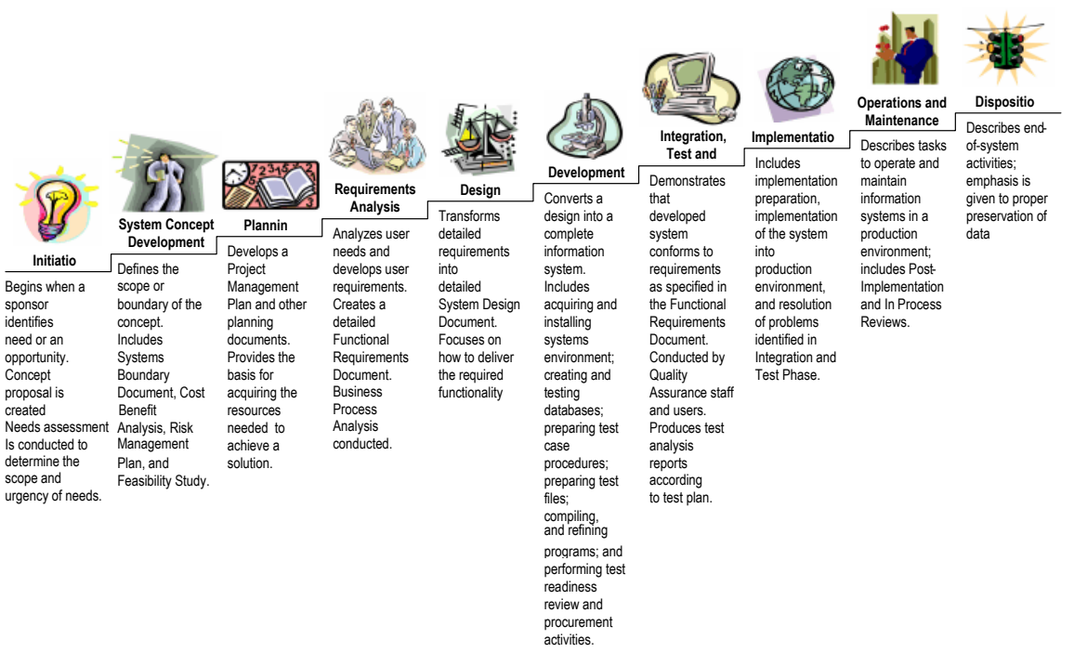
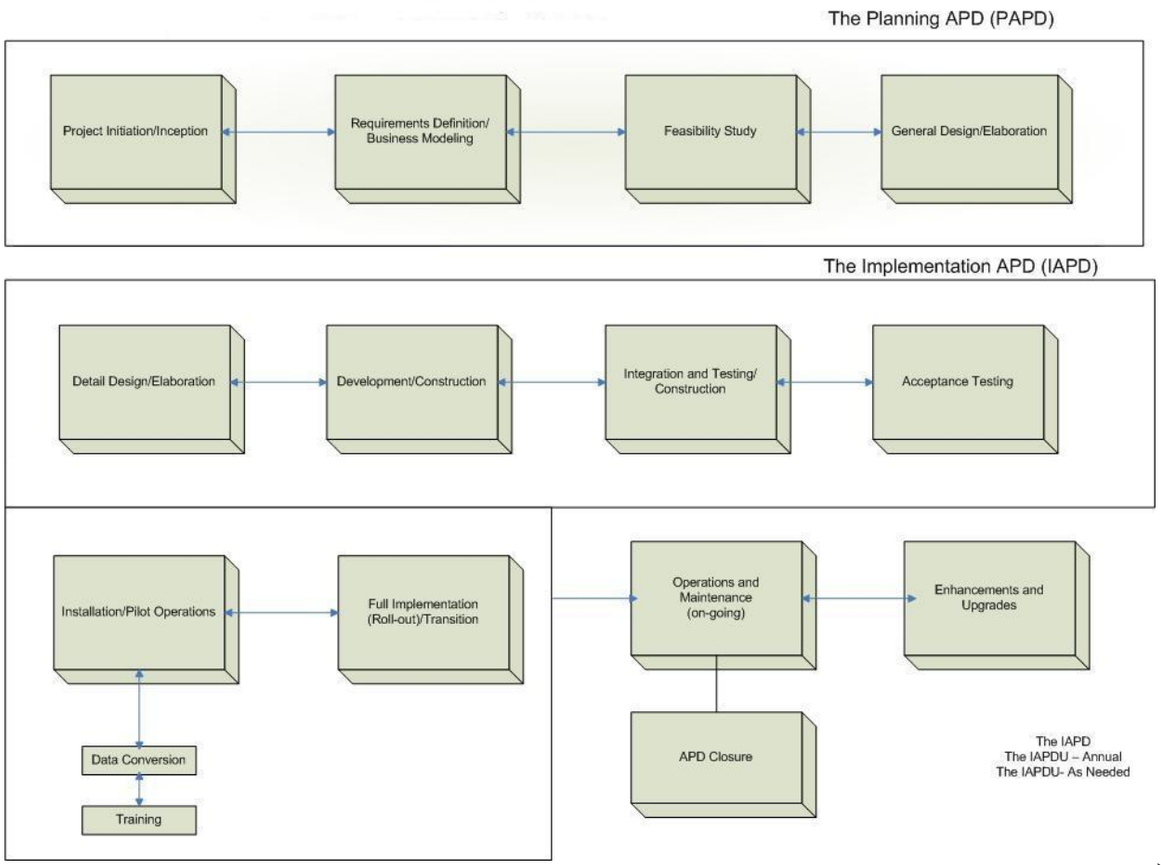
2.0 THE APD PROCESS

The APD process parallels the System Development Life Cycle (SDLC)—the overall process of developing information systems (IS) through multiple phases from investigation of initial requirements through analysis, design, implementation, maintenance, and disposal. There are different models and methodologies, but each generally consists of basic steps or stages during which defined information technology (IT) work products are created or modified. The last phase occurs when the system is disposed of and the task performed is either eliminated or transferred to other systems. Not every project will require that the phases be sequentially executed. However, the phases are interdependent. Depending on the size and complexity of the project, some phases may be combined or activities may overlap (see Figure 0-3).

Figure 0-3. Typical SDLC Phases

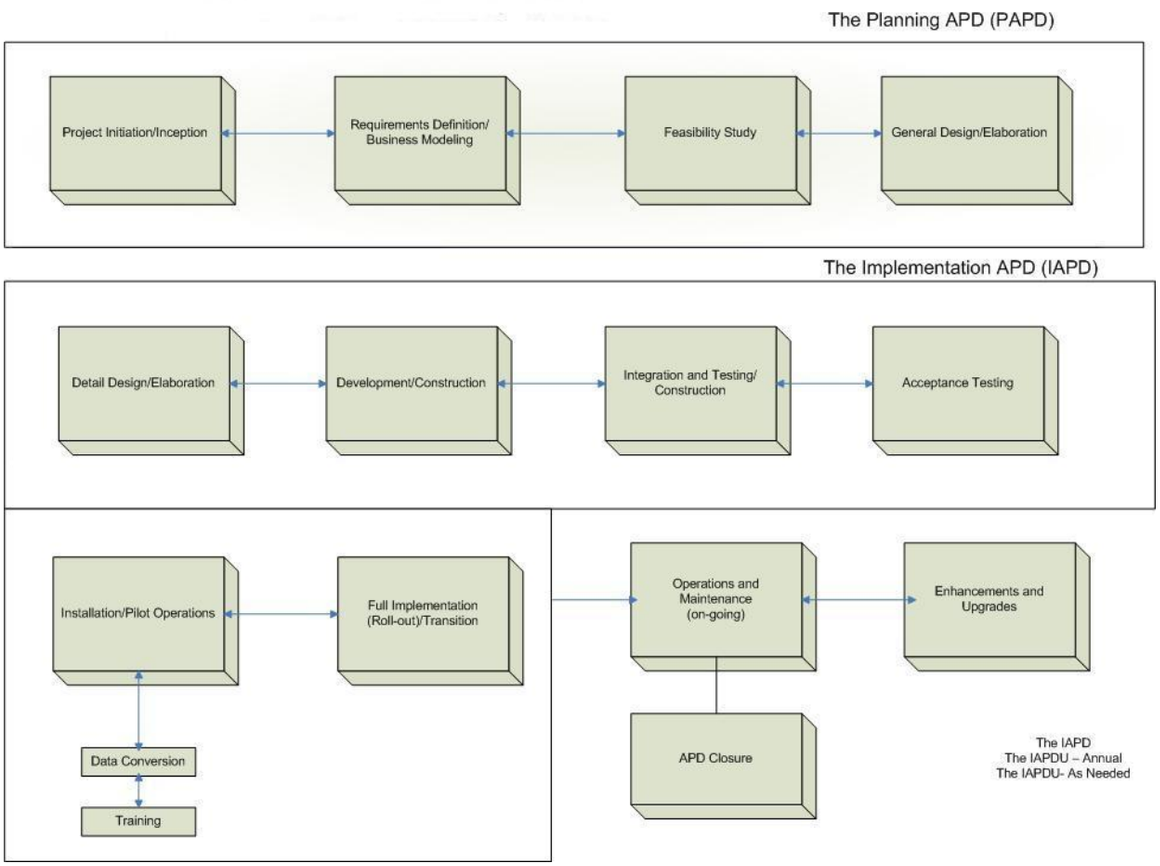




) that a State must prepare for its own internal State clearance and condenses the typical SDLC phases into the following key documents—a Planning APD (PAPD) to address initiation, system concept development, planning, and requirements analysis, and an Implementation APD (IAPD) to address design, development, integration and testing, implementation, and maintenance and operations (also known as operations and maintenance). As long as all the required information is provided, FNS will consider a State's planning documents in any standard, professional format. The State agency may speed FNS's review by providing a cross-walk or document map to the required content.

State agencies must submit these to all Federal funding agencies from which they are requesting Federal financial participation (FFP) and/or grant funding.

Figure 0-4. The SDLC-APD Process Overlay



The APD process is designed to be flexible and adaptable to accommodate all typical systems design methodologies (e.g., waterfall, iterative, spiral—see Section 5.1.2 for definitions) and operational management strategies. FNS uses the APD process to approve funding for systems development and major changes to operational systems. State APDs and more specifically, their procurement documents spell out the expected performance of their contractors and the remedies they intend to apply to poor performance or failure to deliver. These may include payment holdbacks, liquidated damages, and performance bonds. Payments of FFP may be disallowed if FNS finds that any approved acquisition fails to comply with the criteria, requirements, and other activities described in the approved or modified APD (7 CFR 277.18 (h)). Regardless of where in the SDLC they may be, all FNS-funded State programs are required to follow the APD Process when requesting Federal funds to procure software, hardware, and/or contractual services for IS purposes. Each FNS program has specific requirements and nuances that alter the process slightly. Specifics on these may be found in the pertinent program chapter (Chapter 3.0 for SNAP and Chapter 4.0 for WIC). This chapter focuses on the general process and its requirements. Refer to

Figure 0-5 for an overview of the APD Process.

IS designed, developed, or installed with FFP will be used for the period of time (estimated life of the system) specified in the APD, unless FNS stipulates a shorter period. Payments of FFP may be disallowed if FNS finds that any approved systems acquisition fails to comply with the criteria, requirements, or other specifications described in the approved or modified APD.

Approvals for State APD documents and funding requests are issued by FNS Regional Offices (RO). The State Systems Office (SSO), located within FNS' Regional Operations and Support, coordinates the APD process for FNS. SSO specializes in the technical and procedural aspects of the APD process for development of State eligibility systems. APD coordination related to WIC and SNAP EBT systems is handled by the Supplemental Foods Program Division (WIC) and the Benefit Redemption Division (SNAP) respectively. Centralized coordination promotes the consistent application of policy and procedures across regions and provides an opportunity for enhanced customer service.

SSO also provides technical support to FNS' APD Oversight Committee. This executive-level group includes representatives from FNS' offices relating to program management, financial management (FM), and IT. In this capacity, the SSO prepares briefings and makes recommendations to the Oversight Committee on State APDs that meet certain thresholds to trigger the need for executive-level approval. APD requests that are determined to be high risk, either because of the amount of funding involved or other aspects of the project, will be subject to review and approval by the Committee.

