Florida Statewide ITS Strategic Plan

Procurement Issue Paper

FINAL

1. INTRODUCTION

Successful ITS implementation, operation and maintenance requires effective procurement processes to acquire the services, hardware and software necessary for these systems. But many conventional procurement processes are not well suited to buying these systems, and new approaches present their own unique challenges. This issue paper presents brief descriptions of various contracting methods, existing legal considerations related to Florida procurement, barriers and issues concerning existing procurement practice and alternatives and recommendations to enhance Florida procurement. It is important to recognize that this paper is merely intended to serve as an initial survey. It is not a detailed analysis and considerably more effort would be needed to further investigate and implement the alternatives and recommendations described here.

The purpose of this issue paper is to summarize the state of the practice for procuring ITS and other advanced technology implementations. Particular emphasis has been placed on what has worked best, both in Florida and for other states. This includes an assessment of Florida statutes (e.g., Consultants Competitive Negotiation Act) for both barriers and opportunities for the use of alternative procurement types in Florida.

2. TYPES OF CONTRACTS

This section summarizes a wide range of contracting vehicles available for the procurement of ITS.

2.1 ENGINEER / CONTRACTOR (LOW BID)

Traditional highway construction projects have been procured using a process in which the project design is developed by a public agency or a consultant (the "Engineer"). A bid solicitation is issued which includes forms and design specifications and an award is made (to the "Contractor") on the basis of the lowest bid received. While this process is highly competitive, it is not well suited to the development of complex, high-tech information and communications systems which are the core of ITS.

If a consultant is to be used to design the project, the consulting engineer is selected based on qualifications and experience to perform the work. In Florida, this process is governed by the Competitive Consultant Negotiations Act (CCNA). The engineer typically prepares the contract documents (plans and specifications). Construction contractors are invited to submit bids in accordance with the contract documents. Award is based on the lowest responsive bid. Once awarded, the contractor builds the project according to the bid documents. The engineer (or another CE&I consultant) inspects the construction, certifies completion and may interpret the bid

documents. Most highway construction and smaller closed-loop type traffic control system projects in Florida have been procured successfully utilizing this approach.

Advantages:

- The public agency is the responsible entity.
- This approach has a long history of use, with roles clearly defined.
- Its history provides well-established legal precedent to handle disputes arising from this approach.
- The end product is well defined at an early stage in the project.
- The contractor manages the subcontractors
- This approach is well-suited to highway construction

Disadvantages

- Artificial dividing line between design and construction
- Not well-suited to software development in that software projects are difficult to specify and the buyer may not know his needs
- Software/systems integration is not usually performed by the prime contractor
- The contractor has financial incentive to find deficiencies in the bid documents and "changed" site conditions to seek change orders

2.2 DESIGN/BUILD

This type of contract combines both the design function and the construction/installation function into a single contracting vehicle. Also known as a turnkey or public turnkey, the procurement is for the design prepared by the procuring agency. Design/build contracts are usually most successful when they are structured around a preliminary design completed to the 20 to 60 percent level. The agency's role is to monitor the design/build work. Partnering is generally involved. This contracting alternative can allow for rapid completion of the project and can provide for streamlined procurement. Engineering and construction work can be done cooperatively with a single entity to resolve problems that are common in traditional contracting, where the engineering and construction functions are handled by separate firms. These contracts may also include warranty or operations management tasks. Under this arrangement, the agency assumes greater responsibility for inspections and approvals, and requires a significant quality control effort on the part of the public agency . Selection is often based on low bid, and bids may be somewhat higher than with a traditional approach because of the increased risks to the contractor. The design-build approach has been used in Florida for some complex highway and bridge projects, traffic signal installations and for the Sunpass electronic toll collection system.

Advantages:

- The time to deliver the project can be reduced significantly.
- Used extensively in private sector (legal precedent).
- Reduced involvement of agency staff in production and construction inspection stages.
- Single point of responsibility for project design and implementation.
- This approach is well-suited to complex systems procurement and integration.

Disadvantages

- Many agencies lack experience in this approach.

- Reduced level of control over system components and construction methods.
- Final product may not be clearly understood until proposal time.
- Requires contract clauses / incentives to assure quality materials and construction.

2.3 SYSTEM MANAGER

Under this contracting approach, the system manager is selected using conventional consultant procurement processes. The system manager is responsible for the design (plans and specifications), software development, hardware procurement, integration, training, and overall quality control. Equipment and electrical contracting services are usually procured on a low bid basis. System managers are often used for technology-based projects. Large traffic control and freeway traffic management systems have been procured in Florida through this approach.

Advantages:

- Overall system design, software development, and testing are controlled by a single entity
- The software developer is usually the prime contractor
- This approach minimizes the shifting of fault
- Its flexibility allows for more changes than traditional contracting approaches
- It is well suited to ITS projects
- There is relatively strong competition available

Disadvantages:

- Requires careful examination of firm qualifications to assure requisite blend of skills.
- This approach is somewhat unfamiliar to local engineers and procurement officials.
- This approach relies heavily on the successful performance of the system manager.
- The end product tends to be less well defined than under the engineer/contractor approach and it is difficult to manage “expectancies.”
- Low bid services (such as equipment and electrical contracting) are the responsibility of the public agency. This may include inspection and acceptance.

2.4 SYSTEM INTEGRATOR

This approach is virtually the same as the system manager, except that the system integrator can bid on equipment and electrical contracting services. This approach was used in Georgia for the Atlanta area ATMS project. Although there are no apparent obstacles to it use, this approach has not been used for an ITS project in Florida.

Advantages:

- Single point of responsibility
- Contracting is simplified.

Disadvantages:

- This approach is not well known to public agencies
- Allowing contractors to directly bid to the system integrator may violate the public agency’s procurement processes.

2.5 COMMERCIAL OFF THE SHELF (COTS) SOFTWARE ACQUISITION

This approach is new to ITS, but it used for the majority of software acquisitions in both the public and private sectors. The local agency develops a functional specification or needs statement, along with an evaluation procedure. It then evaluates all commercially available systems and selects the system that most closely suits its needs, using a predefined evaluation procedure.

