credit or journal update of the change. Can search work orders by tracking number, display all work order with that tracking number.	AssetWorks is recommending the development of a Project Module function that would link multiple work orders/job to a common Project header using a Project ID. This functionality would be similar to Campaigns in that a user can define the project, predefined specific jobs included in the project and based on a list of included units automatically generate work requests with a common Project ID. Projects can also be linked to Requisitions, Direct Accounts and Indirect Accounts for billing purposes. Additionally, modifications would be made to the Job Visit Reasons to have certain reasons defined as projects and require a Project ID - similar to Accidents. User that use these reasons codes can link jobs to a project by selecting the project ID from a list without having to first create a work request linked to the project A Project Query Screen would be developed to allow users to view all jobs linked to the project id from various work orders with jobs with that Project ID. Similar to WO Query



Enhancement	Requirement	Proposed Development
Special edits on Tech Spec and OEM warranty	Can specify at the Group (Tech Spec) level up to 8 different OEM warranty types. Has a table to maintain descriptions (Body, Engine, Transmission, Rear, Misc., etc.). Not linked to system codes. Alerts flash on RO that these warranty types are still in effect. Special edit allowed LA to manage descriptions and to restrict to validated values.	FleetFocus™ currently supports Whole Unit, System/Assembly, and Part Warranty terms. A modification to the current Whole Unit warranty terms to change it from Whole Unit warranty to an OEM Warranty with multiple terms based on user defined section. The current Whole Unit warranty alerts would be modified to display any valid OEM warranty term whenever a job is added to a work order. A further modification would allow users to link specific system codes to the OEM warranty section to limit warnings to only those systems associated o the OEM warranty type.
Cost Field Expansions	Expand part cost fields to accept/display values of xxx,xxx.xx. This is necessary to support helicopter and airplane parts/components.	AssetWorks is proposing no development for this requirement. Parts Cost fields in M5 are setup as an integer with floating decimal and can accomdate large dollar amounts
Alternative Fuels Tracking	MCMS added fields for: Inventoried (Y/N), Alternative Fuel Type (3 Char – supports dual fuels), Alternate Tax Rate (overrides standard tax rate), Alternative Fuel (Y/N).	AssetWorks is proposing no development for this requirement. These requirements can be supported in M5 with current Product definitions, tax rates, and multiple products on units. FleetFocus also tracks Fuel Types and has an integrated GreenHouse Gas calculator. No modifications are likely needed.
LAPD/LAITA Unit Status Changes	A customization would support updating LAITA units with status changes for LAPD units. Copies status of LAPD of LAITA associated units to match vehicle status. Single direction from LAPD units to LAITA units.	AssetWorks is proposing no development for this requirement. Because LAITA assets will be setup as Components in FleetFocus in the same Company as LAPD an inteface or enhancement will not be needed to maintain status codes in two companies
LAITA Unit Assignments from Work Order	LAITA sets up radios as units and MCMS has a process to assign a radio to a LAPD unit when it is installed in a vehicle. MCMS creates a secondary assignment in LAPD database with the radio equipment. LAPD has a list of installed equipment numbers on the unit entered as secondary	AssetWorks is proposing no development for this requirement. Because LAITA assets will be setup as Components in FleetFocus in the same Company as LAPD an inteface or enhancement will not be needed to maintain assignments.