Figure 0-5. Overview of the APD Process (PAPD)

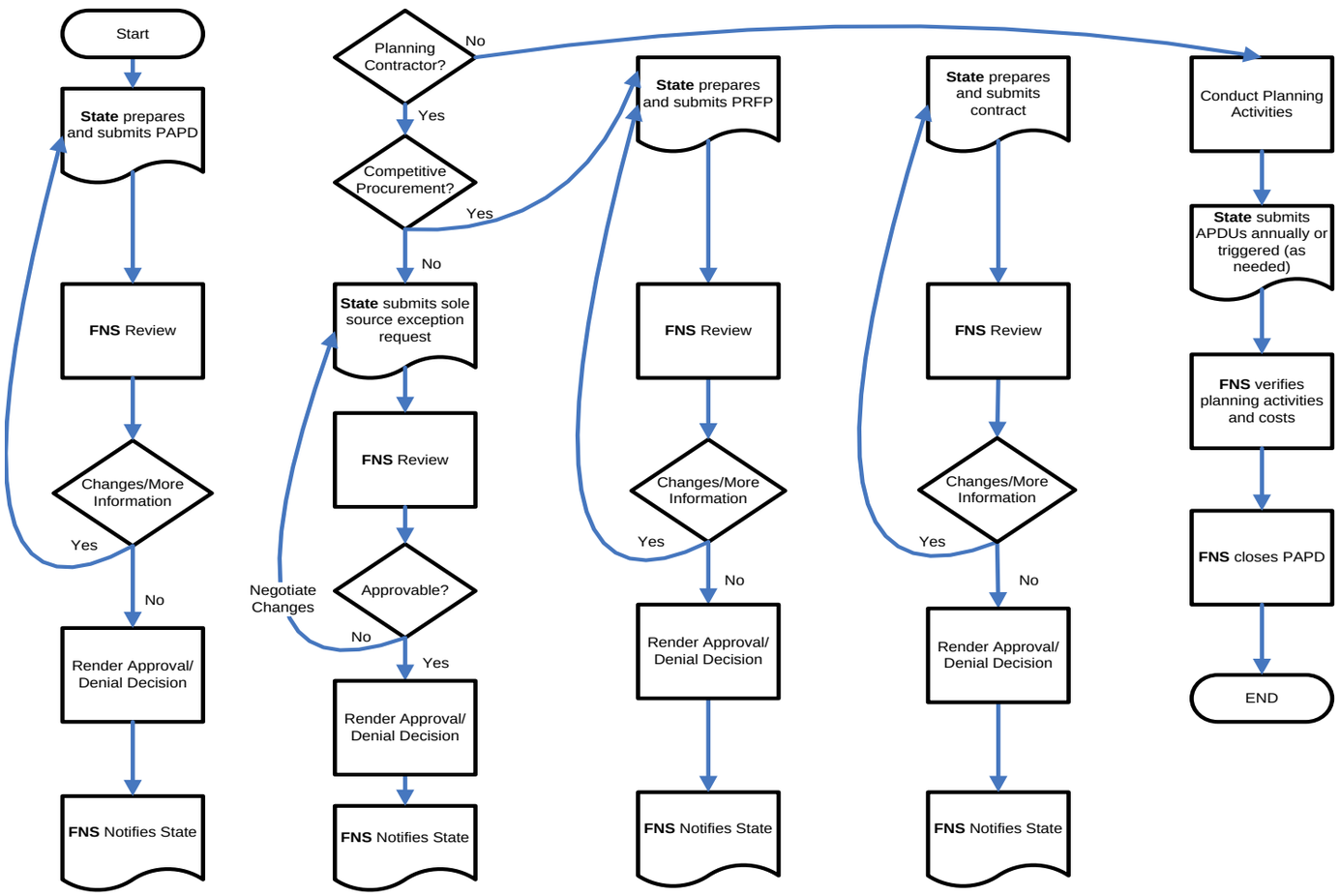
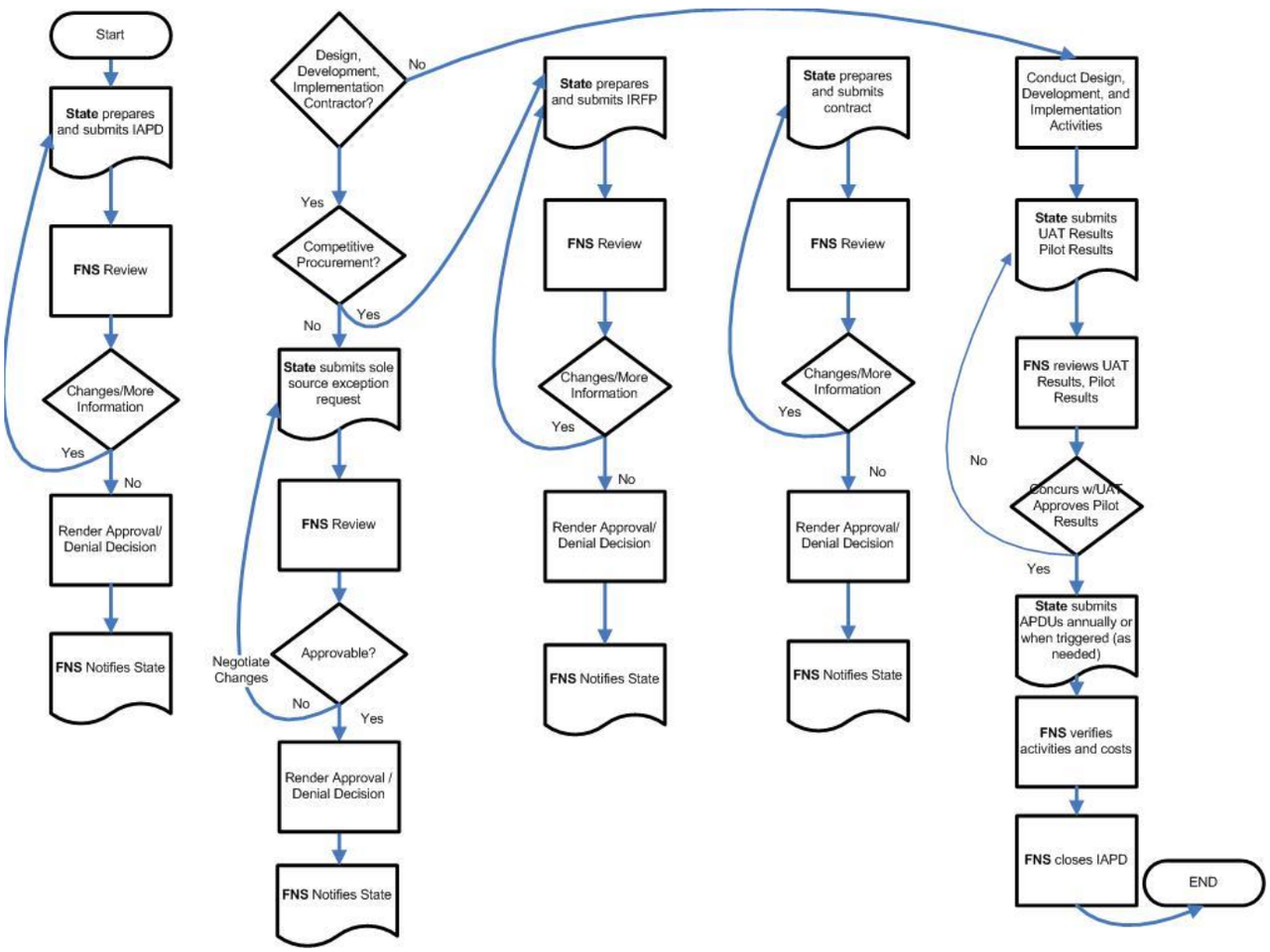


Figure 2-3. Overview of the APD Process

(IAPD)



2.1. ADVANCE PLANNING DOCUMENT

Several requirements must be met in preparing an APD for a program's system needs. These requirements originate from the relationship to dollar thresholds established in law and regulations, types of action/approval sought, program funding source, or type of funding sought. The following process description illustrates the complete APD process. In certain program-specific instances, the process has been streamlined or modified to meet program needs. These deviations are detailed in the program-specific chapters (e.g., SNAP Electronic Benefits Transfer (EBT), WIC State Agency Model (SAM), and WIC EBT).

States may have central IT or procurement authority for the development and maintenance of all systems with the assistance of the State agency performing the actual administration of the FNS-funded program. This can result in cost-saving measures such as purchasing equipment or services from State master contracts or procuring services for system developments or enhancements as part of larger efforts or existing service agreements. Some State agencies may encounter system development as part of a larger integrated departmental or agency-wide system. See Chapter 7 for additional information regarding direct charging (Section 7.1), cost allocation (Section 7.3), and budgeting (Section 7.5).

Two types of APDs and two types of APD Updates (APDUs) address all of these requirements. Each type of APD is devoted to a specific phase of a SDLC, and activities performed under each of the SDLC phases directly feed information into the related APD (refer to Figure 0-6). The APD process also has an Emergency Acquisition Request (EAR) process to use in times of emergency or disaster situations. This is discussed later in this chapter.

Figure 0-6. Relation of APDs to the SDLC

Type of APD	System Development Life Cycle Phase
Planning APD (PAPD)	Planning—A PAPD requests funding for planning activities; specifies the nature of the automation effort; and investigates the feasibility, system alternatives, requirements, and resources needed to move forward with system development.
Implementation APD (IAPD)	Development, Design, and Implementation—An IAPD addresses systems analysis, design, development, integration, testing, and deployment; completes the planning phase; requests funding for enhancements to ongoing operations; and obtains approval to conduct implementation activities.
Annual APD Update (APDU)	Planning or Implementation—An APDU is an update to an ongoing project and is required annually when planning or implementation activities occur for more than 1 year.
APDU As-Needed	Planning or Implementation—An APDU As-Needed may be needed for unexpected project changes that significantly affect project costs and outcomes.
Emergency Acquisition Request (EAR)	Requests immediate funding for hardware and/or software or services in emergency situations in which program operations would be interrupted or extremely hindered. An IAPD follows at a later date.

To identify which steps of the APD process to follow, a State agency must determine the SDLC phase, the type of acquisition or services being sought, and the particular program requirements (e.g., thresholds, documentation) that apply. The State agency must also determine whether the estimated total cost exceeds the program thresholds, including the cost of equipment and service resources acquired from State, commercial, and other sources. Refer to Section 3.1 (SNAP) or Chapter 4.0 (WIC) and Figure 6-1 for additional details. State agencies are encouraged to consult with FNS as frequently as needed. FNS views the APD process as a Federal-State partnership and strives to implement a team effort in conducting the requirements of the process.

It is important to note that before any APD activity occurs, when a State agency first identifies a need or opportunity, a needs assessment must be conducted to determine the extent and urgency of the need and whether the time is right

to address it. As seen in Figure 2-1, the needs assessment occurs prior to the Planning Phase. The needs assessment is intended to assist decision makers in developing the case to move forward with planning activities that are essential to defining the scope of the project, acknowledges future funding and staffing priorities as well as acquiring the required resources. A needs assessment will help the State agency determine whether or not the project is necessary and if they need to develop a PAPD. It may include:

- √ An evaluation of the current system and its utilization
- √ A review of the service approach
- √ An identification of un-met services

2.1.1. Planning APD

The PAPD is a brief document (usually 6–10 pages) that is used to notify FNS of a State agency's need for an improved IS and its intent to begin a planning process. A State agency must use a PAPD to state its assurance that the system will meet program requirements; request prior approval; and obtain a commitment for Federal funding to plan major system development efforts, enhancements, or upgrades.

After the PAPD is approved, planning activities will include preparation of a Functional Requirements Specification or Document, conducting a Feasibility Study with an Alternatives Analysis to assess systems acquisition methodologies, evaluation of the existing system and its business practices, definition of the future system business requirements, preparation of an Implementation APD and a Request for Proposals (RFP), and development of a General Systems Design (GSD).

The evaluation of the existing system and business process is known as a Business Process Analysis (BPA). The BPA involves identifying current processes and the outcomes being achieved; including errors and challenges to the current process. This defines the As Is environment. The State agency should review these processes, identify and differentiate mandatory and nice to have changes, and ensure they incorporate both State and Federal program requirements and policies. Once the BPA process has been completed, the State agency will have defined the To Be environment, around which all future business should be conducted.

2.1.2. Implementation APD

The IAPD is the product of the planning process. It provides the overall management plan for systems design, development, testing, implementation, and enhancements to operational systems. The IAPD describes a project's completed planning activities, such as the identification, analysis, feasibility, and cost of various systems' alternatives, the general design of the chosen alternative, and the project's estimated budget and schedule. It also demonstrates the State agency's thorough preparation of and commitment to the design, development, and implementation phases of the SDLC to meet program requirements.

2.1.3. APD Update

The APDU is an annual requirement (due 60 days prior to the anniversary of the approval) for any ongoing project that reports accomplishments, expenditures, status, and any minor updates to the project. The APDU serves as a mechanism for State agencies to provide information regarding accomplishments and changes, as well as to obtain approval for successive phases of their projects, if limited approvals have been given initially.

2.1.4. APDU As-Needed

The APDU As-Needed is required as soon as possible, but no later than 90 days from the time when major changes that significantly affect the selected IS approach or outcome are anticipated or occur. An APDU As-Needed is specifically used for prior approval of changes in funding levels, extensions for or delays in the project's timeline, changes in procurement methodology, changes in cost allocation methodology, or changes in project scope or system architecture. States are at risk for the costs of IS project changes that do not comply with the approved APD, until such time as written FNS approval is granted.

2.1.5. Emergency Acquisition Request

An EAR is a brief written request from the State to FNS for FFP to allow the State agency to take prompt action on acquisitions that under normal circumstances would be approved under IAPD time frames, but due to extenuating circumstances requires immediate action. All acquisitions approved under an EAR will be approved under an IAPD submitted after the emergency situation is under control, allowing FNS sufficient time to establish that the acquisition can otherwise be approved under normal IAPD provisions. Emergency situations are those for which State agencies can demonstrate to FNS an immediate need for acquiring IT equipment or services to continue operation of the FNS program, to the extent that the need prevents the State from following the normal prior approval requirements. Poor planning is not considered an emergency situation, and the use of an EAR is not allowed in such circumstances.

2.1.6. APD Documentation Requirements

The type and program-specific requirements of an APD dictate which documentation contents or components need to be completed. The chart depicted in Figure 0-7 provides a checklist for each program by APD type.