Advantages:

- Essentials of competitive procurement are maintained
- Proven effective throughout the computer industry
- Increases that probability of receiving mature relatively bug-free software
- Costs are reduced
- Implementation problems and schedule slippage are minimized
- Encourages the use of standard communications protocols

Disadvantages:

- Agencies cannot readily tailor software to their specific requirements
- Only a limited number of COTS currently exist
- This approach will not work for new applications
- It is difficult for an agency to assume ownership of compute source code

2.6 BUILD TO BUDGET

This approach is different from Design/Build in that functional requirements are used in place of a detailed design. Proposers, then, develop designs based on their best solutions to meeting the functional requirements identified, using existing elements where practical. This approach has been used frequently in toll projects.

Advantages:

- Similar to design/build
- Allows maximum flexibility to proposers to use their most cost-efficient designs
- Reduces the risk based on previous developments and applications
- May allow added functionality for a given budget

Disadvantages:

- Similar to design/build
- Very unusual practice for public agencies
- Increased risk because of a lack of detailed designs
- Detailed design documents may prove contentious and delay the project
- This is a very expensive approach for proposers

2.7 BUILD-OWN-OPERATE-TRANSFER AND FRANCHISE/LEASE

This approach involves long-term contracts with a consortium to finance, design, build, operate and

collect revenue. From the system implementation phase, it is equivalent to either the design/build or build to budget alternatives. The differences occur during the system operations and maintenance phases. These alternatives are typically considered because they do not involve an up-front capital cost for the owner. The most recent example of this approach is Kentucky DOT's use of a "Tax Exempt Master Lease" to finance the construction and operation of an ITS project in Louisville. The contractor receives construction funds (and later operational funds) through a private leasing arrangement. Once the system is operational, the DOT makes periodic payments to the leaseholder. Because private investors are assuming much of the risk, the return is considered tax-free.

Advantages:

- Contractor financing reduces the up-front capital requirements of agency.
- O&M the responsibility of the contractor.
- Allows maximum flexibility to proposers to use their most cost-efficient designs.
- Reduces the risk by tying payment to delivery of service (i.e., system operations).

Disadvantages:

- Similar to design/build
- Very unusual practice for public agencies
- Requires long-term (10-15 year) commitment to assure contractor's return on investment.
- This is a very expensive approach for proposers

2.8 DESIGN TO COST AND SCHEDULE

Under this approach, the public agency develops a prioritized list of requirements. The contractor then supplies all of the mandatory items and as many of the optional items as is feasible under the given cost and schedule constraints.

Advantages:

- This approach reduces scope creep
- It reduces cost and schedule risks

Disadvantages:

- Bidders, in an effort to win the job, may be unwilling to propose not meeting all the optional features.
- Overly optimistic proposals, therefore, will win.

2.9 SHARED RESOURCES

A shared resource project is any agreement between one or more public sector agencies and one or more private sector organizations with the objective of providing services using the combined resources of both -- often trading a grant of a right to a public resource for the addition of a private entity to achieve a service or facility of mutual benefit to both partners. Its most common form in the ITS context is a partnership for sharing highway rights-of-way in exchange for private

telecommunications expertise and capacity to further both public sector and private sector objectives.

A shared resource project in this context has four specific features:
- Public-private partnering
- Private longitudinal access to public roadway right-of-way
- Installation of telecommunications hardware
- Compensation granted to the right-of-way owner over and above administrative costs.

Advantages:
- Contractor financing reduces the up-front capital requirements of agency.
- O&M the responsibility of the contractor.
- Agency receives state of the art equipment, built to industry standards.
- Potential revenue generator for agency for valuable right-of-way access.

Disadvantages:
- Dependant on private market forces to create financial incentives
- Very unusual practice for public agencies
- Requires long-term (15-20 year) commitment to assure contractor's return on investment.
- Agency requirements may not match those of private sector, resulting in few to no bidders or increased costs to agency.

There are a number of examples of shared resource arrangements, discussed below:

Florida Fiber Net: FDOT and DMS are preparing to issue an RFP for a shared resource project to provide the state with a fiber optic network using approximately 2000 miles of limited access right of way throughout the state. In exchange for providing the fiber, the successful proposer will get use of the right-of-way for up to 99 years for the construction of a commercial fiber network. In addition to supporting ITS applications, the network also will be used as the principal backbone communications link for various traffic operations centers, data centers and administration buildings. DMS will also offer the opportunity for the successful proposer to provide it with a SONET-based, point to point backbone bandwidth for the state's SUNCOM network. The successful contractor also will be given the opportunity to compete for other communications contracts to provide other state services.

City of Leesburg, Florida: The City's Communications Utility and two private partners (Knight Enterprises and Alternative Communications Networks (ACN)) developed a fiber optics system to deliver telecommunications services in the city. In exchange for the city's grant of right-of-way access to the above ground utility poles and it's construction funding, ACN has designed and contracted the network and is leasing the capacity to public or private customers under a five-year contract with the city.

The city, in return, owns the dark fiber on its right-of-way. Customers own the fiber from the ROW line to their own facilities, pay ACN a fee for access to the city-owned backbone, and can either use their own equipment or pay ACN for the use of its equipment to light the fiber. A total of about 40 miles of fiber will be installed. Leesburg is receiving cash compensation based on lease payments in addition to the fiber capacity. After capital costs are repaid, the revenues will be split evenly

between the city and its telecommunications partner.

Maryland: The state has allowed MCI access to 75 miles of ROW for 40 years, in which MCI may lay as many conduits as feasible and desired, and pull fiber as needed afterward. MCI is providing the state with 24 dark fibers for its use. MCI also will serve as the lead contractor for building and maintaining the system. Another partner, Teleport Communications Group (TCG), entered the agreement as a subcontractor to MCI. TCG is paying MCI to install and maintain fiber in privately held conduits. TCG is giving the state equipment needed to light the fibers, and additional fiber capacity for public sector use. Each party retains ownership of the fiber dedicated to its use. Maryland set up the project strictly as a procurement to purchase telecommunications capacity through ROW access.

Minnesota: Mn/DOT has issued a Communications Infrastructure Request for Proposal offering one time communications access to its freeway ROW in exchange for communications infrastructure, consisting of both fiber optics and wireless towers. In August, 1996, the state selected International Communications Systems (ICS) and Stone and Webster to install 96 fibers on the state's 1000 miles of freeway and on enough trunk highway mileage statewide to connect all of Mn/DOT's district offices and the Department of Administration's 13 Mnet HUB sites. Under the agreement, Mn/DOT will grant ICS and Stone and Webster the right to install the cable in the ROW. In return, the state will receive access to a 1500 mile high speed communications network at no cost. In addition, the private partners agreed to develop the network not only in the metropolitan areas, but also in the less populated areas of the state. The project has received opposition from two groups: long distance and other providers who object to the fact that only one provider will be using freeway ROW, and independent phone companies throughout the state who feel threatened by the competition likely to result from the partnership.