Enhancement	Requirement	Proposed Development
	assignments, but no detail about the installed equipment. Secondary assignments are not validated.	FleetFocus™ M5 has an associated unit function that creates a journal record whenever a unit is linked to another unit as a parent or child. Department Authorization Functions, would permit LAITA users setup in the LAPD company to view LAPD vehicles and associate LAITA radios/computers to these units.
PM Notification	GSD created a PM notification program that allows the repair shop supervisors to notify end users by email when their vehicles are due for PM service. The program has three levels of notification messages that increase importance as the vehicle becomes due and overdue for their PM service. This allows the end user to contact the repair shop and scheduled a date to bring their vehicle in. Once the date has been set it is noted in the program and all other notices are suspended until that date. The shop supervisor also has the choice as to who he wants to send the notices to. Once the PM has been completed the supervisor can send a completion notice to the end user letting them know their vehicle is ready for pick up.	FleetFocus has a Notification function that generates user maintained messages when triggered by a component action. AssetWorks will develop a custom notification message and trigger process to automatically generate a PM service due message to the vehicle. This will be linked to a PM Appointments functionality that would allow the user to reply via text or email to schedule an appointment. The appointment would update the due date on the Work Requests and would lock the date. The ready for PU functionality exists currently in FleetFocus. AssetWorks is proposing developing another automatic notification to the user when a scheduled vehicle is completed.
Mobile Focus	Install Fleet Focus- Mobile Focus software in 4 hand held PDA or similar devices for GSD at shop locations to be determined. This is required to run a pilot program to determine the cost effectiveness for future expansion of the program to each GSD repair location.	No development required - See GSD SOW for implementation effort



AssetWORKS

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To:
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FleetFocus Proposal Summary

Date: 11-Jul-2014
Valid Until: 11-Oct-2014

From:
Joe Keefe
AssetWorks, Inc.
Telephone: 720.633.3043
Facsimile: 720.941.9001

Product: FleetFocus™ M5

Item	Qty	Basis	Cost	Total
<u>FleetFocus Software Licenses</u>				
FleetFocus Enterprise Software License	20,000	Active Units	\$ 1,011,000	
See Software Proposal for list of included modules	60,000	Active Components		
MCMS to M5 Upgrade Discount			\$ (505,500)	
Crystal Reports Server 2008 - FleetFocus Report Engine	4	5 CAL Packs	\$ 19,600	
Crystal Reports Developer - Desktop Report Writer	4	User Licenses	\$ 1,800	
MobileFocus Device Licenses	5	Device License	\$ 4,800	
	Upon Installation			
			Total FleetFocus Software Licenses	\$ 531,700
<u>FleetFocus Software Maintenance & Support</u>				
Annual Software and Interface Maintenance Program				
	Software	Interfaces	Annual Cost	
Year 1	\$ 106,340	\$ 13,120	\$ 119,460	
Year 2	\$ 109,530	\$ 13,514	\$ 123,044	
Year 3	\$ 112,816	\$ 13,919	\$ 126,735	
	Annually			
			3 Year Total Maintenance Fees	\$ 369,239
<u>Hardware</u>				
KeyValet Controllers, Antennas, HID Fobs & Vehicle Hardware		7 locations/290 units	\$ 200,080	
Mobile Focus Devices and cradles		5 Devices	\$ 8,975	
	Upon Delivery			
			Total Hardware	\$ 209,055
<u>Software Implementation Services</u>				
City Wide Implementation	1,400		\$ 294,500	
Interfaces - Design, Development & Delivery		\$ 82,000		
Enhancements - Design, Development & delivery		\$ 123,000		
GSD Implementation	2,040		\$ 434,600	
KeyValet Implementation	440		\$ 90,200	
LAFD Implementation	1,640		\$ 336,200	
LAPD Implementation	2,240		\$ 459,200	
CAM Implementation	240		\$ 49,200	
			Total Services	\$ 1,663,900
<u>Estimated Travel</u>				
Airfare, Hotel, Meals, Local Transportation, Parking	500 Days On-Site	450/Day Budget	\$ 216,000	
				\$ 216,000
Total Licenses, Hardware, Implementation, Travel, & 3 Year Maintenance				\$ 2,989,894

Expenditure Forecast By Fiscal Year

Fiscal Year 2015 (July 1, 2014-June30, 2015)
Fiscal Year 2016
Fiscal Year 2017

	Software, Hardware	Maintenance	Services/Travel	Total
Fiscal Year 2015 (July 1, 2014-June30, 2015)	\$ 740,755	\$ 119,460	\$ 73,274	\$ 933,489
Fiscal Year 2016	\$ -	\$ 123,044	\$ 1,067,296	\$ 1,190,340
Fiscal Year 2017	\$ -	\$ 126,735	\$ 739,330	\$ 866,065
	\$ 740,755	\$ 369,239	\$ 1,879,900	\$ 2,989,894