Figure 0-7. APD Documentation Requirements

PAPD Documentation Requirements by Program					
Documents	**SNAP**	**SNAP EBT**	**WIC**	**WIC SAM**	**WIC EBT**
Transmittal Letter with Official Signature	X	X	X	X	X
Executive Summary	X	X	X	X	X
Resource Requirements	X	X	X	X	X
Schedule of Planning Activities, Milestones, and Deliverables	X	X	X	X	X
Proposed Budget	X	X	X	X	X
Cost Allocation Plan	X	X	X[1]	X[1]	X[1]
IAPD Documentation Requirements by Program					
Documents	**SNAP**	**SNAP EBT**	**WIC**	**WIC SAM**	**WIC EBT**
Transmittal Letter with Official Signature	X	X	X	X	X
Executive Summary	X	X	X	X	X
Functional Requirements Document	X	N/A	X	X	X
Feasibility Study/Alternatives Analysis	X	N/A	X	X	X[2]
Cost-Benefit Analysis	X	N/A	X	X	X[2]
General Systems Design	X	N/A	X	N/A[3]	X
Capacity Plan or Study	X	N/A	X	X	X

[1] As applicable
[2] Optional
[3] GSD will be available from SAM system being transferred

IAPD Documentation Requirements by Program					
Documents	**SNAP**	**SNAP EBT**	**WIC**	**WIC SAM**	**WIC EBT**
Project Management Plan	X	X	X	X	X
Resource Requirements	X	X	X	X	X
Schedule of Planning Activities, Milestones, and Deliverables	X	X	X	X	X
Proposed Budget	X	X	X	X	X
Cost Allocation Plan	X	X	X[1]	X[1]	X[1]
Security Planning	X	X	X	X	X
Request for Waiver of Depreciation	X	X	X	X	X
Test Plan	X	X	X	X	X
Training Plan	X	X[1]	X	X	X
Maintenance and Operations w/ Enhancements (M&O) IAPD Documentation Requirements by Program[4]					
Documents	**SNAP**	**SNAP EBT**	**WIC**	**WIC SAM**	**WIC EBT**
Transmittal Letter with Official Signature	X	X	X	X	X
Description of hardware or software changes	X	X	X	X	X
Budget reflecting State and Federal costs by Federal Fiscal Year and Quarter	X	X	X	X	X
Description of how these changes will benefit the Federal programs being served by the system.	X	X	X	X	X
Description of how testing of the enhancements will be accomplished	X	X	X	X	X
Annual APDU Documentation Requirements by Program					
Documents	**SNAP**	**SNAP EBT**	**WIC**	**WIC SAM**	**WIC EBT**
Transmittal Letter with Official Signature	X	N/A	X	X	X
Project Status (including major accomplishments, challenges and resolutions, and outstanding issues)	X	N/A	X	X	X
Changes to the approved PAPD/IAPD	X	N/A	X	X	X
Revised Schedule of Activities, Milestones, and Deliverables	X	N/A	X	X	X
Revised Budget	X	N/A	X	X	X
Actual Expenditures to Date	X	N/A	X	X	X
Contractor Performance	X	N/A	X	X	X

In the event a project originally estimated to cost less than the $6 million threshold for SNAP or the $500,000 threshold for WIC encounters changes in prices or scope that increase the costs to exceed the threshold, the State agency must submit an APD to FNS for approval of the entire project, not just the portion that is over the threshold. In such a circumstance, the State agency should work with FNS to ensure that all APD information requirements are met prior to submitting it for approval. This will assist FNS in reviewing and making an approval determination and also obviate or shorten any project slowdown during the approval process

[4] Required if M&O includes high risk items or enhancements as defined in 2.3.3

Please note that specific program requirements for APDs are not discussed in detail in this chapter. Please see the specific program chapter (Section 3.0 for SNAP, Section 4.0 for WIC) to ensure all program requirements are met. This chapter presents the general detail required for both program submissions.

2.2. THE PAPD PROCESS

The PAPD is a brief document (usually 6–10 pages) that is used to notify FNS of a State agency's need for an improved IS and its intent to begin a formal planning process. A State agency must use a PAPD to request prior approval and obtain commitment for Federal funding from FNS to plan major system development efforts, system enhancements, or upgrades.

State agencies should submit all PAPDs and related documents directly to both FNS and the Department of Health and Human Services (HHS) and any other participating Federal agencies when requesting FFP. These agencies are independent and submission to and/or receipt by one agency does not suffice as submission to and/or receipt by all participating agencies.

2.2.1. PAPD Thresholds

PAPDs are required when the State agency wishes to receive FFP or Federal funding for planning costs. WIC State agencies are required to submit a PAPD to ensure they are prepared for the development and implementation of a new system, and to meet the program requirements to consider the transfer of a SAM system (see Section 4.0 for more details). All State agencies are strongly encouraged to submit a PAPD, or if below funding thresholds, to undergo a formal planning process to prepare for the larger, upcoming project needs in the SDLC. Figure 0-8 indicates the funding thresholds for each program and how they relate to each major step of the PAPD process (i.e., preparation, submission, review, and approval) based on the type of procurement.

Figure 0-8. PAPD Document Submission Thresholds

Stakeholder	Program/Funding Source			
	SNAP	SNAP EBT	WIC	WIC EBT
State Agency prepares and submits PAPD at least 60 days before project initiation FNS reviews within 60 days.	For All projects >$6 million total project costs	For all projects requesting FFP for new technology	For all projects ≥$500,000 utilizing Federal funding (See Figure 4-1 for requirements at lower thresholds)	For all projects utilizing Federal funding

(Note: FNS mandates full and open competition. Sole source procurements are neither encouraged nor always approvable by FNS.)

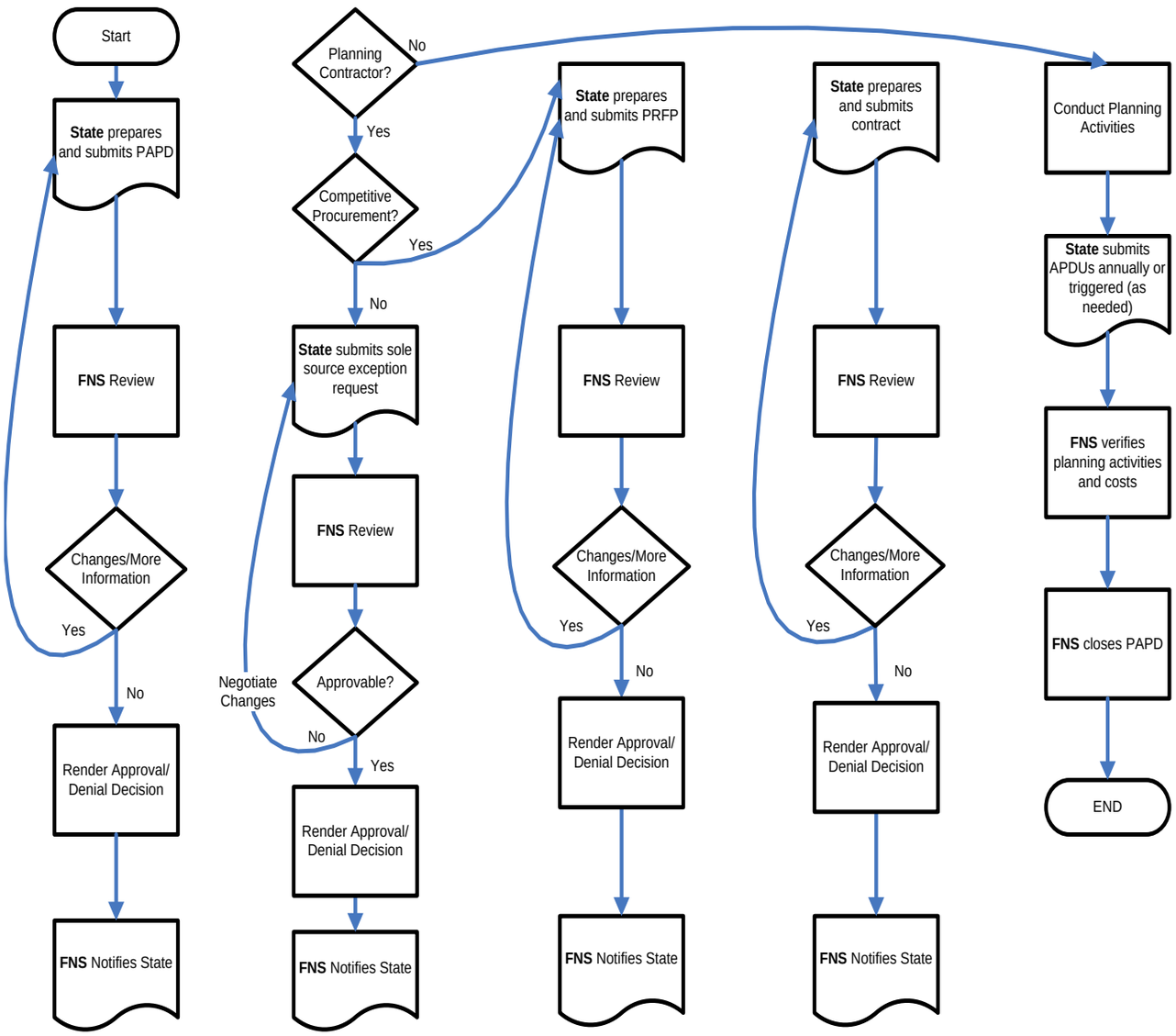
Except in unusual circumstances, significant hardware or software development costs will be ineligible for funding during project planning, although incidental hardware and software that support the planning process may be approved.

2.2.2. PAPD Process Steps

1. The State agency prepares and submits the PAPD to FNS electronically, including a scanned copy of a transmittal letter signed by an official authorized to commit State resources. The electronic submission should be sent to the appropriate FNS Regional Office.
2. FNS reviews the PAPD and notifies the State agency if there is a need for additional information or if changes are required.
3. FNS approves or denies the PAPD and notifies the State agency of the results. Disapprovals of any PAPD may be appealed to the FNS Administrator.
4. If contractor services are required, the State agency prepares and submits the Planning Request for Proposal (RFP). FNS reviews the Planning RFP and notifies the State agency if additional information is required. FNS approves or denies the Planning RFP. FNS informs the State agency of the decision. Note that a RFP can be submitted simultaneously with the PAPD.
5. The State agency conducts planning activities per the PAPD (e.g., alternatives analysis), submitting APDUs and APDU As-Needed when necessary.
6. The State issues the final PAPD Update (PAPDU) to advise when all PAPD activities have been completed. The final PAPD includes the final budget, showing actual costs, for planning activities. See Section 2.2.3 for details.
7. FNS verifies that the State agency has successfully completed all PAPD activities and notifies it of PAPD closure.

An overview of the PAPD process is depicted in **Error! Reference source not found.**. Please note that program-specific requirements are not included.

Figure 0-9. Planning APD Process Map



It is important to consult with FNS before initiating any planning activities even if Federal funding is not specifically being sought. It is strongly recommended that the State agency notify FNS when embarking on system planning activities because costs that are not approved in advance may be disallowed.

Required Documentation for a PAPD

Before preparing the PAPD, the State agency should consult with the State's internal IT oversight department to determine whether any additional documents or procedures are required as part of the State's internal monitoring process or if the PAPD requirements will suffice.

The following components are required when submitting a PAPD:

Transmittal Letter—Cover letter, signed by the appropriate State official, that, identifies the State agency sponsor of the project who has the authority and responsibility to commit State resources to the project, to request Federal funding and approval, and to ensure the project goals and activities are carried out as identified within the PAPD. Appendix D provides an outline as well as a sample letter.

Executive Summary—Describes at a high level (in approximately one page) the business need for a new information system, its advantages, the challenges and shortcomings the system will address, and the stakeholders who will benefit from it. The State agency's commitment, including a description of the process to be used, to complete the following as part of project planning activities: a feasibility study including a thorough alternatives analysis, a cost-benefit analysis, a functional requirements specification document, and a general system design.

Schedule of Planning Activities, Milestones, and Deliverables—Includes a detailed description of activities and deliverables during the planning phase including the schedule of procurement activities to be undertaken in support of the planning project. The schedule shall include and discuss a proposed activity schedule depicting key tasks, events, and deliverables for the planning phase. This shall be presented in narrative and graphical format.

Proposed Budget—Identifies estimated State and contractor costs associated with the project planning phase activities by Federal fiscal year and quarter. For example, State costs related to travel, staff time, equipment, IT support, and indirect costs, as well as contractor costs for travel, time, and deliverables. Details are provided in Section 7.5. The State agency shall also include an estimate of the total project costs, including both the cost of the planning phase and a rough estimate of the cost of any anticipated design, transfer or implementation activities, which will be used only for determining whether the threshold of prior approval submission is met.

Resource Requirements—Describes what resources, in terms of staff, money, and so forth, the State expects to apply during the planning phase its needs from FNS.

Cost Allocation Plan—Describes the methodology used to determine the share each entity will pay in a joint planning effort. Details are provided in Section 7.3.

Consult with FNS for samples of the required PAPD documents, as needed. The required elements are brief and should be part of the PAPD narrative rather than separate attachments. These vary depending on the complexity of the planning activities being undertaken.

PAPD Review and Approval

FNS must conduct its review within 60 days after receiving the PAPD submission to provide timely notice to the State. When reviewing the PAPD, FNS follows several steps before approving or disapproving the State's request for Federal funding of its planning costs:

- √ Examines the transmittal letter requesting funding to review that it has been date-stamped
- √ Notifies the State agency of receipt of the document(s)

- √ Conducts a preliminary review of the document for completeness and notifies the State agency if documentation is missing or incomplete
- √ Evaluates whether the document adequately addresses IT technical and security issues, cost and benefit issues, Federal/State procurement regulations, and program needs assessment by meeting the following review criteria:
  - ✔ Describes planning activities that justify the costs involved or that are otherwise consistent with the objectives of FNS programs
  - ✔ Identifies key stakeholders in the planning process and explains how relationships with other programs or organizations will be considered
  - ✔ Demonstrates availability of funds, resources, and skills to conduct the proposal in a satisfactory manner
  - ✔ Reflects an itemized planning budget by Federal Fiscal Year and Quarter and identifies the sources and amounts of Federal and non-Federal funding and the basis for the allocation of costs among the sources
  - ✔ Includes proposed cost allocation, if applicable
  - ✔ Describes the scope of the appropriate planning activities that meet the identified project objectives and needs
- √ Coordinates comments and requests for information between IT, financial, and program entities at different organizational levels, as needed
- √ Notifies the State agency in writing of FNS' final action (approval, disapproval, or conditional approval)
- √ Meets with the State agency on all negotiable matters
- √ Provides technical assistance to the State agency, as appropriate and necessary
- √ Notifies the State agency of PAPD closure after it has successfully completed all PAPD activities

Once the PAPD is approved, the planning process is conducted. Any planning costs incurred prior to approval will remain the responsibility of the State agency. No retroactive approval will be granted. The State agency must also obtain prior written approval of the Planning Request for Proposals (PRFP) from FNS before entering into any contractual agreements or other commitments for acquiring planning services whose total costs are expected to exceed the relevant dollar thresholds. **Failure to do so may result in the disallowance of unapproved project costs**. The State agency may also opt to use in-house resources to perform planning activities.

