

**Directions: Please Fill Out Shaded Areas**

<b>Department Name: Department of Procurement Management (DPM)</b>	
<b>Project Name: ADPICS Upgrade</b>	
<b>Project Amount: \$2,295,026</b>	<b>(2 Year Implementation – Hosting Fee, Software Leasing, and Consulting Support Services)</b>
	<b>FY 05-06 - \$1,656,610</b>
	<b>FY 06-07 - \$ 638,416</b>
<b>Preparer Name &amp; Contact Information:</b>	
<b>Tom Blaine: (305) 375-5375, Assistant Director, Department of Procurement Management</b>	
<b>Mari Saydal: (305) 375-2205, Special Projects Administrator 1</b>	
<b>Caryl Coker: (305) 375-3045, IT Project Manager</b>	

<b>Project Type:</b> Please check (√) one.
<input checked="" type="checkbox"/> <b>Enterprise</b> <input type="checkbox"/> <b>Communities of Interest</b> <input type="checkbox"/> <b>Department Specific</b>
<b>Funding Source:</b> Please check (√) one.
<input checked="" type="checkbox"/> <b>GF Capital</b> <input type="checkbox"/> <b>Proprietary Capital</b>
<input checked="" type="checkbox"/> <b>Mandated Requirement</b> (If checked (√), please indicate who is mandating this request as well as the time frame) * <b>Resolution No. 442-04; April 13, 2004 (Tracking Steps in the Procurement Process)</b> * <b>Resolution No. 342-04; March 16, 2004 (Vendor Past Performance)</b>
<input type="checkbox"/> <b>1</b> <b>Department Priority of Initiative (1, 2, 3, etc.)</b>

## Section A

### Background

*Provide any relevant background information to include existing investments in the proposed project. Include any information relevant to why this is a mandated project.*

The BCC directed the CMO to evaluate alternatives for tracking steps in the procurement process and for creating a vendor past performance database by Resolutions Nos. 442-04 and 342-04 respectively. In response to the Board’s directives, DPM conducted an extensive analysis for implementing the resolutions as well as streamlining the procurement process. This analysis included assessing existing vendor evaluation systems used by Aviation, CICC, and DPM to provide the functionality to fulfill the resolution requirements.

### Problem Statement

*Define the problem, need, or opportunity.*

The County purchases more than \$900 million in goods and services annually for 45 Departments. DPM generally performs all County procurements for goods and services with some exceptions for departments such as Aviation, Transit, and Public Works. Purchases for Transit and Public Works were being transitioned to DPM in 2004. Capital Improvements Construction Coordination (CICC) manages purchases for construction and for architecture and engineering (A&E) services. Currently, a variety of manual and automated systems support the procurement activities of different County departments.

Within the current ADPICS system, there is limited functionality relating to reporting, document cross reference, document activity and status, and the overall ability to track workflow. ADPICS has very limited capability without extensive modifications to support functionality for capturing vendor performance evaluation information and tracking solicitation processes. ADPICS currently requires that other stand-alone systems be supported in order to capture data that is not available in ADPICS. These stand-alone systems require redundant data entry requirements on DPM and Departments. Furthermore, it has been our experience with existing stand-alone systems used by DPM in conjunction with ADPICS that they cannot sustain a method to validate compliance with entering information or information accuracy.

DPM conducts approximately 2,800 solicitations each year and maintains approximately 39 county-wide contracts. The average procurement life-cycle is about eight (8) months from a department initiating a request until a contract is signed but can take as long as one (1) year to complete. Depending on the procurement type (e.g., ITB's under \$100K, under \$1M, or over \$1M and RFP's under \$500K, under \$1M, or over \$1M) there are numerous procurement steps for tracking each procurement type. Each type of procurement has their own unique process that could also have variable steps depending on the situation.