COSTS FOR POSITIONS REQUEST TO SUPPORT VMS UPGRADE

Dept.:	Position:	Requesting FY:	# of Pos.:	Annual Salaries:	Total:	Comments:
LAPD	Sr. Automotive Supervisor (3716)	2016-17	2	\$93,438	\$186,876	LAPD does not currently have any one individual assigned to work on the VMS but receives intermittent assistance from ITA (position descriptions attached).
				Total:	\$186,876	
ITA	Systems Programmer II (1455-2)	2014-15	1	\$116,343	\$116,343	ITA currently has one person assigned to VMS. However given the increased responsibilities of hosting the system ITA will require additional staffing (position descriptions attached).
ITA	Data Base Architect (1470)	2014-15	1	\$121,438	\$121,438	
ITA	Programmer Analyst IV (1431-4)	2014-15	1	\$105,444	\$105,444	
				Total:	\$343,225	
GSD	Systems Analyst II (1596-2)	2014-15	1	\$85,838	\$85,838	GSD currently has one Systems Analyst position working on the VMS system 50% of the time, and one Fleet position working 50% (position descriptions attached).
GSD	Management Analyst II (9184-2)	2014-15	1	\$85,838	\$85,838	
				Total:	\$171,676	
LAFD	Programmer/Analyst IV	2015-16	1	\$105,444	\$105,444	LAFD currently has one Systems Analyst II to support the current VMS system (position description attached).
LAFD	Management Analyst II	2015-16	1	\$85,838	\$85,838	
				Total:	\$191,282	

POSITIONS REQUEST TO SUPPORT VMS UPGRADE

Requests for staffing related to the specific design, training, implementation and maintenance of the new Vehicle Management System.

An annual cost analysis for the listed requested positions is attached.

LAPD:

(2) Senior Automotive Supervisors (3716) - These supervisory level positions will work with internal technology staff to write VMS operating procedures and provide MTD user training at each of the 24 repair shops. They will also help individual Automotive Supervisors and Senior Equipment Mechanics design reports and tracking systems unique to their operations. Note: positions were deleted from the budget a couple of years ago. MTD is requesting that they be added back and that a sufficient number of lower level vacant Garage Attendant positions be deleted to fund them.

ITA:

(1) Systems Programmer II (1455-2) - Responsible for all aspects of infrastructure support, including hardware and system software purchase, system configuration design, and network integration; performs system and network performance optimization; provides technical assistance to the DBA and PA's to maintain system availability, coordinates with communications staff to resolve network performance issues.

(1) Data Base Architect (1470) - Manages all aspects of database setup and maintenance, including database design and implementation; database monitoring; database optimization; resolution of data-related performance issues (common with new software); data analysis; develops and implements procedures for data security, backup, recovery, and disaster recovery to assure application data integrity.

(1) Programmer Analyst IV (1431-4) - Assists and provides backup the Programmer Analyst V. Due to substantially increased workload for new system implementation, this position would be requested for at least one to two years until system is significantly stabilized.

GSD:

(1) Systems Analyst II (1596-2) - The Management Information Services Division (MIS) staffing has been reduced by 20% in the last two fiscal years due to layoffs and retirements, and prior to the staffing reductions remained at its current level for the past eight years despite significant growth in customer base and workload. The Division currently supports computer devices at 358 separate offices throughout the City. There are over 80 remote sites that have Department computers. Fleet Services alone has over 35 fleet shop locations and 169 computers. The Vehicle Management System is a Citywide mission-critical system. A Systems Analyst position is needed to develop requirements for the new FleetFocus M5 system. As the development of these requirements is critical to successful implementation, it is important that we have a dedicated Systems Analyst to work with technical and functional project team. This position will also help in determining requirements for reporting, data conversion, coordinate migration, implementation, and training for the Vehicle Management System.

In addition, the Systems Analyst position will help in making vehicle diagnostic and repair manuals accessible to all the Fleet shops. Manufacturers are no longer printing paper repair manuals. Most manufacturers are providing manuals on electronic media such as CD or DVD. It is important that mechanics have access to the electronic media to properly repair vehicles in a timely and efficient manner.