In addition, the state has filed a petition with the Federal Communications Commission for a ruling that the grant of exclusive longitudinal use of freeway rights-of-way do not violate Section 253(a) of the Telecommunications Act. Section 253(a) prohibits state and local governments from enforcing statutes, regulations or other requirements that prohibit or have the effect of prohibiting the ability to provide telecommunications service. Section 253(c) of the Act preserves the authority of state and local governments to manage public ROW and to require fair and reasonable compensation from telecommunications providers on a competitively neutral and nondiscriminatory basis for use of public ROW. Mn/DOT is arguing that the partnership is consistent with section 253(c) of the Telecommunications Act.

Missouri: Missouri selected Digital Teleport Inc. (DTI) to install 1300 miles of fiber optic cable to create a statewide communications backbone system. In return for allowing access to the ROW, Missouri received six lighted fibers for state highway use and DTI's maintenance services for the system. The arrangement provides the state with two strong advantages. First, there is limited competition from ROW alternatives, such as railroads, in the areas of greatest interest to bidders (particularly the St. Louis metropolitan area). Second, it grants exclusivity to one telecommunications firm, although that firm can lease access to other telecommunications firms on its lines and is, in fact, doing so.

Missouri also structured the deal strictly as a procurement, purchasing telecommunications capacity through highway ROW, and DTI's access to the ROW is considered a procurement contract awarded to a single contractor, in a competitive process, rather than a special privilege.

2.10 STATE CONTRACT

Purchases of goods and services that are ongoing and are common to several state agencies generally are consolidated under standard specifications and are developed into state contracts or joint institutional purchases. Under the state contract approach, the state issues a Request for Bids for various (and usually indefinite quantities of) commodities and services. Vendors then provide prices for those products and services based on the terms and conditions of the RFB. The vendor providing the lowest bid is selected. The prices are good for some specified period of time. State agencies can then order the products and services they need from a list of providers. While this approach allows agencies to plan for and procure goods and services more easily (prices are known and fixed, ordering process is relatively quick and easy, etc.), it is not well-suited to complex procurement, such as ITS systems and equipment.

At least one District in Florida has proposed using state contract procurement for ITS equipment, coupled with a consultant Systems Manager for software and integration and a low-bid contractor for field construction. This approach has both advantages and disadvantages.

Advantages:

- Latest technology can be procured through State contract
- Eliminates submittal review process when equipment in known to the Department
- State is in complete control over the schedule of equipment and software delivery
- State contracts directly with equipment and software suppliers, giving State greater leverage to insure products supplied are as promoted
- State can quickly procure alternate products when equipment or technology becomes obsolete or unavailable
- State contract equipment has already been product tested and approved
- Allows State to contract and deal directly with suppliers on all testing, giving State more power over suppliers meeting product schedules and adhering to test requirements
- Time required to negotiate and process supplemental agreements due to vendor equipment reduced or eliminated
- State is able to take greater responsibility and control over the success and outcome of the project
- Cost to operate equipment is reduced when the State procures equipment with known, quantifiable operating requirements

Disadvantages:

- Potential for delays getting new products approved and bid to new State contract list
- Contractors' ability to provide innovative approaches restricted or eliminated
- Introduces fourth party (vendors) as a major player in deciding on what and how system functions will be delivered
- Greatly increases Department involvement and liability in system procurement and acceptance
- Transfers some of the responsibility for ultimate system operation from Systems Manager and contractor to the State

3. METHODS OF AWARD

In addition to considering the type of contract vehicle most appropriate to a particular ITS project, the public agency must also consider which method of awarding the contract is most appropriate to ensure adequate competition for the award. A variety of options are described below.

3.1 SEALED BIDS

This approach is perhaps the most common method of award for both Federal and state contracting. This approach requires that contracts be awarded only on a lowest cost, responsible and responsive bidder basis. This approach tends to maximize the number of private firms competing against each other solely on the basis of price, and gives the procuring agency the "best buy."

The sealed bid process is easy to defend in protests because of its objectivity. However, sealed bidding works best when the agency can develop a complete, adequate, and realistic set of specifications, there are two or more responsible bidders willing to compete, the procurement lends itself to a firm, fixed price contract, and the selection itself can be made on price.

In the ITS context, however, sealed bidding presents some significant disadvantages. Detailed specifications may not be available for emerging technology, sealed bidding inhibits innovation, it precludes the public sector from considering anything but price in its selection, and it limits opportunities for the public and private sector to engage in meaningful dialogue to find the most appropriate solution to the agency's needs.

To mitigate some of these disadvantages, many public agencies have adopted pre-qualification procedures to ensure that low bidders have the requisite skills and competencies to successfully execute the work. This is particularly important in the ITS environment.

Lifecycle contracting is another approach agencies have employed to ensure that they receive both low cost and good value in their procurements. Lifecycle contracting is a competitive procurement process that results in the selection of the bid with the lowest lifecycle costs or that increases the weight given to lifecycle cost considerations.

3.2 2-STEP BID PROCESS

This approach allows the procuring agency to gain the advantages of a sealed bid approach when it lacks adequate specifications for a project. The process starts with a solicitation from the public agency that sets forth its technical needs and requirements. Proposers make technical proposals based on the solicitation, without discussing price. Those firms submitting technically acceptable proposals in step one would be invited to submit sealed fixed price bids based on their proposals.

3.3 COMPETITIVE PROPOSALS

This approach uses Requests for Proposals (RFPs) and Requests for Qualifications (RFQs) to select contractors when price and other considerations must be weighed. In general, the more design and professional services that are bundled into a solicitation, the more appropriate the use of competitive proposals. This approach is usually employed when there is more than one source capable of providing the services. While there is some subjectivity involved in selecting a contractor under this method, the process is sufficiently objective to allow for courts to review decisions, if a proposer issues a protest. Competitive proposals encourage innovation, but if the solicitation is too loosely defined, proposers may submit bids that the public agency does not consider to be responsive. The process also does not allow for bidders to clarify their bids in such circumstances. This approach may also invite political problems if the low bid contractor is not selected.

3.4 COMPETITIVE NEGOTIATIONS

Competitive Negotiation uses an RFP/RFQ process to identify one or more firm with which to conduct negotiations. This allows the agency to negotiate different contract terms than those used as the basis for the bid. Among the criteria to be considered in determining whether competitive negotiations are appropriate are whether there is significant variations in how the services to be procured can be provided, whether attributes other than price are to be considered, and whether there is a need for bidders to revise their work plans after the initial evaluation of the proposals.

