

To: A & F Committee

Date: November 3, 2011

From: J. Scott Mitchell  
Director of Maintenance

Reviewed By:

**SUBJECT: Maintenance and Inventory Replacement Project**

**BACKGROUND:**

As the Board of Directors is aware and has recognized many times in the past, the CCCTA Maintenance Department consistently exceeds National Maintenance Standards for Miles Between Road Calls, Maintenance Employees per 100,000 Miles, and Buses Per Mechanic. Having a reliable maintenance and inventory control management system is critical in helping achieve these standards.

The TMIS (Transportation Maintenance Information System) application has been used by CCCTA for over 20 years, and has been through several iterations and upgrades. It has an extensive array of functions and categories for tracking our most important information within the fixed-route unit of CCCTA. The following are its core functions:

- Scheduled Maintenance of fixed-route buses and support vehicles
- Work Orders and maintenance history for buses and support vehicles
- Work Orders for Facilities Maintenance
- Parts Inventory
- Fuel and Oil Inventory and usage
- Purchase Orders
- Vendor Tracking
- Accident and Incident Records

**SUMMARY OF ISSUES:** TMIS received a major upgrade six years ago to bring it into compliance with modern operating systems and to move the database to a more standardized format, should we ever need to move to another platform. Prior to this upgrade, CCCTA had explored other options to migrate to. These other software platforms were overly complex and expensive. The closest match in terms of functionality approached \$500,000 in initial costs with a doubled cost in yearly maintenance. This is why we proceeded with TMIS and performed the upgrade.

The sole TMIS programmer, Ken Leidy, passed away in 2010, and since, support has been provided by Transit Resource Center (TRC), which acquired rights to the software before Ken's demise. Two large problems arose at this point, 1) TRC didn't have the expertise to properly maintain and upgrade TMIS, and 2) CCCTA transitioned to Windows 7 on the desktop PC's which are not compatible with the current version of TMIS.

TRC began to consult with DragonPoint Systems, a software design company, to provide TMIS customers with support and the possibility of designing an upgrade. We have worked with DragonPoint to repair some issues with TMIS and have found them to be very competent. They understand TMIS, as well as our needs at CCCTA.

TMIS was programmed in Visual Basic 6, which is not upgradeable to current development environments; and programs created within VB6 cannot be manipulated to work with Windows 7 OS. All VB6 programs must be rewritten from scratch within Microsoft's new development environment, Visual Studio.NET. The cost of doing so is beyond what TRC is willing to pay and therefore, leaves CCCTA stuck with an outdated and unsupported application.

That leaves CCCTA with two options.

Option I: Hire a software consultant to write a technical specification for a maintenance and inventory management system. Release an Invitation for Bid or Request for Proposal. The last time CCCTA solicited bids for an inventory and maintenance management system, bids came in at the \$500,000 range. This option would require CCCTA to change or modify many of our internal policies and procedures, require retraining of CCCTA staff, and result in higher annual maintenance costs.

Option II: Enter into a professional services contract with DragonPoint Systems directly to re-write our inventory management program.

The latter option tends to make more sense, as we can keep the familiar look-and-feel of TMIS, avoiding re-training and loss of productivity, and can make the application fit our exact workflow. Along with this, the newly re-written application would allow for modern compatibility, longevity, and standardization, so that any Microsoft-based programming company or individual can support it.

DragonPoint Systems is already familiar with all aspects of our needs, and is willing to complete the project module-by-module at a total estimated cost not to exceed \$240,000. Also, yearly support costs will be less through DragonPoint and there will be no yearly licensing fees--CCCTA would own the updated application outright. Should DragonPoint ever fail to meet our support needs, we have endless options for support elsewhere, which would not be the case with other commercial products.

**FINANCIAL IMPLICATIONS:** Grant funds have been identified for this project. Project not to exceed \$240,000.

**RECOMMENDATIONS:** CCCTA enter into a professional services contract with DragonPoint Systems to update our maintenance and inventory management software to a modern iteration and migrate our end-users at the beginning of next year, when complete. This move should give CCCTA problem-free service until at least 2019.

**ACTION REQUESTED:** Staff recommends that the A&F Committee recommend that the full Board of Directors authorize the General Manager to enter into a professional services contract with DragonPoint Systems.