Over the past several years, the County's procurement process has undergone major improvements to achieve service excellence provided to departments and vendors, while raising the bar of citizen accountability. This is evident in the efforts achieved through the eProcurement functionality provided via the Internet and the County's Intranet. Even with the achievements accomplished to date by DPM, additional improvements are needed to streamline the procurement process and provide more accurate tracking and reporting of procurement activities. Further availability of information will not be evident if the two BCC resolution priorities that called for DPM to identify a solution are not implemented. The resolutions are as follows:

- **Alternatives for tracking steps in the procurement process (R-442-04):** This resolution calls for a system to track the steps that need to be taken or are taken in the procurement process for all facets of County contracting. The system must identify the department, responsible work unit or position, capture process information, and provide assurance of accountability.
- **Creation of a database of contractor past performance (R-342-04):** This resolution calls for a plan that provides a method for evaluating qualifications and responsibility of contractors. The information is to incorporate contractor performance from internal (e.g., County Department and Procurement Agent feedback) and external (e.g., federal, state, and local entities) sources.

Procurement is not a stand-alone function. To procure goods and services for purchases of more than \$900 million per year requires involvement from County Leaders, Departments along with Budget and Financial Data, supplier relationships, and performance measures and feedback mechanisms. To achieve procurement efficiencies and accountability requires viewing procurement activities from an enterprise perspective.

What does it mean to address procurement from an enterprise focus? There are three major components of an enterprise solution that include:

- Viewing Miami-Dade County as an entire organization with integration points that reduce redundant data entry and data management;

- Emphasizing collaboration and data management among Finance, DBD, DPM, and all 48 county user departments; and
- Retaining information that can be used to provide customizable and ad-hoc management reports.

### Solution

*What is the proposed solution?*

DPM evaluated three types of alternatives for implementing the BCC directives. These alternatives included:

- Manual Processes
- Enhancing stand-alone systems used by DPM, CICC, and Aviation. This review was to determine if any of existing systems were capable of supporting the BCC business requirements.
- Augmenting ADPICS functionality by activating, or in some cases, enhancing the existing Countywide ADPICS purchasing system.
- Upgrading the ADPICS mainframe software to the new web-based ADPICS eProcurement module.

Further investigation of a manual process was not conducted when DPM reviewed the number of different procurement types and the number of steps for each procurement type. There are between 13-20 major procurement steps. Each of these major procurement steps involves additional steps. DPM Agents could be trying to track 30-50 steps for 15-20 individual procurements. Creating a manual logging process would be burdensome and the results would be impossible to analyze quickly to assess improvement areas.

A session was conducted to review the functionality of the Consultant Evaluation System (CES) used by CICC. Also the Contracts Administration Tracing System (CATS) used by Aviation was reviewed. DPM was already familiar the Contract File system (BTS).

The system solution had to meet seven key implementation factors:

- Meet the BCC resolution requirements;
- Accomplish with minimal risks;
- Cost effective;
- Fit the County's enterprise and procurement Vision;
- Improve county procurement; processing times and reporting capabilities
- Provide a strong return on investment (ROI); and
- Present quick county and vendor wins.

In addition the solution had to *deploy procurement best practices* that would offer an opportunity to improve procurement *efficiencies* through *process improvement* evaluation and re-engineering activities that would reduce the number of procurement tasks while providing *tighter accountability controls*. It also had to be a *flexible* solution that could be quickly configured, as opposed to, requiring costly software modifications and lengthy development times to meet legislative and policy changes. Lastly an emphasis was placed on being an *integrated end-to-end procurement solution* that could be implemented in a timely manner that would deliver results that can be managed, measured, and provides executive reporting for the County Manager and Commissioners.

The alternative to enhance a stand-alone system was not explored further because it will require redundant data entry requirements on DPM and Departments. Furthermore, it has been our experience with existing stand-alone systems used by DPM in conjunction with ADPICS that they cannot sustain a method to validate compliance with entering information or information accuracy. Therefore, DPM focused on identifying the

advantages, disadvantages, and costs for enhancing ADPICS or upgrading to OLF eProcurement.

Since December of 2003, DPM began exploring the ADPICS upgrade. This exploration included management and senior representatives from DPM, Finance, and ETSD. In January of 2004 TIER made a presentation to DPM, Finance and ETSD on their new web-based application product offering. Further investigation was conducted by DPM and ETSD during the TIER annual conference in March 2004.