If approval is granted for the proposed planning process, FNS will notify the State agency and include one of the following conditions of approval:

- **General**—Related to availability of Federal funds and compliance with FNS regulations
- **Specific**—Funding might be approved for a specific time period or incrementally based on satisfying specific conditions, such as submitting additional documents requested by FNS.

Some examples of specific conditions that FNS could require include the following:

- Bid responses must come in at or below the estimate given in the PAPD.
- Quarterly progress reports are required.
- Some or all procurement documents must be submitted for prior approval.

It should be noted that approval of planning activities does not guarantee approval of FFP for implementation activities.

If a State agency does not receive approval, denial, or additional requests for information within 60 days of receipt of the FNS acknowledgment, **provisional approval** would be deemed in effect *for SNAP projects*. This would not, however, exempt a State from meeting all other Federal requirements that pertain to the acquisition of information systems equipment and services. Such requirements remain subject to Federal audit and review. FNS will make every effort to respond to State agencies within the targeted review periods. ***Provisional approval does not apply to WIC projects.***

Key tips for successful planning include the following:

- √ Collaborate early with program policy and IT staff
- √ Establish and maintain communications with all State and Federal partners based on long-term business goals to ensure that all agencies with potential program involvement are aware of the project when it is still in the planning stage
- √ Know all Federal APD requirements and document approval time frames
- √ Know Federal and State contracting laws and requirements
- √ Talk with and visit other States with successful models and strong project management
- √ Engage workers, recipients, and other stakeholders in the system design as early and as much as possible
- √ Understand that communication is vital to successful planning and throughout the entire process.

2.2.3. PAPD Closure

Closure of a PAPD occurs when all activities associated with the planning phase, approved through the PAPD, have been successfully completed to the satisfaction of FNS and any other contributing Federal agencies. Official closure of the PAPD must occur to document the end of the planning activities and the actual costs incurred, and to terminate FNS-funded planning activities. The State must submit the following information:

- √ Final summary of work Completed
- √ Final budget showing all expenditures by line item by Federal Fiscal Year and Quarter
- √ Final cost allocation across all contributing entities (as applicable)
- √ List of all deliverables and payments made to all contractors or to State IT staff
- √ Description of the goals met by the project and any deviations from the last approved APDU

If projects become dormant (display no activity for a substantial period of time) or are abandoned (no longer being conducted by the State agency) before they attain the goals set forth in the PAPD, FNS will make every effort to contact the State to determine if a need still exists for the project. If the State does not respond to FNS communications regarding the project, FNS may close the PAPD at its own discretion, terminate funding, and recover any funds owed. FNS will make every effort to close a PAPD only when it has been completed or when there is mutual agreement with the State agency.

The groundwork laid by activities accomplished and deliverables completed during the planning phase provides analysis, information, and decisions that will lead the State agency to prepare for and meet the requirements of the implementation phase and the IAPD.

2.3. THE IAPD PROCESS

The IAPD describes the outcomes of a project's planning activities such as the identification, analysis, feasibility, and cost of various systems alternatives; the general design of the chosen alternative; and the project's estimated budget and schedule. It also demonstrates the State agency's thorough preparation of and commitment to the design, development, and implementation phases of the SDLC. The following planning documentation or deliverables may be required for review and approval by FNS prior to the submission of the rest of the IAPD:

- √ Feasibility Study
- √ Alternatives Analysis including a thorough Gap Analysis
- √ Cost Benefit Analysis
- √ Functional Requirement Document

Details on these outcomes of the planning phase may be found in this Chapter beginning at 2.3.2.1.

After the planning activities are completed and the results are analyzed, the State agency may request Federal funding, or FFP, for the acquisition, development, testing, pilot, and full implementation of the proposed IS through an IAPD—the second milestone in the overall APD process. The IAPD marks the completion of the planning phase of the SDLC. The IAPD provides the overall management plan for systems design, development, testing, and implementation.
Answers to the following questions can serve as the basic rationale for the IAPD:

- √ What demonstrated need do you have for this IS?
- √ How will this benefit the FNS program?
- √ When do you want to do this?
- √ How do you want to accomplish it?
- √ How much will it cost?

Many State agencies may rely on contractor support for system planning services, including the preparation of the IAPD, making it necessary to discuss these questions and determine the answers with the planning contractor before beginning development of the IAPD.

2.3.1. IAPD Thresholds

As presented in Figure 0-10, the IAPD process and funding thresholds are identical to those of the PAPD; therefore, some of the information in this section will parallel the PAPD process.

Figure 0-10. IAPD Document Submission Thresholds

Stakeholder	Program/Funding Source			
	SNAP	SNAP EBT	WIC	WIC EBT
State agency prepares and submits IAPD at least 60 days before project initiation FNS reviews within 60 days.	For all projects >$6 million total project costs	For all projects requesting FFP	For all projects ≥$500,000 utilizing Federal funding (See Figure 4-1 for requirements at lower thresholds)	For all projects utilizing Federal funding

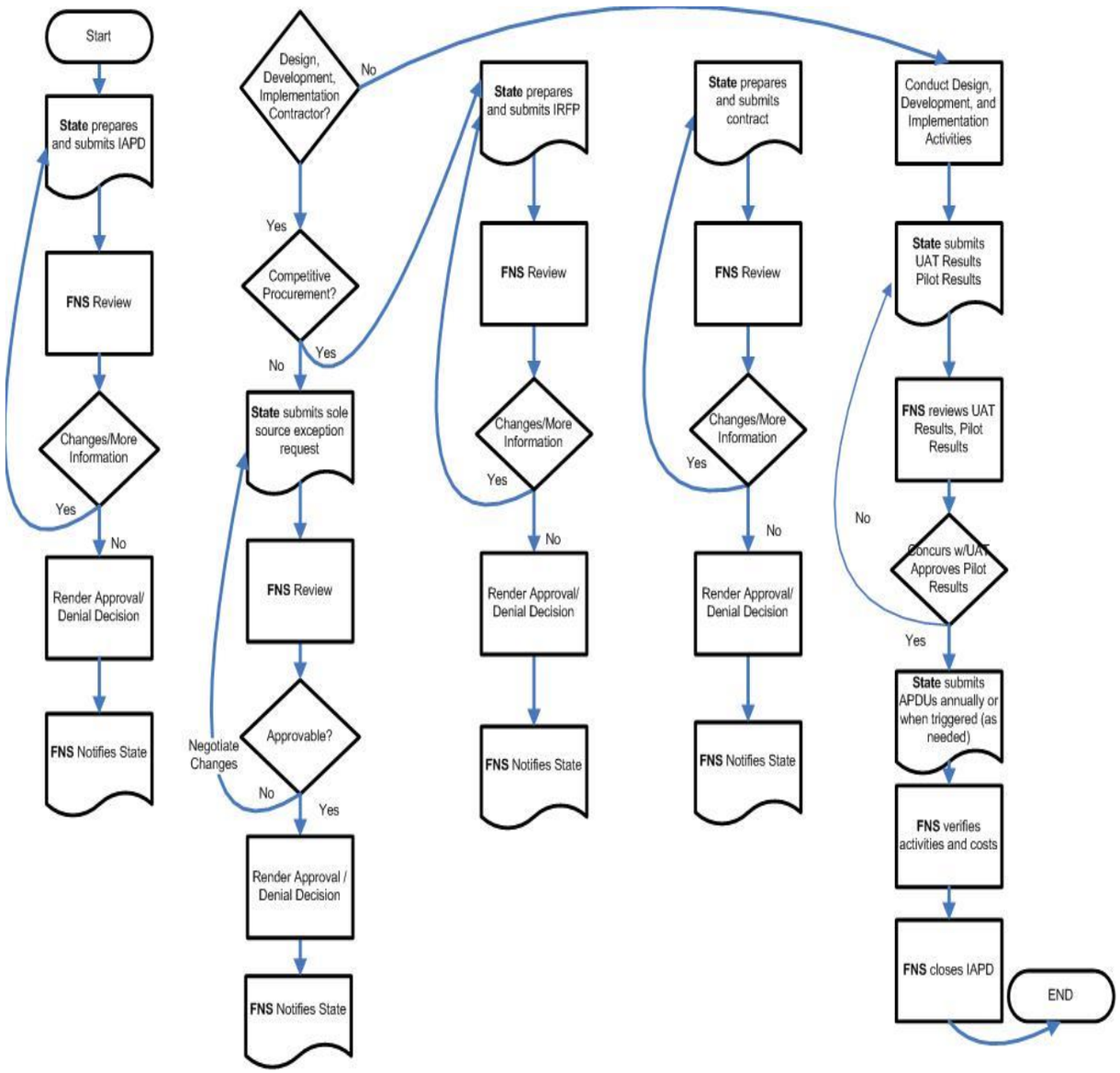
Failure to submit an IAPD may result in the disallowance of costs that might otherwise be covered by Federal funds. Regardless of whether a PAPD was submitted or approved, an IAPD must be submitted for all IS projects to receive FFP in accordance with program-specific dollar thresholds. Note that SNAP EBT IAPDs follow a different process within FNS. Please refer to Section 3.3 for details.

2.3.2. IAPD Process Steps

1. The State agency prepares and submits the IAPD to FNS electronically, including a scanned copy of a transmittal letter signed by an official authorized to commit State resources. The electronic submission should be sent to the appropriate FNS Regional Office.
2. FNS reviews the IAPD and notifies the State agency if additional information is required. FNS approves or denies IAPD. FNS informs the State agency of the decision.
3. If contractor services are required, the State agency prepares and submits the Implementation RFP. Note that an RFP may be submitted simultaneously with the IAPD. FNS reviews the Implementation RFP and notifies the State agency if additional information is required. FNS approves or denies the Implementation RFP. FNS informs the State agency of its decision.
4. The State agency conducts implementation activities per the IAPD (e.g., design, construction, testing, and implementation), submitting APDUs and APDUs As-Needed when necessary.
5. The State issues the final Implementation APDU (IAPDU) to advise when all IAPD activities have been completed. The final IAPDU includes the final budget, showing actual costs, for implementation.
6. FNS conducts a Post-Implementation Review as needed.
7. FNS verifies that the State agency has successfully completed all IAPD activities and notifies it of IAPD closure.

An overview of the IAPD process is provided in **Error! Reference source not found.**.

Figure 2-9. Implementation APD Process Map



Proper adherence to the IAPD process, such as including Federal review periods in the schedule or not rushing critical steps, can help States avoid project delays, estimate project progress and outcomes more realistically, and contribute to a successful project completion.

2.3.2.1 Required Documentation for an IAPD

The following components are required when submitting an IAPD:

Transmittal Letter—Cover letter, signed by the appropriate State official, identifies the State agency sponsor of the project who has the authority and responsibility to commit State resources to the project, to request Federal funding and approval, and to ensure the project goals and activities are carried out as identified within the IAPD. Appendix D contains an outline as well as a sample letter.

Executive Summary—Describes at a high level the business need for a new IS; identification of all the stakeholders who will benefit from it; its advantages, the challenges and shortcomings the proposed system will address compared to the current system and the alternative systems; the resources required from all stakeholders; and the technical, financial, and program impacts of the project. For details, see Figure 0-11.

Functional Requirements Document (FRD)—A comprehensive description of the functions that will be included in the system. It helps the State agency to prepare an RFP and serves as guidance to program and IT staff in the development of the system. The FRD developed in the planning phase is a comprehensive description of the functions that will be included in the system. Specifications shall be based upon a clear and accurate description of the functional requirements for the project. And, in competitive procurements shall not lead to requirements that unduly restrict competition. Refer to the SNAP Automation of Data Processing/Computerization of Information Systems (ADP/CIS) Model Plan (http://www.gpo.gov/fdsys/pkg/CFR-2011-title7-vol4/pdf/CFR-2011-title7-vol4-sec272-10.pdf) of the Requirements for Participating State Agencies' Regulations or the SNAP System Integrity Review Tool (http://www.fns.usda.gov/apd/snap-apd-requirements) or the WIC Functional Requirements Document (FReD) (http://www.fns.usda.gov/apd/WIC-FReD) for details. Copies may be obtained from the FNS website (http://www.fns.usda.gov/apd/WIC-FReD). States are reminded of the importance of this document and how it serves as a touchstone for the project when defining specifications, providing developers (whether contracted or in-house) with the "what" of the system or enhancement, and must be managed throughout the process. States are urged to ensure this document is kept up to date as the project progresses, noting decisions or changes to requirements, and as a reference for testing. When the project is complete, the FRD provides a historical view of the requirements and how they were met with changes noted and serves as a reference document during Operations and Maintenance as well.

Feasibility Study/Alternatives Analysis—Summarizes the results of a preliminary study conducted during the planning phase that determines whether the considered project is technically, financially, and operationally viable and presents the results of the alternatives analysis. The State agency must consider the transfer of an existing system or provide justification for excluding the transfer alternative from further consideration.

Cost-Benefit Analysis (CBA)—Summarizes the results of the CBA. The CBA determines which alternative will provide the greatest benefits relative to its costs and is required for all system development initiatives requesting more than $1 million in FFP. The CBA provides a meaningful comparison of the costs of the alternatives under consideration.

General System Design—A combination of narrative and diagrams that describe the generic architecture of the proposed system, as opposed to the detailed architecture that will be developed later. The General System Design shall provide a generic description of the architecture for the proposed system, as opposed to the detailed architecture that will be developed later in the project. If a system is to be transferred, the State agency may plan to use the general system design of the system to be transferred.

Capacity Plan or Study—Determines the overall size, performance, and resilience of an information system and relates organizational needs to the system's configurations to establish a computer installation that adequately meets the organization's projections for growth. If the Capacity Study is not completed when the IAPD is submitted, a commitment from the State agency to complete the study will suffice, until the Capacity Study can be submitted during the appropriate project phase.

Disaster Recovery Plan - Each State agency is required to develop a formal disaster recovery plan that encompasses the program certification and eligibility system. This plan can be part of a larger, overarching State agency plan, but it must detail how the State agency plans to recover and restore the system to normal operations.