3.5 SOLE SOURCE

Sole source contracting is allowed in only very limited circumstances. This approach involves the selection of a contractor for negotiations based on the firm's reputation or its prior relationship with the owner. It should be used only when the supplies or services to be procured are available from only one source.

3.6 UNSOLICITED PROPOSALS

Unsolicited proposals allow public agencies to obtain innovative or unique methods for meeting agency needs. Contracts can generally only be awarded when the unsolicited proposal does not resemble a pending competitive acquisition. Florida DOT generally does not accept unsolicited proposals and the Florida Public Records law (as interpreted) discourages them.

4. LAWS/REGULATIONS GOVERNING FLORIDA PROCUREMENT

ITS deployment occurs largely in the realm of state and local agencies. But Federal law considerations play a role in determining what types of contracting vehicles and award methods can be used. This section describes some of the most significant Federal and Florida legal requirements to be considered in procurement.

4.1 FEDERAL LAW CONSIDERATIONS

Common Rule

Under the Common Rule, if a public agency is receiving Federal-aid funds, it is required to use the established state or local procurement procedures, but must also ensure that the contracts issued include relevant clauses required by Federal statute, executive order or regulation.

Title 23 Requirements

Title 23 states that highway construction contracts must use bidding methods that are effective in securing competition. In other words, competitive bidding methods are required, unless the state demonstrates that another method is more cost effective or an emergency requires the use of an alternative method.

The definition of construction includes traffic control systems. Currently, there is little guidance as to whether Title 23 requirements apply to specific ITS projects. But in general, if a contract involves installation, then it is considered construction and competitive bidding applies.

Other sections of Title 23 require that contracts for engineering, architectural, and design services must be awarded in the same manner as architecture and engineering services procured under the qualifications-based selection process prescribed in the Brooks Act (or some equivalent qualifications based requirement). Thus, since construction (or installation) projects require the use of competitive low bid methods for procurement, and architectural/ engineer/ design services require a qualifications-based selection process, a number of ITS projects could result in the need for two separate contracts (one for the engineering services and one for the installation services) and two separate contractors.

SEP-14 Innovative Contracting Methods

Within the context of the Common Rule and Title 23, FHWA has been promoting the evaluation of innovative contracting methods known as Special Experimental Project number 14 (SEP-14) for ITS projects. For eligible projects, SEP-14 allows the use of innovative contracting methods, such as design-build, for procurement of construction related items. ITS projects that receive federal aid funds and that have any elements that may be classified as construction items are required to follow the SEP-14 process if using the design-build contracting method. The SEP-14 process requires prior approval of the concept before proceeding with design-build contract.

There are no required selection criteria for design-build projects under the SEP-14 process, however it is the policy of FHWA that cost must be one of the factors. Other factors usually included in award criteria include quality and construction time considerations. The SEP-14 process has been used in North Carolina to award a design-build contract for construction of the Congestion Avoidance and Reduction for Automobiles and Trucks (CARAT) project near Charlotte. Utah DOT used “best value” award criteria for a design-build procurement for reconstruction of I-15 through Salt Lake City, including an area-wide ATMS, in time for the 2002 Winter Olympics.

4.2 FLORIDA LAW CONSIDERATIONS

Florida Consultant Competitive Negotiation Act

This act sets forth the procedures to be used in the state in acquiring architectural and engineering services. The process has three phases: 1) public announcement and qualifications procedure, 2) competitive selection, and 3) competitive negotiation. Each phase is discussed below:

Announcement and Qualifications: In this phase, the agency announces a solicitation for professional services, a general description of the project and how consultants can apply to provide the services. Any interested firm must be certified as pre-qualified to deliver the services. The agency then evaluates the capabilities of the firms to provide the professional services being sought.

Competitive Selection: In phase two, the agency reviews the current pre-qualification statements of the interested firms. It then selects no fewer than three firms (in order of preference) deemed most qualified to deliver the services.

Competitive Negotiation: The agency then negotiates a "fair, competitive, reasonable" contract with the most qualified firm for the professional services being sought. As part of this process, the agency conducts a detailed analysis of the cost of the services. If the agency cannot negotiate a contract with the top firm, it then moves to the second ranked firm and conducts a negotiation with it, and so on until it can successfully negotiate a contract for the desired services. If it cannot reach an agreement with any of the selected firms, the agency can then select additional firms in order of their competence and continue negotiations until an agreement is reached.

Florida Public Records Law

The Florida Public Records Law is intended to ensure "government in the sunshine," that is, that Florida government is conducted openly, and to allow public inspection by any person of all state, county, and municipal records. According to the statute, "public records" means all documents, papers, letters, maps, books, tapes, photos, films, sound recordings, data processing software or other materials, regardless of the physical form, characteristic, or means of transmission in connection with the transaction of official business by an agency. This rather all encompassing definition includes all information related to proposals submitted to public agencies as part of a procurement.

The law does provide for exemptions, but establishes high hurdles in order to prove that an exemption is required. An exemption can be created only if it serves an identifiable public purpose and is no broader than necessary to meet the public purpose it serves. An "identifiable public purpose" is served only if the exemption meets one of the following, including legislative concurrence that the purpose is sufficient compelling to override the public policy of open government, and that the public purpose cannot be accomplished without the exemption:

1. The exemption allows the state or political subdivision to effectively and efficiently administer a government program and the administration of the program is significantly impaired without the exemption.

2. The exemption protects information of a sensitive and personal nature concerning an individual, but only the information identifying the individual can be exempted.

The exemption protects confidential information concerning entities includes but is not limited to

formulas, patterns, devices, or combinations of devices, or compilations of information used to protect or further a business advantage over those who do not know it or use it, the disclosure of which would injure the affected entity in the marketplace.

Public-Private Partnerships in Florida

Florida Statutes, Section 337.251 provides for partnerships between public agencies and private entities that are mutually beneficial to both parties. Although not specifically aimed at ITS projects or partnerships, this statue provides a basis in law for establishing such arrangements and contracts.

Other Contracting / Procurement Methods in Florida

Finally, it is important to be creative with existing procurement methods that are available now. Many other state agencies use methods, such as state contract, for procurement of goods and services. Some of these methods are not used by FDOT, but are still viable procurement methods. District 6 will be using the invitation-to-negotiate (ITN) method for an ATIS procurement. The ITN allows negotiation with short-listed firms for selected services. This method has been used extensively in other state agencies, but is not well known in FDOT.