On May 6, 2004, TIER conducted two meetings. The first meeting with DPM and ETSD reviewed what would be required to make ADPICS enhancements to support the BCC Resolution requirements, knowing the ADPICS enhancements would not be able to completely address the Resolution requirements. During an afternoon Technical Integration discussion with DPM and ETSD, TIER reviewed their new web-based eProcurement offering and how integration points to FAMIS, the County's accounting system, is handled. At the end of this meeting the County prepared a technical questions document to clarify information during the discussion. TIER provided a written response. A few additional technical questions were submitted and TIER provided a written response. On August 4, 2004 TIER met with DPM and ETSD to review the technical questions with the County and provide additional information based on the meeting dialog.

On June 28<sup>th</sup> and 29<sup>th</sup>, DPM conducted five (5) presentations reviewing different functionality of the ADPICS upgrade software. The purpose of the presentations was to demonstrate the software functionality so DPM and Departments could provide feedback on the ADPICS eProcurement software upgrade. Presentations showed functionality that could be used by DPM, Departments, Vendor and Public access. In addition, integration points to ONLINE FAMIS and ADPICS, the County's accounting and purchasing systems, were identified demonstrating where eProcurement functionality would integrate with existing systems and processes.

Employees from DPM, as well as Departments representing GSA, WASD, MDT, Seaport, and the Airport attended the presentations. At the end of each presentation, the attendees completed an evaluation form. The evaluation served two primary objectives. First, if areas were not adequately covered during the presentation, TIER was asked at the end of the meeting to show or further clarify how the software upgrade handled criteria being evaluated. Second it provided attendees the opportunity to score their impressions of the ADPICS upgrade software. Scoring was done on a scale of 0-5, where a score of 5 was outstanding, 3 was acceptable, and 0 unsatisfactory.

Individuals attending the presentations expressed positive feedback regarding the software functionality to meet the needs of DPM, Departments, Vendor, and Management reporting. It was also determined the software would be able to meet, even exceed, the BCC Resolutions 342 and 442. In addition the software solution would provide other, much needed, purchasing functions that have been requested by Departments, County Management, and Procurement Agents. The software also provided an opportunity for DPM to quickly and cost effectively advance the eProcurement vision of the County. A few examples of some eProcurement *quick wins* include:

- Tracking a solicitation from the point in originates and is approved in a department through payment,
- Tracking and reporting vendor performance based on receipt of goods and services,
- County contracts for goods and service available as online catalogs,
- Complete vendor web registration and profile updates including online County data verification (no more paper shuffle),
- Online posting for requests for bids and quotes,
- Award postings online,
- Improved user ad-hoc report capability; and
- Electronic solicitation package assembly.
- Improved communication with bidders using integrated broadcast email tools.

**Expected Benefits / Direct Payback**

State the benefits of solving the problem or reaching the goal. Hints: “How the project will reduce costs (perhaps from reducing redundant tasks such as data entry), better decision making at each step of a process (perhaps due to more accurate and timely information), or improved efficiency (thanks to fewer steps to process a transaction).

Specify collective benefits and identify benefits that are specific to each stakeholder. Wherever there are metrics (numbers or targets) for improvement, be sure to include them. Examples: “Reduce communications costs by 20%” or “Increase revenues by \$1,340,500 in fiscal year 2007.

Fulfill requirements of the BCC directive for DPM to evaluate alternatives for tracking steps in the procurement process and for creating a vendor past performance database requested through Resolutions Nos. 442-04 and 342-04.

Pursuing an ADPICS upgrade to OLF eProcurement provides the county needed purchasing functionality. Selecting the ADPICS upgrade approach saves the county time and money to integrate purchasing to payables, finance, and with the county’s ERP solution. There are twelve (12) major integration touch points to consider when implementing disparate systems. Each touch point has a different level of integration complexity and depending on the technical team knowledge of the systems can take additional time. The following outlines the integration touch point savings by upgrading ADPICS with a knowledgeable team of consultants who know Miami-Dade finance, payables, and purchasing requirements, as well as the OLF eProcurement system.