Project Management Plan—Describes the project oversight, reporting requirements for the State and contractor, and how the State will achieve professional project management. Project management is the application of knowledge, tools, skills, and techniques to project activities and teams for meeting project requirements and competing demands and is accomplished by integrating and applying the project management processes of initiating, planning, executing, controlling and integrating, and closing. Therefore, successfully managing FNS systems projects includes identifying requirements; establishing goals; balancing demands of quality, time, scope, and cost; and adapting the specifications, plans, and approach to meet the needs and expectations of FNS stakeholders. Refer to Chapter 5 for guidance.

Resource Requirements—Describes resources (in terms of staff, funding, facilities, etc.) the State expects to apply to the implementation phase and what the State requests from FNS. Refer to Section 2.2.2.1 for guidance.

Schedule of Development Activities, Milestones, and Deliverables—Outlines the key implementation tasks, events, and deliverables. Refer to Section 2.2.2.1 for guidance.

Proposed Budget—Identifies estimated State and contractor costs associated with the implementation phase. For example, State costs related to travel, staff time, equipment, IT support, and indirect costs, as well as contractor costs for travel, time, and deliverables. Refer to Section 7.5 for details.

Cost Allocation Plan—Describes the methodology used to determine the share each entity will pay in a joint implementation effort. Refer to Section 7.3 for details.

Request for Waiver of Depreciation (if desired)—Provides a means for expensing capital expenditures, rather than depreciating them to benefit the Federal Government. A waiver of depreciation is a written request to change the method of accounting and claiming for the cost of equipment. The Federal cost circulars require individual items of equipment costing more than $5,000 to be charged over the useful life of the equipment. (Useful life is as prescribed by the Internal Revenue Service: workstations have a useful life of 3 years, while mainframes are normally charged over a period of 7 years.) The written request asks for agency permission to charge the entire cost of the equipment acquisition at the time of acquisition (more commonly known as "expensing"). Unless agency permission is received, the equipment cost must be based on depreciation over the life of the equipment. This component is optional based on individual circumstances. Refer to Section 7.2.7 for details or consult with FNS to determine whether this component is necessary.

Security Plan - The State agency shall describe the security and interface requirements to be employed and the system failure and disaster recovery/business contingency procedures available to be implemented. The Security Plan shall describe the approach for ensuring the physical, electronic, and operational security of the system, including hardware, software, data, communications, facilities, and goods. It shall describe the approach and requirements that will be delivered as part of the project. Preliminary plans may be submitted based on information available at the time of the initial IAPD and completed in more detail during the appropriate phase of the project. Refer to Section 8.7 for details.

Training Plan - The State agency shall describe how all system users, including staff at the state and local levels including clients, as applicable, will be provided with training on the IS. The training statement shall include a commitment to develop a comprehensive training plan that identifies the topic(s), the training methods to be utilized, the duration, location, and staff identified for each topic. All training materials to be developed shall be defined. The training plan shall describe the training methodology and provide sufficient detail to encompass all possible users, the training topic, materials to be developed, and include a budget that identifies travel for the trainers and trainees, materials, facilities, and goods. Describes how all system users, including technical, State agency, end users, and clients, as applicable, will be provided with training on the application. The training plan may also include recommendations for refresher training and new staff training that may be conducted by the State agency after the system is fully operational. Preliminary plans may be submitted based on information available at the time of the initial IAPD and completed in more detail during the appropriate phase of the project.

Test Plan – Describes how all system testing will be conducted in order to verify that the system complies with program requirements, design specifications, performance standards, usability, capacity, and security. Testing includes, but is not limited to, unit testing, integration testing, performance testing, end-to-end testing, user acceptance testing and regression testing. At a minimum, the Test Plan shall address:

- ✓ The types of testing to be performed;
- ✓ The organization of the test team and associated responsibilities;
- ✓ Test database generation;
- ✓ Test case development;
- ✓ Test schedule;
- ✓ Acceptance testing;
- ✓ Go/No Go criteria; and
- ✓ Contingency plans.

The State must provide a complete Test Plan to FNS prior to the start of the testing phase. The Test Plan itself does not require approval. However, documentation of the results of user acceptance testing (UAT) must be submitted to FNS for approval before a State agency can advance from UAT to pilot as well as to continue to receive Federal funding. FNS's ability to assess the validity of the test results will be dependent upon its earlier review of the Test Plan. Failure to submit a complete Test Plan in advance of UAT may result in delays in FNS review and approval of test results. In addition, the State agency is also required to provide documentation of the pilot test results for FNS approval before the system can be implemented more broadly and to continue to receive Federal funding. . Preliminary plans may be submitted based on information available at the time of the initial IAPD and completed in more detail during the appropriate phase of the project. Refer to Section 2.3.2.1.9 for additional details on that Test Plan and documentation of testing results.

Because the IAPD outlines all the information and requirements for the design, development, and implementation of the new system—a lengthy and intensive phase of the SDLC that may depend on the services of a contractor—some of the IAPD components are explained in further detail in other chapters highlighting critical factors that must be met to ensure success of the project (i.e., Procurement, Project Management, Financial Management, and Systems Security). Additional information on the remaining IAPD components follows in this section.

Consult with FNS for samples of the required IAPD documents, as needed. FNS encourages State agencies to refer to existing materials and documents created for other recent projects as a guideline for preparing their own IAPDs so that the States can benefit from each other's experiences, streamline their efforts, and efficiently use their planning dollars. However, it is vital for all components of the IAPD to reflect accurately each State agency's individual and unique needs, expectations, resources, and so forth. When referring to sample documents, therefore, it will be necessary to revise and adapt the information to the current, proposed project.

The following sections provide greater detail on several of the components.

2.3.2.1.1 Executive Summary

When developing the Executive Summary be aware that this document may be used to brief FNS management on the nature of the IAPD and/or serve as the documentation submitted to FNS for approval. A clear, concise Executive Summary is critical for conveying goals and advantages of the proposed project. State agencies should prepare the Executive Summary carefully, ensuring that all pertinent information is included. Refer to Figure 0-11 for guidance on the type of information to include in the Executive Summary.

Figure 0-11. IAPD Executive Summary Guidelines

Content/Issues	Information to be Addressed
General Information	• The nature of the project and the program needs or requirements the proposed IS is intended to meet or improve. • The IS functions to be included and to what level (e.g., business rules engine and web services). • How the project fits into the State agency's IT strategy and plans (e.g., statewide telecommunication plan, central computer processing center). • The involvement of the State's top management in the project to ensure success and the proposed project management organization and responsibilities • The schedule for developing and implementing the system, showing major milestones, including a statement concerning the State's judgment about its ability to meet this preliminary schedule • The expected impacts on State organizational entities that will be affected by system implementation, including issues such as staffing, business process, union contracts, and communications • A description of the State's planned mechanisms for quality assurance during project development. If a contractor will not be used, a description is needed of the quality assurance approach in the State agency's plans, as well as the method envisioned to ensure independent verification and validation of the project and system performance.
Program	• Commitment to involve State/local/county policy staff in project development as well as any other means necessary to ensure that the system implements program policy correctly • Commitment to meet all requirements for sufficient IT capabilities (e.g., Participant Characteristics Minimum Data Set, Functional Requirements outlined in the SNAP ADP/CIS Model Plan or WIC FReD V2.0 2008). • Commitment to ensure the system produces required program reports (e.g., for SNAP the FNS–388 and FNS–46).

Content/Issues	Information to be Addressed
Financial	• A statement indicating if the cost allocation plan has been approved and a description of any approved plan. • A simple schedule showing the estimated development costs for the total project, by Federal fiscal year and broken out by quarter, including the total costs and what it includes (all system components, hardware/software, deliverables, services, etc.), the share of such costs allocated to FNS, and the basis for that percentage (this assumes that the cost allocation plan has been approved or submitted for approval). • A description of the project costs for maintenance and operations with an estimate of the Federal share of these costs over the life of the project, and assurances that other payers are prepared to meet their share of these costs. • A statement indicating whether a waiver of depreciation is being requested • A description of the equipment to be provided to each worker (or some other descriptive measure of equipment levels) • A description of the results of the cost-benefit analysis

Content/Issues	Information to be Addressed
Technical	• A summary of any analysis performed by the State agency to determine the availability of transferable systems or subsystems • A brief description of the system architecture, including hardware, software, and telecommunications, and where applicable, a summary of the telecommunications planning and networking proposal. • A description of efforts to address technical issues of system capacity, response times, backups, etc. • A description of when and how case conversion will occur.
Procurement	• A summary of the procurement process that describes plans for either single or multiple procurements and whether ownership rights for software will be affected. • In the case of multiple procurements, include a summary of any bidding restrictions (e.g., project management contractor cannot bid on the quality assurance contract or the planning contractor cannot bid on the implementation contract). • A summary of the ongoing/planned management and operations approach (e.g., use of a facilities management contractor, in-house management, or a combination of these). If in-house staff is to be used, assurance that technical expertise is available or will be obtained, as well as demonstration of State preparedness in the areas of management and system maintenance.
Security	• A statement of commitment to comply with FNS security requirements, including development of a disaster recovery and business continuity of operations plan

2.3.2.1.2 Functional Requirements Document

A Functional Requirements Document (FRD) is required for all programs receiving Federal funding. The FRD is a comprehensive description of critical and desirable functions—a detailed set of processes and business rules—that must be contained in the new IS to support the program. The document is intended to help State agencies prepare an RFP for development contractors and associated implementation services and to serve as guidance to program and IT staff in developing an IS.

For the SNAP, refer to Section 0 where the APD/CIS Model Plan requirements are discussed. For the WIC program, refer to http://www.fns.usda.gov/apd/WIC-FReD.

2.3.2.1.3 Feasibility Study

The feasibility study is a preliminary study that determines whether the project being considered is technically, financially, and operationally viable. The study identifies the approaches that can be used to meet the program objectives of improved effectiveness and efficiency of operation and administration. The purpose of the feasibility study is not to determine whether it is feasible to build a new system, because the answer can always be "yes." Rather, it needs to determine whether it is feasible to build a State's future system based on the specific State agency's circumstances, such as budget and schedule. The feasibility study uses the FRD as a baseline to assess the ability of various alternative approaches to meet defined requirements. Thus, the feasibility study is a tool to help the State agency analyze, compare, and make sound decisions.

Given the complex nature of system development and the interdependence of technical, program, fiscal, and operational considerations, a team approach is recommended for the feasibility study. Depending on the program(s) involved, the team may consist of a variety of individuals with different skills and backgrounds (e.g., accounting, budget, program, or IT). Managers, system analysts, programmers, and program analysts may also play a role. If the proposed system is integrated with other programs, specialists from those programs may either be included formally or be used on a consultant basis for the team. The size and composition of the team may also depend on the type and complexity of the proposed project. The important factor in the formation of the team is that its size and composition is sufficient to allow a comprehensive, well-coordinated study.

Appendix D contains "Steps For a Thorough Feasibility Study", a step-by-step guide to the Feasibility Study process.

2.3.2.1.4 Alternatives Analysis

A complete feasibility study should include an alternatives analysis. Or, if the technology and platform are known, viable entities, the major focus of the alternatives analysis may be on determining the best approach for the State agency. An analysis of the option of transferring an existing system from another State or jurisdiction is required for SNAP and WIC. FNS will assist State agencies that request assistance in identifying other States with systems that should be considered for possible transfer. State agencies should contact those States with systems in which they are interested, to arrange for the sharing of available software and system documentation, within a reasonable timeframe. State agencies need to analyze obstacles to the transfer or modification of an existing system, and compare the cumulative costs of overcoming the problem in transferring an operational system to the costs of developing a new system. The feasibility study uses the current system as a baseline to begin the comparative analysis of alternatives. The analysis should also assist the State agency to identify any possible need to request a waiver of program requirements (for SNAP only).

Unless one is introducing new technology or architecture, the primary focus of the feasibility study for FNS systems is the alternatives analysis. A State agency must perform an analysis of representative alternatives for hardware, software, and program functionality to determine the type of system that best meets its needs. Typically, States use *at least* the following four alternatives in their analysis:

- Upgrading or enhancing the existing State system
- Transferring a system or components from another State
- Developing a new system from the ground up
- Using a hosted environment or cloud computing options

Any viable alternative may be used in the analysis. Appendix I includes a System Acquisition Toolkit to assist States in narrowing down their alternatives.

Once these results are known, the State agency can compare the cost effectiveness and long-term benefits from upgrading its existing system, transferring an existing system from another State, or developing a new system. Figure 0-12 provides a general guide to alternatives.

Figure 0-12. Alternatives Analysis Element Example

Representative Alternatives
Alternative Platforms/Capacity Enhancement
Platform (or architecture) alternatives range from stand-alone solutions to mainframes, distributed networks, or web-based systems. Requirements for capacity may affect platforms as well as other options.