5. CURRENT PROCUREMENT PRACTICES, ISSUES & BARRIERS IN FLORIDA

By and large, the predominant procurement practice for ITS projects in Florida has been the engineer/contractor method. There have been some cases of ITS-type projects procured by system manager, the (modified) two-step method, public/private partnership and design-build. This section presents several Florida case studies and highlights the issues and barriers that were associated with each.

5.1 ENGINEER/CONTRACTOR CASE STUDY

Florida has used the engineer/contractor method for procuring nearly all of the computerized traffic signal control systems installed in the last decade. A recent project in Lakeland, Package C of the City's traffic signal control system (WPI No. 1128116), was the subject of a Process Performance Review (PPR) aimed specifically at the procurement method.

This project was the last of three separate construction projects to complete the computerized traffic signal control system for the City of Lakeland. It is a hybrid-type control system with about 170 signalized intersections. A central monitoring computer is connected (via hardwire) to each signal controller. While there was not anything particularly unusual about the system design, it still is a very complex system and all system components must work together seamlessly to assure maximum system efficiency and safety.

The PPR cited the long lead-time between the engineering design of the system and the final letting of Package C of the construction project. This long lead-time meant some of the equipment

originally specified was no longer manufactured. The time between design and Package C construction (approximately 4 years) also meant that the latest technology (e.g., fiber optics instead of copper wire) was not specified for the communication system. Finally, the signal system construction could not be coordinated with other roadway construction because of the overlap in bid package letting schedules. This construction overlap resulted in field conflicts and the inability to complete some work as scheduled.

The PPR concluded that design/build would have been "an appropriate contracting method" for this project. Design/build would "allow the FDOT to select a qualified firm with the expertise to design and build an appropriate system." The main reason for this conclusion is that it would allow the project to be constructed faster, using the latest technology, and coordinated with other area construction to minimize conflicts and assure more reliable system operations.

5.2 SYSTEM MANAGER CASE STUDY

The I-4 Surveillance and Motorist Information System, a freeway management system in Orlando, was procured using the system manager approach. PB Farradyne Inc. (PBFI) was contracted as the consultant and engineer-of-record, responsible for the system functional design, preparation of the plans, specifications and estimates (PS&E), development of the central software and system training and operations. PBFI was also the lead CEI consultant for the construction of the system.

The construction of the system was bid via a conventional low-bid process, however no system software was included in the bid package; only the construction and installation of field equipment. PBFI, as the CEI, monitored the construction for adherence to FDOT and project specifications, however both the contractor and PBFI (as system manager) were responsible for making the system work. As the engineer-of-record, PBFI was held responsible for making sure that their design could be constructed properly and that it would work with their software.

Most of those involved, including the FDOT, PBFI and the contractor, agreed that this was a successful project. This was due, at least in part, to the system manager approach. FDOT maintained more control over the system software development, and supplemental agreements for software enhancements were not an issue - it had to work with the field installations and equipment that had been designed for it.

5.3 TWO-STEP PROCESS CASE STUDY

The Daytona Area Smart Highway (DASH) system was based on the same central software used in the I-4 SMIS project. PBFI was also the system manager for this project. The construction contract procurement method was different, however.

FDOT originally wanted to use the FHWA Two-Step Process to select a contractor to build the DASH system. As described above, this process requires contractors to submit a technical proposal first to determine if they meet minimum qualifications. FDOT only determines if contractors meet the minimum technical requirements (i.e., either “yes” or “no”). Only contractors that have submitted a responsive technical proposal are allowed to submit a bid. The contract is then awarded to the lowest responsive contractor bid. The strict FHWA approach is difficult to coordinate in Florida, however, due to the State's Public Records law. Under this law, all of the

contractors' technical proposals become public documents within 10 days of their submittal. Thus, the District Division office had to evaluate the technical proposals as to their responsiveness, inform the contractors if their proposal was responsive or non-responsive and then inform the FDOT Central Office of the responsive contractors within 10 calendar days. The Central Office had to receive bids from all responsive contractors within the same 10 day period. Also, rejected contractors had to have an opportunity to submit a written notice of intent to protest. Otherwise, each contractor could review the technical submission of their competition before submitting a bid. This would have had the effect of negating any true competition in the bid. One contractor elected not to submit a technical proposal because of the requirement for full financial statements, information that would become public. In this particular case, the selection committee rejected all bids from the first letting, since one contractor filed a notice of intent to protest.

FDOT chose instead to use the Department's request for proposal (RFP) process to select the contractor. While this RFP method is not approved for federal funding by FHWA, the DASH project was built using only State funds; therefore this restriction did not apply. The contractors were required to submit a technical and cost proposal at the same time. The technical proposals were evaluated first and given a score. Cost proposals were then opened and the technical score was combined with a cost score to select the successful bidder.

5.4 PUBLIC / PRIVATE PARTNERSHIP CASE STUDY

In 1996, FDOT was approached by a private radio station operator for permission to place information signs on highway rights-of-way (ROW). These signs would inform motorists of the radio stations to tune-in for the private firm's traveler information service. The company, Traveler Information Radio Network (TiRN), wanted to offer motorists a full-time, 24 hour a day traveler information service that was advertiser supported. The information would include directions to area attractions and real-time traffic conditions along the route. The concept would operate much like "infomercials" on television, where there is a constant mix of advertising and information. TiRN plans to have both AM and FM band stations in every metropolitan area in Florida.

In return for permission to put the signs on FDOT ROW (at their expense), TiRN would broadcast public service announcements (PSA) at regular intervals. These PSAs would promote FDOT programs, such as ridesharing, seat-belt usage, and also include construction and maintenance information.

Even though there would be no money changing hands between TiRN and FDOT for this arrangement, FDOT could not accept this unsolicited proposal. FDOT was required to prepare and advertise an RFP for just the service that TiRN was offering. TiRN was eventually awarded the contract and allowed to place their signs on Florida's interstate ROW. However, the RFP process added several months to the project. By the time TiRN was allowed to put up their signs, many of their radio station agreements and contracts had lapsed. TiRN is still trying to make their project work, but the delays caused by the limitations in Florida's procurement process, have hurt their business plan.