<b>Touch Points</b>	<b>Effort Description</b>	<b>Average Savings \$175/hour rate</b>
(1)Encumbrance, (2) Pre-encumbrance, (3) Encumbrance Backout, (4) Pre-encumbrance Backout, (5) Contract allocation updated based on payment	Each of these 5 touch points involves approximately 2 weeks of effort each or a total of 10 weeks	10 x \$175 x 40 hrs/wk = \$70,000
(6) Vendor file mapping, (7) User integration, (8) Organization integration, (9) Unit of Measure integration, (10) Address integration, (11) Commodity Code integration	Each of these 6 touch points involves approximately 3 weeks of effort each or a total of 18 weeks	18 x \$175 x 40 hrs/wk = \$126,000
(12) Partial System Administration	This 1 touch point involves approximately 4 weeks of effort	1 x \$175 x 40 hrs/wk = \$7,000

**Hard Cost Savings: Approx \$1,284,227 (Years 3-5)**

- .5 Technical ETSD ADPICS FTE – annual savings as follows: YR3 (07-08) = \$77,561; YR 4 (08-09) = \$81,439; YR 5 (09-10) = \$85,511; TOTAL Year 3 -5 Savings = \$244,511.
- 1 ETSD ADPICS Report Programmer FTE – annual savings as follows: YR 3 (07-08) = \$112,290; YR4 (08-09)= \$117,904; YR 5 (09-10) = \$123,799; TOTAL Year 3-5 Savings = \$353,993.
- Approximately a 75% reduction in ADPICS mainframe utilizations costs provided by ETSD resulting in average savings as follows: YR 3 (07-08)= \$224,063; YR 4 (08-09)= \$228,544; YR 5 (09-10) =

\$233,116; TOTAL Year 3-5 Savings = \$685,723.

- Realized 25-50% savings of on-hand inventory stock through better inventory management and quicker purchasing capability that could impact Fire, Police, Sea Port, MDTA, GSA, Fleet, and Parks. This percentage savings is based on industry standards when implementing more up-to-date automated procurement systems.
- Reduced need for the County to procure other department business tools to support inventory management, purchasing systems, and fixed assets, as well as expansion of mainframe DASD. FY04-05 budget request savings of approximately \$800,000.

### **Soft Cost Savings:**

The soft savings percentages is based on industry published savings standards when implementing a more up-to-date automated procurement system that incorporates business best practices within the software features.

- Improvement of Procurement procedures and efficiencies through easily configurable software settings that doesn't require lengthy software development / enhancement efforts.
- 30% reduction through standardized managed processes which can be achieved in areas such as:
  - **Online Vendor Enrollment and Registration** – Having vendors fill out electronic forms that check for required information saves time by the Finance Department and Vendor Information Unit handling paperwork and following up with vendors for missing information.
  - **Electronic Vendor Response Submission** – The Vendor Information Unit, Clerks Office, and DPM Procurement Agents will spend less time recording and handling paper solicitation submissions. In addition vendors save time and money copying, mailing, or dropping off submissions. These cost savings can be reflected in lower county vendor prices. Standard formats provided electronically can be analyzed more quickly and reduces data entry errors.
  - **Available Online Information** – Having information such as solicitations, addendums, bid results, and award information available online will reduce DPM Agent calls. This will provide DPM Agents additional time to perform market research, work more closely with solicitation evaluation teams, and verify vendor references.
  - **Electronic PO Dispatch** – Having the ability to electronically send PO requests to vendors reduces DPM Agent time printing, manually faxing, and mailing vendor orders.
- 20 % average savings through higher aggregate volume buying and better managed contracts such as:
  - **Online Catalog Shopping** – Department purchasing staff not only saves time by shopping through a County Catalog of contracted goods and services, the County saves money through higher aggregate volume buying. Additionally, with the automatic creation of a purchase order (PO) and funds check from the catalog, department purchasing staff saves time re-keying information and order accuracy increases.
  - **Contract Management** – The ability to better manage vendor contracts, track performance, and have accurate information regarding county and other municipality contract purchases provides the County a better negotiation position for lower costs based on higher volume buying.

### **Other Benefits**

- Ability to publicize and track municipality purchases off of County contracts, increasing potential UAP revenue.
- Easy to use, web-based software reduces reliance on long and complicated user training. When county employees move to new positions, less training time is required and therefore quicker employee productivity is achieved.
- Better reporting tools makes it easier to get information reducing the need for report development time.

Novice users will have access to information and be able to massage data without technical assistance.

- Responsiveness to request from the County Manager's Office, BCC, departments, and vendors is timelier with easily accessible electronic information versus paper documents requiring manual compilation.