Failure to fund this position will result in delays in addressing Fleet Services Division requests for VMS support. As resources become available, we would assign staff. The proposal is for a hosted solution which introduces more areas of concern to ensure that the Fleet Services Division is provided with the most useful and accurate information from the Vehicle Management System. There are interfaces with mission critical applications such as the purchasing, fuel management and timekeeping systems that this position will be instrumental with validating data between these systems. A Systems Analyst position is needed to work with the software provider and the Fleet Services Division to deliver an effective Vehicle Management System.

(1) Management Analyst II (9184-2) - This position would support the implementation, end user training, continued Information technology support, assist with system administration, management reporting, and analysis for fleet operations. This position will be the main management reporting support resource for the upgraded system. This position will be responsible to be a subject matter expert providing fleet maintenance cost analysis, vehicle replacement analysis, provide support to the systems administrator and acquire specific knowledge and skills that will allow the upgraded system to be used at it fullest capacity. This position is necessary to create and report key performance indicators (KPI's) based on fleet needs, work with MIS staff to create customer service portals for city departments to have access to the system for their own fleet vehicles and to ensure vehicle assets are properly tracked and reported from beginning to end of life cycle.

LAFD:

(1) Programmer Analyst IV (1431-4) - Provides overall project lead which includes planning, coordinating, directing, and reviewing the work of assigned subordinates, as well as contracted employees for the implementation, enhancement, maintenance and support of the new system. This position also performs user interface (screen) and reports to meet user's requirements and facilitate workflow and data processing efficiency.

(1) Management Analyst II (9184-2) - This position would support the implementation, end user training, continued information technology support, assist with system administration, management reporting, and analysis for fleet operations. This position will be the main management reporting support resource for the upgraded system. This position will be responsible for being a subject matter expert providing fleet maintenance cost analysis, vehicle replacement analysis, provide support to the systems administrator and acquire specific knowledge and skills that will allow the upgraded system to be used at its fullest capacity.

- Add New Jobs to WO
- Assign Jobs to Tech/Group
- Post Direct and Indirect Labor Transactions
 - Labor Wedge
 - Labor Time Sheet
- Post Part Transaction
 - Stock
 - Non-Stock
- Post Commercial Transaction
- Edit Labor/Part Transactions
- Test Warranty Alerts
- Enter Notes
- Attach Scanned Files
- Complete/Close Work Orders
- Generate Work Order Reports/Invoice
- View Unit History and Work Order History

Test Inventory Process

- Create Part Numbers
- Update Part Numbers
- Create Cross Reference
- Request Parts for Work Order/Unit
- Create/Approve Requisitions (if used)
- Generate Purchase Order (if used)
- Execute Automatic Reorder (Manual Reorder Only)
- Receive Parts – Manual, From PO (if used)
- Transfer Parts – Request, Transfer, Receive



- Issue Parts to: Work Order, Unit, Department, Account
 - Stock
 - Non-stock, Manual PO
- Adjust Part Quantity/Price
- Execute Physical Inventory for selected part numbers
- Print Bar Codes/Test bar coding
- View Part Journal

Test Fuel Management Process

- Issue Fuel Card to Unit
- Issue Fuel to Unit from Vendor manually
- Test Vendor/Internal Fuel Interface
- Review Unit/Product Issue History
- Review Unit Meter Journal

System Administration Testing II

- Execute key standard batch processes, including:
 - Forecaster,
 - End-of-Day,
 - End-of-Period,
 - Auto Requisitions and
 - Billing.
- Generate a sampling of standard reports including transaction journals used to verify processing of test data.
- Execute sample dashboards, verify results
- Test Interfaces, review rejected transactions as per specification and interface documentation

Additional Workshops maybe needed to test optional modules and advanced functionality such as: Motor Pool, Replacement Planning, Accident Management, Customer Portal, Shop Portal, Billing, Unit Availability, Notifications, Core Tracking, and Repeat Repairs. AssetWorks will provide test scripts for each of these modules as required. CoLA will be responsible for executing these test scripts in the same manner as those for the standard modules processes.