Several states (Colorado, New Jersey, Virginia for example) have passed legislation that specifically support Public/Private Partnerships. While the details vary, the concept of these new laws is to allow public agencies to accept partnership proposals from the private sector, with limited

or no competition, provided there is a clear public benefit from the arrangement. Such a law in Florida would have allowed FDOT to review and negotiate the un-solicited proposal from TiRN the first time it was presented.

6. PROCUREMENT ALTERNATIVES & RECOMMENDATIONS

While there is still much confusion and consternation relative to ITS procurement, one thing is certain -- there are steps agencies can take to improve the acquisition of the hardware, software and services required. It also is true that there are no silver bullets, no magic solutions. A procurement process which worked successfully for one type of ITS procurement may not be appropriate for another one. This section discusses some general guidelines FDOT should employ in preparing for ITS procurements and provides some recommendations for which contracting vehicles should be considered for specific procurements. It concludes with a few additional recommendations for FDOT to consider in easing current procurement processes.

6.1 STEPS TO SUCCESSFUL ITS PROCUREMENT

There are six basic steps to be considered in preparing to purchase ITS. While these generally apply to system and software acquisitions, many of these steps can and should be applied to acquiring consultant services, as well. Each step is discussed briefly below:

Step 1 --- Build a Team
As many transportation professionals, long accustomed to traditional highway contracting procedures, have discovered, procuring ITS is different. It requires the involvement of a myriad of disciplines and specialties, some of which may be outside the Department of Transportation. The team may serve a number of functions: developing the plan and requirements for the procurement, evaluating the proposals, and ensuring that the goods or services procured are meeting the needs identified in the plan. The team can also serve to cement existing interagency relationships or build new relationships which will be critical not only to procuring the ITS system, but also to deploying and maintaining it.

Who should be on the team? Several people, including:

- Software technical expertise
- End users
- Maintainer and administrators of the system
- Domain experts
- Contracting and purchasing officials
- Software, information systems, and intellectual property legal expertise
- "Translators" who can explain technical jargon, concepts, etc across disciplines.

Step 2 -- Plan the Project

Good procurements are ones that are well-planned. Project plans need not be long and detailed, but should concisely present the goals and objectives of the project and highlight high-level strategic decisions about the procurement. The project plan will help to define the boundaries of the project, identify who needs to be on the project team, and provide a communications tool for all those involved in the project procurement. Importantly, the plan helps to explain "why" the project is being pursued - justifying the purchase and ensuring the procurement is focused on meeting these needs. Some things to include in the plan:

- Description of the project
- Rationale for the project
- Project Schedule
- Roles and responsibilities of team members
- Funding estimates and sources
- Facilities
- How the system will be acquired (the build or buy decision) (note: early in the project, this section may be in the form of alternatives)
- How the project fits in with other "legacy" or planned ITS systems
- Standards
- Risk Management
- Contracting Strategy (the extent to which consultants and outside support will be used for the project)
- Contracting Vehicles
- Contract Management
- System Operation and Use (who will use the system, who will administer and manage the system, etc.)
- Acceptance Strategy (how will the system, once acquired, be accepted?)
- Training Plans (how will users be trained in using the system?)
- Maintenance Plans (who will be responsible for maintaining the system?)
- Reality Check (what constraints and conditions must be considered in relation to the procurement?)

A key thing to remember is that the plan should be a living document and be a tool to guide the procurement. It should not become an overwhelming task that inhibits, rather than facilitates the procurement. Items within the document are likely to (and should) change as the project evolves and team members contribute their various perspectives to the project. In addition, externalities affecting the project (budget, schedule, etc.) may force a reevaluation of certain parts of the plan.

Step 3 -- Develop Requirements (Software and Systems Projects)

A good set of requirements is perhaps one of the most important things you can do in a software or systems acquisition. This is where your project team can play an invaluable role. Requirements should be well documented in a configuration control document. The requirements should focus on the functional and performance requirements the system must meet. It should not get into design and technical requirements. Doing so confuses the issue and unnecessarily limits the options available to the agency.

It is important to thoroughly review and revise the requirements. Do not ask for too much. Unnecessary or superfluous requirements can greatly increase cost and complexity, without adding

much in the way of functionality. Also consider quality factors in the requirements analysis. Ensure that the system will be able to accommodate anticipated changes.

Step 4 -- Make the "Build or Buy" Decision

Over the last several years, a variety of software and system applications and field devices have been developed and enhanced. Many of these existing systems and devices provide extensive functionality and can be integrated with other existing systems. Too often, however, public agencies have failed to consider "off-the-shelf" products for their systems. It is when systems are customized that bugs and costs explode. Off-the-shelf products can provide agencies with cost-effective systems that are well integrated and meet most, if not all, of their requirements. One approach to determining whether to build or buy a system is to develop a matrix for evaluating off the shelf products. An example is shown below in Table 1.

Table 1. Example Table for Evaluating and Comparing Product Features

	Product 1	Product 2	Product 3
Mandatory Requirements			
Requirement A			
Requirement B			
Requirement C			
Other Criteria			
Security			
Data Rights			
Life Cycle Costs			

Using the matrix, weed out products that do not meet your mandatory criteria. It is important to ensure that your mandatory requirements are, in fact, that. Carefully evaluate the remaining products, either through hands on use, or through a rigorous demonstration under conditions as close to yours as possible. Contact the vendor's other customers to determine the product's quality and reliability, the extent and quality of the vendor's support for the product, maintenance issues, etc. If you chose to use off-the-shelf products, be sure the contract includes provisions to accommodate changes in requirements, functionality, costs, etc. Also be sure that you get a flexible licensing agreement for the system. If you choose to customize off-the-shelf products, recognize that there are intellectual property rights issues to be considered, as the "commercialized" portions of your system will be subject to certain restrictions.

Step 5 -- Select a Contracting Vehicle

The next step in the procurement process is to select an appropriate contracting vehicle. This paper has presented a number of contracting types and issues to consider for each type. In addition, the Table 2 provides more guidance on how to select the right contracting vehicle for specific procurements.