Representative Alternatives	
Platforms/Capacity Enhancement	*Architecture* • Client/server LAN and micros • Distributed • Web-based • Mainframe • Capacity of current hardware, telecommunications, and network components *Outsourcing (contracting out)* *Acquire Services (other than equipment)* • From other State agencies (central IT) • Commercially *Reconfigure Existing Resources* *Use of Non-Automated Alternatives* • Reallocating or increasing personnel • Manual systems or work processes

Alternatives for Implementing Applications	
Alternatives range from modifying current systems to transferring and modifying another State's system, incorporating off-the-shelf solutions, or initiating custom development (when more cost-effective and timely solutions do not exist).	
implementing Applications	*Transferring/Modifying Another State's System:* • Using in-house services • Using contract services • Using a combination *Off-the-Shelf Software* • Generalized, such as DBMS • Specialized, such as payroll *Modifying or Redesigning Current System* • Using in-house resources • Using contract services • Using a combination *Custom Development* • Using in-house services • Using contract services • Using a combination *System Hosting by Another State* • Using shared system • Using shared services • Using in-house resources • Using contract services • Using a combination *Cloud Computing* • Platform as a Service • Infrastructure as a Service • Software as a Service • Hybrid solutions
Services include teleprocessing, computer time, electronic mail, voice mail, cellular telephone, and web services. Alternatives include both in-house and contractual solutions, as well as sharing and borrowing resources.	
Alternatives for Acquiring Services	

Representative Alternatives	
Acquiring Services	• Increase in In-House Resources • In-House Development of Service Capability • Resources Sharing with Other State Agencies • Contractual Commercial Services • Temporary Commercial Services
Alternatives for Obtaining Support Services	
Support Services include source data entry, training, custom software development, systems analysis and design, software conversion, facilities management, maintenance, equipment operation, network management, studies, and evaluation.	
Obtaining Support Services	*Increase in Permanent Staffing* *In-House Development of Service Capability* *Resources Sharing with Other State Agencies* *Contractual Commercial Services* • Manpower-based • Project-based • Full Service, Per Call, On Call • Temporary Commercial Services

States should carefully define their criteria for the new system prior to performing the feasibility study/alternatives analysis. For example: the system must be web-based, meet the mandatory requirements of the WIC FReD or the SNAP ADP/CIS Model Plan, allow for easy ad hoc report generation, and not exceed a transaction time of so many seconds.

Refer to Figure 0-13 for guidance and examples of the type of information that should be contained in the feasibility study.

Figure 0-13. Feasibility Study Guidelines

Content/Issues	Information to be Addressed
General Information	• Provide a brief description of the present system • Is the present system integrated with another public assistance or health system? • What is the age of the current system? Does it meet the functional requirements of the program(s)? • What Federal, State, and local programs will the new system service? • What are the roles of other offices that will be involved (e.g., IT finance, Attorney General's office, other health or human service programs)?
Content/Issues	**Information to be Addressed**
Management Summary	*Objectives* • Compliance with regulations • Increased processing speed • Increased productivity and streamlined business processes • Improved IT services • Improved implementation of program policies and decision making *Requirements* • Increased capacity (e.g. number of users that may be supported, number of offices, number of mobile sites • New technical requirements (e.g., a statewide standard) • Improved privacy and security (e.g., must be HIPAA compliant or meet state-specific security standards) • Improvements in management controls *Assumptions and Constraints* • Operational life of the proposed system • Availability of information and resources • Financial constraints (e.g., a specific program function was mandated to be completed within a given time frame • Legislative and policy constraints • Technical constraints (e.g., changing hardware/software/operating environment, new equipment must be compatible with existing) • Operational constraints (e.g., constraints imposed by an outside agency if the proposed system will be integrated with other public assistance programs)

Content/Issues	Information to be Addressed
Alternatives Analysis	*Methodology* • Identify how the analysis was accomplished and how the alternative system(s) were evaluated • Summarize the general method or strategy employed, such as surveying, weighing, modeling, benchmarking, or simulating *Evaluation Criteria* • Identify the criteria to be used to determine the viable system(s), including the relative technical, fiscal, and operational advantages and the ability to meet the system requirements specified in the functional requirements document *Alternatives* • Describe each alternative system in terms of methodology and the degree to which it meets the established objectives and evaluation criteria within the framework of the aforementioned constraints • Include alternative systems deemed to be infeasible and specify the reasons for this conclusion (include the alternative analysis elements described in Figure 0-12)
Proposed System(s)	*Technical Maturity* • Describe the level of technical maturity for the potential solution. The description may address questions such as: 1) Is the potential solution technically proven or a recent innovation. 2) Has the proposed technology solution fully matured? 3) Is it nearing obsolescence? 4) Are services and expertise required to support the potential technical solution readily available? 5) What is the estimated lifecycle and longevity of the solution? *Equipment Effects* • Describe how new equipment requirements and changes to currently available equipment will be met; for example, do current hardware, telecommunications, and/or network services have the capacity to meet new system requirements? *Software Effects* • Describe any required additions or modifications needed to existing applications and support software to adapt them to the proposed system(s) and explain how such needs will be met • Describe any data conversion activities that will be necessitated by adoption of the proposed system *Organizational Effects* • Describe any organizational, personnel, and skill requirements that will change and how the change will be handled • Program Effects • Describe any conflicts or need to request a waiver (SNAP only) from program requirements • Resource Effects • Management, programmatic, and technical resource requirements • Computer processing resources required to develop, convert, implement, and test the new system(s) • Continued support for current system operations *Operational Impacts—How the development process will take into account the effects on operations* • User operating procedures • Operating center procedures • Operating center and user relationships • Telecommunications impacts on the operating center and user sites • Source data processing • Data retention requirements and information storage and retrieval procedures • Output reporting procedures, media, and schedules • System failure consequences and recovery procedures • Plans for system support throughout the system's life *Site/Facility Effects* • Describe building modification requirements and how they will be met

Content/Issues	Information to be Addressed
	Fiscal Impacts • Describe cost factors that may influence the development, design, and continued operation of the proposed system(s) • Identify the estimated total developmental cost and estimated annual operating costs and who will pay for these expenses *Justification* • State the reasoning that supports the selection of the proposed system(s) based on the aforementioned evaluation criteria and elimination of other alternatives
Proposed Schedule	• For any alternative still being considered after the alternatives analysis, outline a proposed schedule for all implementation activities, such as systems design, development, testing, quality assurance, data conversion, and deployment and address the following components: • Specific activities to be performed by the user in support of development of the proposed system(s) • Major milestones and management decision points

Conducting a thorough Gap Analysis of all alternatives is vital in assisting the State to determine which alternative is the most viable given the State's needs, budget, schedule, constraints, and assumptions.

Appendix D provides a feasibility study worksheet to help the State agency identify and outline all requirements of the feasibility study before preparing the detailed narrative for each system.

The outcome of the feasibility study should identify what system(s) might be functionally, technically, and operationally feasible for the State, based on current circumstances and needs. Based on the analysis, there may be more than one feasible system. It may also be possible that none of the options is feasible and, therefore, this may be a go/no-go point at which the State agency should halt the process and reevaluate the project's direction.

2.3.2.1.5 Cost-Benefit Analysis

Because more than one system may be functionally, technically, and operationally feasible, the State needs another tool to help it select the best system. The CBA is used to estimate the costs and benefits that might be incurred for each of the recommended system(s). This decision-making tool helps to further narrow the possibilities and arrive at the best system for the State's needs and circumstances. It is easy to confuse the CBA with the feasibility study because both require the State to analyze and compare alternative systems. The feasibility study focuses on the technical, functional, and operational needs; and which system(s) are best able to meet them. It does not consider cost, although the alternatives analysis portion may take into account projected costs for the development and operational phases of the system. The CBA focuses specifically on the costs of each of those systems, relative to their benefits. The feasibility study and the CBA are two different, yet complementary ways of defining needs and determining the best solution.

The CBA determines which alternative will provide the greatest benefits relative to its costs. The analysis provides, by funding source, the estimated cost of developing and operating each alternative found to be viable through the feasibility study. The analysis identifies the tangible and intangible benefits related to each funding source. Based on this information, the CBA is the ultimate means for selecting the best approach for developing or enhancing an IS. The IAPD must show that a meaningful CBA was performed as a part of comparing alternatives, but does not require calculating a number of years to the break-even point or tracking and reporting the CBA beyond initial approval of the IAPD.

A CBA is required for large-scale software development, is not required for routine equipment replacement, and upgrades. FNS may refuse additional project funding until a State submits a satisfactory CBA that provides the needed justification for proceeding with project implementation.

If the feasibility study includes an analysis of system alternatives that examines the option of transferring (usually with modifications) an existing system from another State or jurisdiction, and a transfer option is determined feasible, the costs and benefits of transfer must be carefully considered in the analysis. Moreover, if retention of the current system is found to be a feasible alternative, it must be included in the CBA. Refer to for guidance on the type of information that should be provided in the CBA.

Figure 0-14. CBA Guidelines

Content/Issues	Information to be Addressed
General Information	• Identify and define the alternatives • State the methodology used for comparing alternative systems as described in the alternatives analysis section of the feasibility study • Document assumptions concerning the alternative systems
Developmental Costs for Each Alternative System	• IT Personnel (e.g., programmers; analysts; project leaders; and testing, implementation, and conversion personnel) • Salary plus overhead, including fringe benefits • Training • Database and data preparation, control, and conversion • Software conversion, including all necessary reprogramming • Projected maintenance (during implementation) • Office space requirements • Travel for visits to other States (include air fare, per diem, etc.) • Special one-time expenditures for areas such as conversion and testing *User Personnel (e.g., staff who are directly responsible for the new system and cannot be charged to the IT Personnel category)* • Meeting time • Procurement planning and benchmarking • Reviews of the processing system • System testing and evaluation Training and manual preparation • New personnel required, technical or non-technical (permanent or temporary) *Equipment and Software Costs* • Communications equipment • Hardware • Physical storage devices • New office space and supplies • Equipment maintenance costs and contracts • Special-purpose software including system testing tools • Telecommunications equipment and services (e.g., operating center and user sites) *Other Costs* • Power • Maintenance (e.g., raised floors, additional wiring, air conditioning, etc.) • Supplies (e.g. CDs, paper, ink cartridges, etc.)

Content/Issues	Information to be Addressed
Maintenance and Operations Costs	• Personnel (e.g., operations, support, and customer service) • Overhead • Space and off-line equipment • Security and privacy • Supplies and utilities • Processing requirements • Training and education • Travel • Software licenses and maintenance agreements • Maintenance agreements on the new hardware, apportioned to the department as required • Contractual and interagency services, such as IT services, data communications, and technical and other support • Additional peripherals needed, such as monitors and storage units • Projected normal maintenance or revisions to the new system (not including correcting initial errors or bugs imbedded in the new system) • Additional operational manuals and offsite training for line and staff personnel • Other current operational costs that will not change with the introduction of the new system, but must be added as part of the total picture
Benefits of the Alternative Systems	*Quantifiable* • Describe how the tangible benefits (e.g., cost reduction, value enhancement, leases, rentals, and maintenance) can be measured directly in monetary terms, including benefits that are measured in non-monetary terms (e.g., staff salaries and fringe benefits, travel and training, space occupancy, and direct support services) for which monetary values can be estimated. Place a monetary value on tangible benefits when possible. Express items such as cost reduction, value enhancement, leases, rentals, and maintenance in dollar terms. Place a dollar estimate on items such as staff salaries and fringe benefits, travel and training, space occupancy, and direct support services. *Non-quantifiable* • Describe the benefits that cannot be quantified in terms of direct dollar values (e.g., improved customer services, faster service, improved office organization and flow, reduced error rates, improved data quality, less demands on retailers, and more accurate reporting). When applicable, include the following components: boundary areas (i.e., analysis of best-case and worst-case estimates to justify the proposed alternative), and/or tradeoffs with tangible benefits (i.e., cases in which an intangible benefit is gained at the expense of a reduced potential tangible benefit).
Comparative Cost/Benefit Summary	• Display the costs and benefits of each alternative presented during the expected life of the system (e.g., recurring, non-recurring, system life, residual value, and adjusted costs)
Selected Information System	• Document the final decision on the best alternative, considering all costs and benefits

Appendix D provides a CBA worksheet to help the State agency identify and outline all requirements of the CBA before preparing the detailed narrative for each system.

2.3.2.1.6 General System Design

A general system design consists of a combination of narrative and diagrams describing the generic architecture of a system, as opposed to the detailed architecture. A general system design may include a system's diagram; narrative identifying overall logic flow and systems functions; a description of equipment needed, (including processing, data transmission, and storage requirements); a description of other resource requirements that will be necessary to operate the system; a description of system performance requirements; and a description of the environment in which the system will operate, including how the system will function within the environment.

2.3.2.1.7 Capacity Plan or Study

Capacity planning determines the overall size, performance, and resilience of an information system and relates organizational needs to the system's configurations to establish a computer installation that adequately meets the organization's projections for growth. Because there are so many variables and intangibles, and because needs change so rapidly, capacity planning is not an exact science. However, various methodologies can be applied to help determine the workload, performance, and costs of the system. A workload model captures the resource demands and workload intensity characteristics of the load brought to the system by the different types of transactions and requests. A performance model is used to predict response times, utilizations, and throughputs as a function of the system description and workload parameters. A cost model accounts for software, hardware, telecommunications, and support expenditures. The detailed components of the study will vary, depending on the intended usage of the system, but the following factors should be considered:

- √ Expected storage capacity of the system and the amount of data retrieved, created, and stored within a given cycle
- √ Number of on-line processes and the estimated likely contention
- √ Required performance and response required from both the system and the network
- √ Level of resilience required and the planned cycle of usage (i.e., peaks, troughs, and average)
- √ Impact of security measures (e.g., encryption and decryption of data)
- √ Need for 24/7 operations and the acceptability of taking the system down for maintenance and other remedial work

The need to conduct a capacity study or develop a plan varies depending on the breadth of the project the State agency is undertaking. A software upgrade would not entail a formal study and plan while a new system development would need to include a study of current hardware and telecommunications capacity in order to determine if the current hardware can meet the requirements of the new system being developed. It is wise to conduct this analysis to evaluate realistically other transfer systems, a bidder's proposal, or project costs (e.g., development, operational, processing, and telecommunications). The study provides information that specifies the size and expansion capabilities of the new system or the scope of enhancement to an existing system.

Conducting this task can be very difficult, particularly in predicting the volume of traffic or load conditions. Therefore, many State agencies use contractor support if their staff is not experienced in doing this type of analysis and specify the capacity study as a requirement in the RFPs when procuring a development contractor. For this scenario, the capacity study is linked to the current processing environment, workload data, and new system environment sections that are commonly part of a statement of work (SOW) for an RFP.

Capacity studies are of particular importance when a State agency is contemplating making a significant change or upgrade to its major operating platform, network infrastructure, data/telecommunications services, or database management system. Examples include replacing or upgrading the current mainframe and storage hardware, replacing the networking architecture, moving to web services, or changing to a different database management software or structure.