Table 2. Contracting Approaches

[0] Sources: Salwin, *The Road to Successful ITS Software Acquisition* and Tarnoff, *Procurement of Professional Services in a High Tech Era*

Contract Approach	Description of Alternative	Advantages	Disadvantages	Example Applications
Engineer/ Contractor	Engineer is selected using a conventional consultant procurement process that is based on qualifications and experience to perform the work. The engineer typically prepares the contract documents are invited to submit bids in requirements of the contract documents. Once the bid has been awarded, the contractor builds the project per bid documents The engineer may inspect construction and interpret bid documents. The agency is the responsible entity.	Long history of use Well-defined roles Legal precedent for handling disputes End product well-defined at early stage Contractor manages subcontractors Well-suited to highway construction	Artificial dividing line between design and construction Not well-suited to software development work (difficult to specify, buyer may not know needs) Software/systems integration not usually performed by prime contractor Contractor has financial incentive to find deficiencies in bid documents and "changed" site conditions to seek change orders Limits communications between customer and software developer when software is developed by a subcontractor	Several agencies surveyed have used this approach, including: Colorado, the Gary-Chicago-Milwaukee Corridor, Houston, I-95 Corridor, Maryland, Missouri, Virginia, Washington and Wisconsin. Most have used for furnishing and installing field devices One ITS software contractor found itself third tier down on a construction contract, effectively shut off from all contact with the customer. Result was very bad software experience for all involved, because of the lack of communication and interaction with the client.

Contract Approach	Description of Alternative	Advantages	Disadvantages	Example Applications
Systems Manager	The systems manager is selected using conventional consultant procurement process (i.e., qualifications-based followed by competitive negotiation). The systems manager is responsible for design (plans and specifications), software development, hardware procurement, integration, training, and overall quality control. Equipment and electrical contracting services procured on low bid basis. System managers are often used for technology-based projects.	Overall system design, software development, system integration, and testing controlled by a single entity. Software developer is usually prime contractor Minimizes shifting of fault More flexibility to allow changes than in traditional approach Well-suited to ITS projects Avoids use of low-bid selection Gives customer access to systems manager	Fewer firms in marketplace with requisite blend of skills Somewhat unfamiliar to local engineers/procurement officials Heavy reliance on successful performance of system manager End product less well-defined than engineer/contractor approach; difficult to manage "expectancies." Low bid services (equipment and electrical contracting) responsibility of public agency; may include inspection and acceptance	Used by both the Houston and I-95 Corridors in furnishing and installing field devices and software, ITS operations and ITS maintenance. Dade County, Florida is using this approach for a signal system upgrade. Proposers were requested to propose based on capabilities of existing system and improvements identified at functional level. Allowed proposers to use base package.
System Integrator	Same as system manager, except the system integrator can bid on equipment and electrical contracting services.	Single point of responsibility Simplified contracting	Not well-known by agencies Direct bidding to system integrator may violate agency procurement process	Used by Colorado, GCM corridor, Maryland, Missouri and Washington for furnishing and installing software. Used by GCM, Missouri, Virginia and Wisconsin for ITS Operations.

Contract Approach	Description of Alternative	Advantages	Disadvantages	Example Applications
Design/ Build	The agency must commission the concept plans. The concept plan is normally 15 to 30 percent complete at the design level before the contractor is selected. this approach relies on a single entity to be responsible for the design and construction of a project. The agency's role is to monitor the design/build work. The design/build approach is frequently used for federal procurements involving structures. Partnering is generally involved.	Full transfer of responsibility to design/build team Eliminates imperfect transfer of design knowledge from designer to contractor Rapid completion possible; significant time-savings Streamlined procurement possible Engineer and construction work done cooperatively with a single entity to resolve problems. Financial incentive to rapidly complete work May include warranty of operations management	Agency assumes greater responsibility for inspection and approval process May be indistinguishable from engineer/contractor approach when plans developed by engineer and design/build May increase costs because of contractor risk and high proposal costs (design not complete) May violate statutes (17 states) Significant agency commitment to quality control	Detroit used this approach for a freeway management system upgrade. Primary objective of the procurement was to provide field infrastructure, but did include TMC remodeling, new central control hardware, and operating software enhancements.
Design to Cost and Schedule	A prioritized requirements list is generated. The contractor supplies all the mandatory items and as many of the optional items within cost and schedule constraints.	Reduces requirements creep Reduces costs and schedule risks	Bidders may be unwilling to propose not meeting all the optional features Overly optimistic proposals will win	Utah used this approach for their initial I-15 freeway management system procurement. Limited response led to selection of design/build approach for ultimate system

Contract Approach	Description of Alternative	Advantages	Disadvantages	Example Applications
Build to Budget	Different from design/build in that functional requirements used in place of detailed design. Proposers develop designs based on their best solution to meeting functional requirements using existing elements where practical..	Similar to design build Allows maximum flexibility to propospers to use their most cost-efficient designs Reduced risk based on previous developments and applications May allow added functionality for given budget	Similar to design/build Very unusual practice for agencies Risk based on lack of detailed designs Detailed design document may prove contentious point and delay project Very expensive for proposers	Sometimes used by commercial builders. For transportation projects, this approach has been used mostly in toll projects and major bridges.
Shared Resource	Any agreement between one or more public sector agencies and one or more private sector organizations with the objective of providing services using the combined resources of both -- often trading a grant of a right to a public resource for the addition of a private entity to achieve a service or facility of mutual benefit to both partners. sector objectives.	Allows public agency to obtain goods/services with little or no up-front costs	Complex and numerous legal issues (some of which are in limbo, including interpretation of key provisions of Telecommunications Act) Somewhat limited application	Several state and local agencies have used this approach to provide a telecommunications backbone, including Maryland, Ohio Turnpike, Missouri, Bay Area Rapid Transit, City of Leesburg.

Contract Approach	Description of Alternative	Advantages	Disadvantages	Example Applications
State Contract	Purchases of goods and services that are ongoing and are common to several state agencies consolidated under standard specifications and developed into state contracts or joint institutional purchases.	Quick and easy method of procuring standard equipment and supplies All state agencies buy the same type of equipment Standard equipment may ease maintenance and operation Easier planning and budgeting	Constrains system to only those products on the state contract, thereby limiting flexibility in system design Long term contracts limit ability to buy latest versions	Caltrans pioneered this method for traffic signal controllers and VMS Utah currently using state contract prices for major components on the I-15 Salt Lake City ATMS. This is good approach for purchase of COTS software.
Build, Own, Operate, Transfer (BOOT) **Franchise or Lease**	Long-term contracts with a firm or consortium to finance, design, build, operate and collect revenue. Equivalent to design/build or the build-to-budget for implementation, but requires seller financing and adds the own-operate phase. These alternatives are typically considered because they do not involve an up-front capital cost for the owner.	Similar to design build Bidders provide financing, reducing up-front capital costs for the agency. Allows maximum flexibility to prospers to use their most cost-efficient designs Reduced risk of operations and maintenance costs, since this is bidder's responsibility.	New approach - often requires statutory authority Reduces agency control over project Finance requirement may limit competition Interest costs ultimately add to total for the project	Dulles Greenway Toll Road Extension, No. Virginia (BOOT) Calif. SR 91 HOV / Toll Lanes (Franchise/Lease)

In addition to the details presented in Table 2, the following are other general observations about procurement methods:

- There is no "one-size-fits-all" for ITS procurements. Contracting vehicles appropriate for some simple field devices will not likely be appropriate for other more complex acquisitions.
- The engineer/contractor (low bid) approach is not appropriate for software. Software performance and the “look and feel” in operation are difficult to impossible to specify in great detail and are very subjective.
- The engineer/contractor (low bid) approach for complex systems is difficult to design and specify due to the lack of pay-item numbers for ITS technology. Other methods, such as state contract for equipment and design-build, can be used as an alternate until ITS pay-items are standardized.
- Consider the full range of options before selecting one. Selecting a contracting vehicle because it is familiar may seem easy and convenient initially, but it is likely that the approach's deficiencies for the procurement will become readily apparent, causing significant problems, creating delay and increasing the costs associated with the procurement.
- The requirements definition stage for system and software applications is critical and will play a key role in determining which contracting vehicle is most appropriate.

Table 3 presents a summary of the recommended types of procurement that are appropriate for each type of ITS service or product. These recommendations are based on past experience, both in Florida and in other states. The advantages and disadvantages used to make a decision on a particular procurement method are documented in Table 2.

There are implications involved with some of the recommended procurement methods. For example, the build-own-operate-transfer (BOOT) method will require, at a minimum, a new set of procurement rules for FDOT; and, at worst case, will require legislation. The use of state contract for ITS equipment will require that the Central Office develop specifications and procedures to develop the ITS qualified products list (QPL).

Table 3. Recommended Procurement Method by Type of System and/or Product

Work Type	Contract Type						
	Engineer/Contractor "Low-Bid"	**System Manager**	**System Integrator**	**Design-Build**	**BOOT**	**Shared Resources**	**State Contract**
Traffic Signal Installation	✔						✔
Time-Based Signal System	✔						✔
Closed Loop Signal System	✔			✔			✔
Traffic Adaptive / Hybrid Signal System		✔	✔	✔	✔		
Ramp Metering System	✔	✔		✔			✔
Communications System			✔	✔	✔	✔	✔
Dynamic Message Signs		✔	✔	✔	✔		✔
Highway Advisory Radio	✔			✔			✔
Motorist Aid System (Call Boxes, etc.)	✔						✔
CCTV Monitoring System			✔	✔		✔	✔
Electronic Toll Collection System		✔	✔	✔	✔		
Multi-modal Systems (transit, ridesharing, etc.)		✔	✔	✔			✔
ISP (Kiosks, website, travel planning center, etc.)	✔	✔		✔	✔	✔	✔
Freeway Service Patrols	✔			✔	✔	✔	✔

Note: For complex ITS projects, such as an integrated system combining communications, field equipment and software development, the project

may be broken up into multiple procurements, with each using the method most appropriate to the items being specified.

Step 6 -- Understand Intellectual Property and Other Contractual Terms and Conditions
Traditional infrastructure design and construction does not present issues relating to rights in intellectual property. Software and system design can and do. It is important that these issues and other contractual terms and conditions (warranties, royalties, etc.) be fully understood by the project team when embarking on an ITS procurement. The active involvement of legal experts in these areas is critical to ensure the maximum response from the private sector and to fully protect the interests of the public agency.

6.2 STATEWIDE CONSIDERATIONS

This paper is intended to provide an overview of ITS procurement alternatives and issues as they relate to Florida. Time and budget constraints do not allow for a significant and in-depth analysis of this very complex issue. In addition to the comments and recommendations above, Florida DOT should consider the following:

Conduct an in-depth analysis of the Florida Public Records Law and existing Florida contracting procedures to assess their impact on ITS procurements and private sector response. The breadth and scope of the Florida Public Records Law has been cited as a significant barrier to effective ITS procurement in the state. But very little research and information exists on how the law actually operates with respect to ITS procurements in particular. Significantly more research is needed to truly understand the implications of the law, and "how far the envelope can be pushed." While the language of the statute is restrictive, the law does provide for some exceptions. There is no case law, Attorney General Opinions (AGOs), or detailed DOT guidelines on how the law is to be interpreted. There may be strategies available to reduce or eliminate some of the perceived barriers created by the law. The Orlando-Orange County Expressway Authority (OOCEA) found it had to request an amendment to the Public Records Law in order to protect the privacy of its customers using the new E-Pass electronic toll collection (ETC) system. Without the amendment, which was passed in 1995, all toll records (including times, dates and places of passage) could have been open to the public.

Present hypothetical scenarios to the Attorney General to obtain clearer guidance on issues related to the Public Records Law and ITS procurements. While there are some AGOs available on the application of the public records law and agency rights in agency-produced software, copyrighted software, and trade secrets, there is little in these opinions which illuminates the issues presented by ITS procurements. There are presumably instances in which procurements have not gone forward, or private firms have been reluctant to bid on projects because of the Public Records Law. These scenarios should be presented to the Attorney General to clarify the law's application to these instances.

Develop clear guidelines on the Public Records Law and its application to ITS procurement. Once these AGOs are obtained, the FDOT should develop clear and concise guidelines on how the Public Records Law is applied and how proposers can effectively comply with its mandates.

Consider developing new contracting vehicles for ITS procurements. There has been interest and some effort in some states to develop new contracting vehicles for ITS procurement (or to adopt existing procurement methods from other state agencies to buy ITS). In Virginia, after frustrations

with the low-bid contracting approach, DOT officials used a procurement category called "non-professional services" to obtain ATMS software. Originally the state had included software development as a part of a freeway construction project. The construction portion of the project was completed late, leaving very little money left for software development. VDOT terminated the contract and is now procuring the software through an "administrative services" RFP, giving the state greater flexibility in selecting an appropriate vendor. It has developed its requirements and scope of work and has adopted a design and process approach. Under the first phase of the project, a detailed design of the software will be developed and "frozen." The software will be built and additional features and functionality will be added later, as necessary. Other states have toyed with the idea of creating new contracting approaches, building on past procurement successes, and incorporating lessons learned from past failures. Florida should consider (perhaps in conjunction with other states and/or with the Federal government) developing these new vehicles.