2.3.2.1.8 Disaster Recovery Plan

Each State agency is required to develop a formal disaster recovery plan that encompasses the program certification and eligibility system. This plan can be part of a larger, overarching State agency plan but it must detail how the State agency plans to recover and restore the system to normal operations.

2.3.2.1.9 Test Plan

FNS is required to ensure that all eligibility systems are adequately reviewed and tested, that the system makes accurate eligibility determinations in accordance with Federal regulations and approved State policies, and that system functionality meets the required functional specifications. To meet this requirement, the State agency is required to provide a preliminary Test Plan in its initial IAPD, a final Test Plan prior to the start of the testing phase, and test results throughout user acceptance testing (UAT). FNS will be evaluating the information provided by the State agency to determine if the State agency's plans, methodology, results tracking and analysis approach are adequate and whether additional information is needed.

At a minimum, the Test Plan should address the following:

- Types of testing to be performed must include, but are not limited to:
  - unit testing
  - integration testing,
  - performance testing
  - end-to-end testing
  - user acceptance testing
  - regression testing

- Organization of the test team and associated responsibilities – the Test Plan should specify the number and skill sets of the staff involved in the test team from Program/Business staff, Development/Integrator staff, and Quality Assurance/Independent Verification and Validation staff. In addition, it should specify who is responsible for testing management and oversight. The plan should also itemize the testing tools (software), equipment, workstations, and testing facilities that will be utilized by the test team.

- Test database generation – creation of a database generated in the test environment to mirror/duplicate as closely as possible the database to be used in the production environment.

- Test case development – selection of scenarios to test and scripting of scenarios

- Test schedule – the following milestones, at a minimum, should be scheduled:
  - Pre-testing validation of functional requirements
  - Accepting system for UAT
  - Training on system and on test procedures
  - UAT
  - UAT results (FNS approval required)
  - System acceptance for pilot implementation and testing
  - Pilot Results (FNS approval required)
  - System acceptance for implementation and Statewide rollout
  - Statewide rollout
  - Warranty period

- Acceptance testing methodology– acceptance testing is conducted prior to pilot and implementation and is the point at which the State agency "accepts" the system. The Test Plan should describe the methodology for:
  - functional requirements testing

  - error condition handling and destructive testing
  - security testing
  - recovery testing
  - controls testing
  - stress and throughput performance testing
  - regression testing

- Go/No-go decision criteria – criteria should be specific and measurable and include specific test results that will need to be met before the State agency exits the testing phase. Identify staff responsible for verifying the criteria have been met and the State agency's go/no-go decisions.

- Contingency plans – identifies alternative strategies that may be used if specific risk events occur, such as a failure of test results to support a decision to proceed to the next phase of the project. Examples would include delaying or revising staffing plans; rescheduling training; adjusting pilot plans; and/or extending, rescheduling or redeploying testing resources such as space, contractor and state staff, servers and other equipment. The plan should also address who has the authority to activate contingency procedures, how these decisions will be made and demonstrate that the State agency is prepared to adjust and "fall back" to a sustainable position to continue testing when necessary.

FNS' examination of State agencies' test plans would include, but not be limited to, the following areas: Risk management, rigorous methodologies, industry standards, professional test management, repeatable test processes, specific pass/fail metrics, adequate time allotted for testing, and an unbiased decision-making process. Results from the UAT and Pilot Test and other testing, as appropriate, will be evaluated from a system perspective as well as a program perspective to determine whether their outcomes can be considered successful. FNS may require any or all of these tests to be repeated in instances where significant modifications are made to the system after these tests are initially completed or if problems that surfaced during initial testing warrant a retest.

By submitting the Test Plan well in advance of testing, the State enables FNS to be an informed and timely reviewer of test results. FNS expects that the typical project timeline for testing, pilot and rollout includes specific go/no-go decision points. By communicating with FNS throughout the testing and pilot phases regarding results and the status of the State's go/no-go criteria, State agencies can help ensure that there is no need for additional delay at the key decision points. FNS does not anticipate the need for a separate test or pilot evaluation period, in addition to the State agency's own, if FNS is kept fully informed throughout the process.

Documentation of Test Results

The State must provide to FNS a complete Test Plan prior to the start of the testing phase. The testing plan itself does not require approval. However, documentation of the results of UAT must be submitted to FNS for approval before a State agency can advance from UAT to pilot and continue to receive Federal funding. FNS's ability to assess the validity of the test results will be dependent upon its earlier review of the Test Plan. Failure to submit a complete Test Plan in advance of UAT may result in delays in FNS review and approval of test results. In addition, the State agency is also required to provide documentation of the pilot test results for FNS approval before the system can be implemented more broadly and also to continue to receive Federal funding.

✓ UAT documentation should contain:

- An itemization of the testing goals achieved, such as:
  - The number of test scenarios completed and the number of those which included SNAP-specific functionality
  - The total universe of defects found by severity level, such as:

        - Severe – Affects accurate determination of eligibility, benefit amount, or has an unacceptable impact on system performance
        - Priority – Impacts eligibility, benefit amount, or system performance but a tested work around is in place
        - Medium – Does not meet system requirements but does not affect accuracy of eligibility, benefit amount, and the performance impact is acceptable in the short term
        - Minor – Does not meet system requirements but the impact is negligible, inconvenient, or cosmetic
    - The number of defects by severity level resolved and successfully regression tested
    - The number of defects outstanding by severity level
- The results of the conversion test runs
- Status of testing all interfaces including assurances that the interface partners are satisfied with the results
- Results of system security testing
- Other pertinent readiness issues (i.e. network, facility, equipment readiness, training)
- In addition to the above information, at the conclusion of UAT, the State must submit its Go/No-go decision with justification summarizing any outstanding issues/defects with the system and any other pertinent readiness issues. In addition, justify the decision to either move forward or delay the project (i.e. the number and severity of outstanding defects, status of site readiness, data cleanup, conversion testing results, and stakeholder input including concurrence from all interface partners to move forward).

✓ Pilot testing documentation should include the following:

- An itemization of the pilot goals in progress or achieved:
    - The number of cases processed in the new system
    - The total universe of defects going into pilot by severity level
    - The number of new defects by severity level identified during pilot
    - The number of defects by severity level resolved and successfully regression tested
    - The number of defects outstanding by severity level
- The results of the conversion to pilot and the management strategy for any post-conversion clean-up work that will be required during the pilot
- A sign off by the interface partners assuring that they are satisfied with the functionality of the interfaces.
- Other pertinent readiness issues (i.e. network, facility, equipment readiness, training)
- In addition to the above information, at the conclusion of the pilot, the State must submit its Go/No-go decision with justification summarizing any outstanding issues/defects with the system and any other pertinent readiness issues. In addition, justify the decision to either move forward to full implementation or delay the project. FNS may attend the Pilot to assist and corroborate the findings of the State agency.

Refer to Section 5.5.1 and 5.5.2 for additional information on conducting UAT and pilot testing.

2.3.2.2 IAPD Review and Approval

FNS must conduct its reviews within 60 days after receiving the IAPD submission to provide timely notice to the State. When reviewing the IAPD, FNS follows several steps before approving or disapproving the State's request for Federal funding of its design, development, and implementation costs:

√ Examines the transmittal letter requesting funding to ensure that it has been date-stamped

√ Notifies the State agency of receipt of the document(s)

√ Conducts a preliminary review of the document for completeness

- √ Notifies the State agency if documentation is missing or incomplete
- √ Evaluates whether the document adequately addresses IT technical and security issues, cost and benefit issues, Federal/State procurement regulations, and program needs assessment by meeting the following review criteria:
  - ✔ Analyzes the objectives and needs of the new system and provides an acceptable plan for proceeding
  - ✔ Describes implementation activities that justify the costs involved or that are otherwise consistent with the objectives of FNS programs
  - ✔ Identifies key stakeholders in the implementation process and explains how relationships with other programs or organizations will be considered
  - ✔ Demonstrates that the proposed system does not unnecessarily duplicate or conflict with other systems
  - ✔ Demonstrates availability of funds, resources, and skills to conduct the proposal in a satisfactory manner
  - ✔ Reflects an itemized implementation budget and identifies the sources and amounts of Federal and non-Federal funding and the basis for the allocation of costs among the sources
  - ✔ Includes proposed cost allocation, if applicable
  - ✔ Describes the scope of the appropriate implementation activities that meet the identified project objectives and needs
- √ Coordinates comments and requests for information between IT, finance, and program entities at different organizational levels, as needed
- √ Notifies the State agency in writing of FNS final action (approval, disapproval, or conditional approval)
- √ Meets with the State agency on all negotiable matters
- √ Provides technical assistance to the State agency, as appropriate and necessary
- √ Provides IAPD oversight and reviews APDUs, as required until the implementation activities are completed
- √ Notifies the State agency of IAPD closure after it has successfully completed all activities approved in the IAPD

The approval conditions for the IAPD, both general and specific, are the same as those for the PAPD. If approval is granted for the proposed project, FNS notifies the State agency and includes one of the following conditions of approval:

- **General**—Related to availability of Federal funds and compliance to FNS regulations.
- **Specific**—Funding might be approved for a specific time period or incrementally based on satisfying specific conditions, such as submitting additional documents requested by FNS.

Some examples of specific conditions that FNS could require include the following:

- Bid responses must come in at or below the estimate given in the IAPD
- Quarterly progress reports are required
- Some or all procurement documents must be submitted for prior approval
- Additional project documents such as the detailed design or risk management plan must be submitted for review
- Specific go/no-go points in the process must be established beyond which the State agency may not proceed or receive funding without FNS prior approval.

After FNS approves the IAPD, the State can begin the procurement and development tasks necessary to produce and implement a successful IS that meets the requirements and objectives defined by the State agency and participating Federal agencies. Please note any costs incurred prior to approval will remain the responsibility of the State agency. No retroactive approvals will be granted. Acquisitions and subsequent undertakings that fail to meet approved APD requirements may be subject to disallowance in accordance with 7 CFR 277.18 (h).

Under the authority of 7 CFR 277.18, FNS will monitor progress of the State's project using the APD Update (APDU) process, including regular conference calls, FNS site visits as needed as well as required review and approval of the user acceptance testing (UAT) and pilot results. This monitoring approach supports the high degree of interaction expected between FNS and the State as the project moves forward. The State is responsible to have performance expectations, prescribed remedies and penalties in place that protect the State in the event of a failure in performance by the vendors. Acquisitions and subsequent undertakings that fail to meet approved APD requirements may be subject to disallowance of costs.

Provisional Approval

If a State agency does not receive approval, denial, or additional requests for information within 60 days of receipt of the FNS acknowledgment, **provisional approval** would be deemed in effect. This would not, however, exempt a State from meeting all other Federal requirements that pertain to the acquisition of IS equipment and services. Such requirements remain subject to Federal audit and review. FNS will make every effort to respond to State agencies within the targeted review periods.

Please note that provisional approval does not apply to WIC.

2.3.3. IAPD Process for Maintenance and Operations

Once implementation activities have been completed and the closeout IAPDU has been approved, FNS does not require annual APD Updates to approve the funding of maintenance and operations activities. However, prior approval is required for maintenance and operations (M&O) when significant hardware upgrades, platform changes, and software enhancements are made to the system. Figure 2-14 provides examples to help determine the need for APDs and associated procurements.

Figure 0-15. M&O Examples

Maintenance and Operations Decision Table Examples		
	IAPD Required	IAPD Not Required
Hardware	Replacement of mainframe and associated peripheral devices	Routine hardware replacement of routers, hubs, storage devices that does not affect type of platform
	Architecture change from client/server or distributed system to web-based	Routine PC replacement (usually planned in advance on a cycle replacing a percentage of PCs on an annual basis)
	Increased storage and/or processor capacity to meet increased caseload requirements	Upgrade of peripheral devices such as printers or scanners
		Procurement for leased hardware and peripherals needs to be rebid
Software	Software enhancement adds new functionality to the existing certification/eligibility or issuance system	Routine software maintenance, including fixes, patches, and upgrades that do not introduce additional functional capabilities to the system
	Implementation of Enterprise Architecture	Routine software license renewals
		Routine support activities that normally include corrective, adaptive, and perfective changes, without introducing additional functional capabilities
Services	Consultant services are required to develop and	Contract for routine maintenance and operations services is due to expire,

	implement software upgrades to an existing system that adds new functionality to the system	needs to be rebid; SOW does not include any enhancements or upgrades to software that will add functionality to the system

If the changes fall under the threshold, the State agency should keep FNS informed during the M&O phase. This may be satisfied by submission of the documents below along with a transmittal letter signed by the State official who has authority to commit State resources. In addition all contract amendments should be submitted. Contract amendments that cumulatively exceed 20% of the base contract must be submitted for FNS prior approval, including amendments to M&O contracts.

- A description of hardware or software changes (may be in a Task Order or Contract Amendment).
- A budget reflecting State and Federal costs by Federal Fiscal Year and Quarter
- A description of how these changes will benefit the Federal programs being served by the system.

These information requirements may be satisfied by an MOU, SOW, RFP and contract or other narrative along with a transmittal letter signed by the State official who has authority to commit State resources.

If procurement is needed, the RFP and contracts resulting from the RFP must be submitted for review and approval prior to the issuance of the RFP or the execution of the contract. Figure 2-20 provides the RFP submission thresholds.

- Including a provision of Quality Assurance (QA) or Independent Verification and Validation (IV&V) services for system enhancements is highly recommended and serves the same purpose as utilizing such services during system design, development, testing, implementation and documentation. Refer to Chapter 5, Section 5.6 for more information on QA and IV&V, Chapter 6 Section 6.2 for procurement thresholds.

These information requirements may be satisfied by the RFP and contract along with a transmittal letter signed by the State official who has authority to commit State resources. States should submit the draft contract prior to the release date of the RFP. Refer to Figure 0-15.

2.4. THE APDU PROCESS

To conduct its oversight responsibility properly for multi-year IS projects; FNS requires State agencies to provide updates on the progress and accomplishments of a PAPD/IAPD-approved effort. Updates may be annual on the anniversary of the PAPD/IAPD approval or as-needed triggered by significant project events. Annual APDUs are for routine reporting only. Major changes in scope, cost, or schedule must be submitted immediately as an APDU As-Needed (see Section 2.4.2). Significant changes not reported timely may not be approved and costs may be disallowed.

2.4.1. Annual APDU

Annual APDUs are required for all active PAPDs and IAPDs (refer to Figure 0-16). The APDU also serves as a mechanism for State agencies to provide information regarding accomplishments and changes, as well as obtain approval for successive phases of their projects, if given limited approvals initially.

Figure 0-16. APDU Document Submission Thresholds

Stakeholder	Project Program/Funding Source			
	SNAP	SNAP EBT	WIC	WIC EBT
State agency prepares and submits APDU no later than 60 days before the anniversary of initial PAPD/ IAPD approval FNS reviews within 60 days.	For all approved PAPDs/ IAPDs	Only required on an as-needed basis	For all approved PAPDs/ IAPDs	For all approved PAPDs/ IAPDs

Annual APDU Process Steps

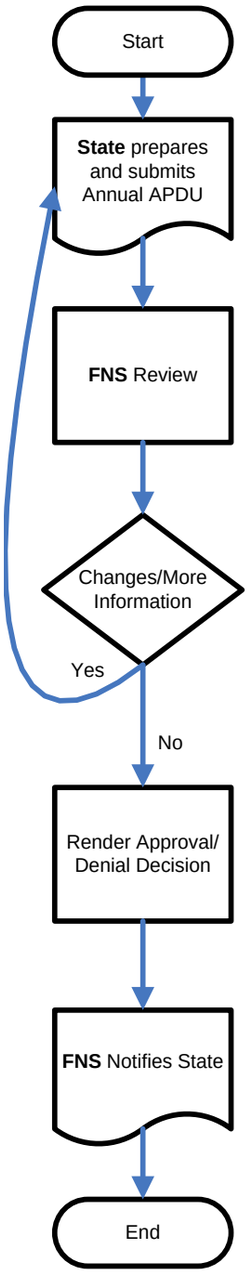
1. The State agency prepares and submits the APDU to FNS electronically, including a scanned copy of a transmittal letter signed by an official authorized to commit State resources. The electronic submission should be sent to the appropriate FNS Regional Office. The APDU must be submitted no later than 60 days before the anniversary of the initial PAPD or IAPD approval.

2. FNS reviews the APDU and notifies the State agency if there is a need for more information. FNS approves or denies APDU. FNS informs the State agency of the decision.

3. The State agency continues to conduct its systems development activities (planning, implementation) per the PAPD or IAPD.

The APDU keeps a State's PAPD or IAPD current by annually updating FNS on the project's progress, including accomplishments, adjustments in plans or approaches, problems, and changes in budget or schedule.

Figure 0-17. Annual APDU Process Map



Any changes made in an Annual APDU will be carefully reviewed to ensure that they do not fall within the criteria for an APDU As-Needed.

Required Documentation for an APDU

The State agency must submit electronic copies of the annual APDU with a scanned copy of transmittal letter signed by an official authorized to commit State funds for the effort—one electronic copy to the FNS Regional Administrator, and one electronic copy to the State Systems Office Director—no later than 60 days prior to the anniversary date of the original PAPD/IAPD approval, unless the submission date is specifically altered by FNS.

State agencies should include the following components in the APDU:

Transmittal Letter—Cover letter, signed by the appropriate State official, identifies the State agency sponsor of the project who has the authority and responsibility to commit State resources to the project, to request Federal funding and approval, and to ensure the project goals and activities are carried out as identified within the IAPD. Appendix D provides an outline as well as a sample transmittal letter.

Project Status—Includes major accomplishments, challenges and resolutions, and outstanding issues.

Changes to the Approved PAPD/IAPD—Identifies all changes to the approved APD including changes to language, schedule, budget, or requirements.

Revised Schedule of Activities, Milestones, and Deliverables—Includes changes (increase or reduction) in the amount of time needed to complete any activities, milestones, or deliverables, the addition or deletion of new activities or deliverables, or the combining of activities to reach a milestone or deliverable.

Revised Budget—Addresses any increase or decrease in the approved budget, presented in required Federal Fiscal Year and Quarter line item format identifying funding sources both actual costs to date and estimates.

Actual Expenditures to Date—Report of actual funds expended to date as opposed to estimated amounts.

Contractor Performance (optional)**—**Identify any issues, resolutions, strengths, and weaknesses, and any significant change orders.

APDU Review and Approval

Annual APDUs are reviewed and approved in the same manner as APDs. If the APDU includes significant changes to an open PAPD or IAPD, the State agency will be liable for costs associated with the changes in the event of disapproval.

FNS approval of an Annual APDU constitutes its acceptance of the State's activity update and any significant changes, unless otherwise stipulated. FNS will notify the State agency in writing of its approval or disapproval and/or any need for additional information or clarification of the information submitted.

2.4.2. APDU As-Needed Process

The APDU As-Needed presents major changes that significantly affect the selected IS approach or outcome and is specifically used for prior approval of changes in funding levels, project timeline extensions or delays, changes in procurement methodology, changes in cost allocation methodology, or changes in scope or system architecture. States are at risk for the costs of IS projects' attributes that do not comply with the approved APD, until such time as written FNS approval is granted. Therefore, it is imperative the State agency submit the APDU As-Needed as soon as it becomes aware of significant changes.

The APDU As-Needed is similar to an initial APD in that it identifies key factors, especially as they relate to cost, scope, or schedule, to consider when changing the course of a project. These include not only the nature of the

proposed change, but also the effect that change will have on those portions of the project in which FNS and the State agency have already invested.

Circumstances for an APDU As-Needed

The State agency must submit an APDU As-Needed under the following circumstances:

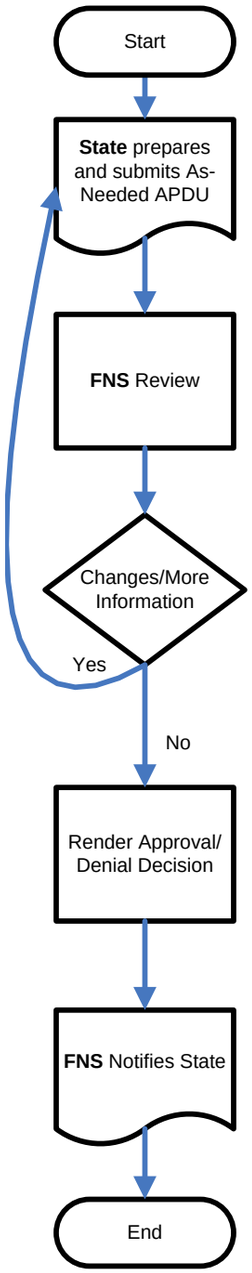
- A significant increase in total costs (>$10 million or 10 percent of the total project cost, whichever is less, for SNAP and >$100,000 for WIC)
- A significant schedule change (>120 days for SNAP or >90 days for WIC) for major milestones
- A significant change in procurement approach and/or scope of procurement activities beyond that approved in the APD, such as:
  - A change in procurement methodology
  - A reduction or increase in the procurement activities that were described in the APD
  - A change in an acquisition (e.g., changing from a State blanket purchase agreement to issuing an RFP)
- A significant change in an approved system concept or scope of the project, such as a proposal of a different system alternative, a change in platform, a change in the project plan, or a change in the cost-benefit projection
- A change to the approved cost allocation methodology

To avoid any gaps in funding approval, the State agency must submit an APDU As-Needed as soon as significant changes are known but no later than 90 days from the time when significant changes are anticipated to occur. The APDU As-Needed is not optional but mandated by the triggers discussed above.

APDU As-Needed Process Steps

1. The State agency prepares and submits the PAPD to FNS electronically, including a scanned copy of a transmittal letter signed by an official authorized to commit State resources. The electronic submission should be sent to the appropriate FNS Regional Office.
2. FNS reviews the APDU and notifies the State agency if there is a need for more information. FNS approves or denies APDU. FNS informs the State agency of the decision.
3. The State agency continues to conduct its systems development activities (planning, implementation) per the PAPD or IAPD.

Figure 0-18. APDU As-Needed Process Map



Required Documentation for an APDU As-Needed

State agencies should include the following components in an APDU As-Needed:

Transmittal Letter—Cover letter, signed by the appropriate State official, identifies the State agency sponsor of the project who has the authority and responsibility to commit State resources to the project, to request Federal funding and approval, and to ensure the project goals and activities are carried out as identified within the IAPD. Appendix D provides an outline as well as a sample letter.

Executive Summary—Describes at a high level the reason(s) for significant changes in the project and how these changes will impact the project's scope, approach, cost, schedule, and resources.

Project Status—Includes major accomplishments, challenges and resolutions, and outstanding issues.

Changes to the Approved APD—Addresses significant language changes that affect the meaning and intent of the APD. Examples include transferring from another State a system that performs similar functions, instead of developing a new system; performing project management in-house instead of contracting it outside; or adding another program as a system user.

Revised Technical Approach*— Addresses significant changes that affect the technical specifications and requirements of the system under development. Examples include a change from a distributed closed system to a web-based system or from a proprietary programming language to an open-source language.

Revised Functional Requirements*—Incorporates additions to or deletions from the last defined functional requirements for the system. Examples include removing an interface or a function such as growth chart plotting or adding customized reports.

Revised Project Management Plan and Resource Requirements*—Addresses changes in key personnel, staffing, and associated duties. Examples include moving project management in-house instead of contracting it outside, replacing key State or contracted personnel, losing essential resources in either the program or technical area, or changing the scope of quality assurance (QA) duties.

Revised Schedule of Activities, Milestones, and Deliverables*—Includes changes (increase or reduction) in the amount of time needed to complete any activities, milestones, or deliverables, the addition or deletion of new activities or deliverables, or the combining of activities to reach a milestone or deliverable.

Revised Budget*—Addresses any increase or decrease in the approved budget, presented in required Federal Fiscal Year and Quarter line item format identifying funding sources both actual costs to date and estimates.

Revised Cost Allocation Plan*—Addresses any change in the approved cost allocation plan resulting from budget increases or the addition or removal of participating programs.

Contractor Performance (optional)—Describes issues and resolutions, strengths and weaknesses, and any significant change orders

APDU As-Needed Review and Approval

When the State agency submits the APDU As-Needed to FNS, FNS responds to it in the same manner and time frame as an APD. FNS approval of an APDU As-Needed constitutes its acceptance of the State's activity update and any significant changes, unless otherwise stipulated. FNS will notify the State agency in writing of its approval or disapproval and/or any need for additional information or clarification of the information submitted.

* *As applicable*

The APDU As-Needed is submitted when a State changes the course of its project. The Annual APDU is an annual update the State provides to report on the progress and accomplishments of its approved project. If a State submits an As-Needed document and shortly thereafter an Annual APDU, the former will likely be included in the latter. This action diverts State resources to preparing a relatively unnecessary document and FNS resources to reviewing a redundant one. In such instances, there may not be a need to submit an Annual APDU. To maintain consistency with other Federal agencies and lessen the State reporting burden, FNS may waive the submission of another Annual APDU for up to 18 months.

FNS may waive the requirement for a State to submit its Annual APDU when it has submitted an APDU As-Needed within 6 months. FNS may either 1) reset the State's anniversary date for submitting its next Annual APDU from the date of the original APD approval to that of APDU As-Needed approval or 2) waive the Annual APDU annual update for that year, as long as the budget submitted for the APDU As-Needed covers the full period. FNS reserves the right to request additional information or updates in the interim.

2.4.3. IAPD Closure

Closure of an IAPD occurs when all activities associated with the implementation phase, approved through the IAPD, have been successfully completed to the satisfaction of FNS and any other contributing Federal agencies. . Official closure of the IAPD must occur to document the end of the implementation activities and the actual costs incurred, and to terminate FNS-funded activities. The State must submit the following information:

- √ Final project plan showing all work completed
- √ Final budget showing all expenditures by line item by Federal Fiscal Year and Quarter
- √ Final cost allocation across all contributing entities (as applicable)
- √ List of all deliverables and payments made to all contractors or to State IT staff
- √ Description of the goals met by the project and any deviations from the last approved APDU
- √ Description of any problems encountered during system development and implementation and their resolutions
- √ Description of any outstanding issues and how these will be resolved (these should be minor or else closure cannot occur)
- √ Estimate of annual operating costs for the new system
- √ Documentation of any post-implementation reviews or reports conducted by the State or contractors, if available

If projects become dormant (display no activity for a substantial period of time) or are abandoned (no longer being conducted by the State agency) before they attain the goals set forth in the IAPD, FNS will make every effort to contact the State to determine if a need still exists for the project. If the State does not respond to FNS communications regarding the project, FNS may close the IAPD at its own discretion, terminate funding, and recover any funds owed. FNS will make every effort to close an IAPD only when it has been completed or when there is mutual agreement with the State agency.

2.5. THE EMERGENCY ACQUISITION REQUEST PROCESS

An EAR is a brief written request from the State to FNS for FFP to allow the State agency to take prompt action on acquisitions in urgent situations. Following the approval of an EAR FNS will work with the State agency to determine what portions of the IAPD process are applicable and what steps must be taken. Emergency situations are those for which State agencies can demonstrate to FNS an immediate need to acquire IS equipment or services to continue operation of an FNS program, and that the need prevents the State from following the normal prior approval requirements. Examples of such situations include equipment failure attributed to physical damage or

destruction caused by natural or other disasters and changes imposed by Federal legislative requirements that necessitate immediate acquisition of IS equipment or services.

FNS will not consider circumstances arising from poor planning on the part of State agencies to be emergency situations. Failure on the part of a State to begin acquisition procedures of equipment or services in a timely manner to meet the requirements, deadline, situation, or event does not constitute an emergency. The State may not submit an EAR for approval of a sole source selection of a vendor to continue operations. Each State is responsible for knowing the procurement and contracting processes and their timeframes and must plan accordingly.

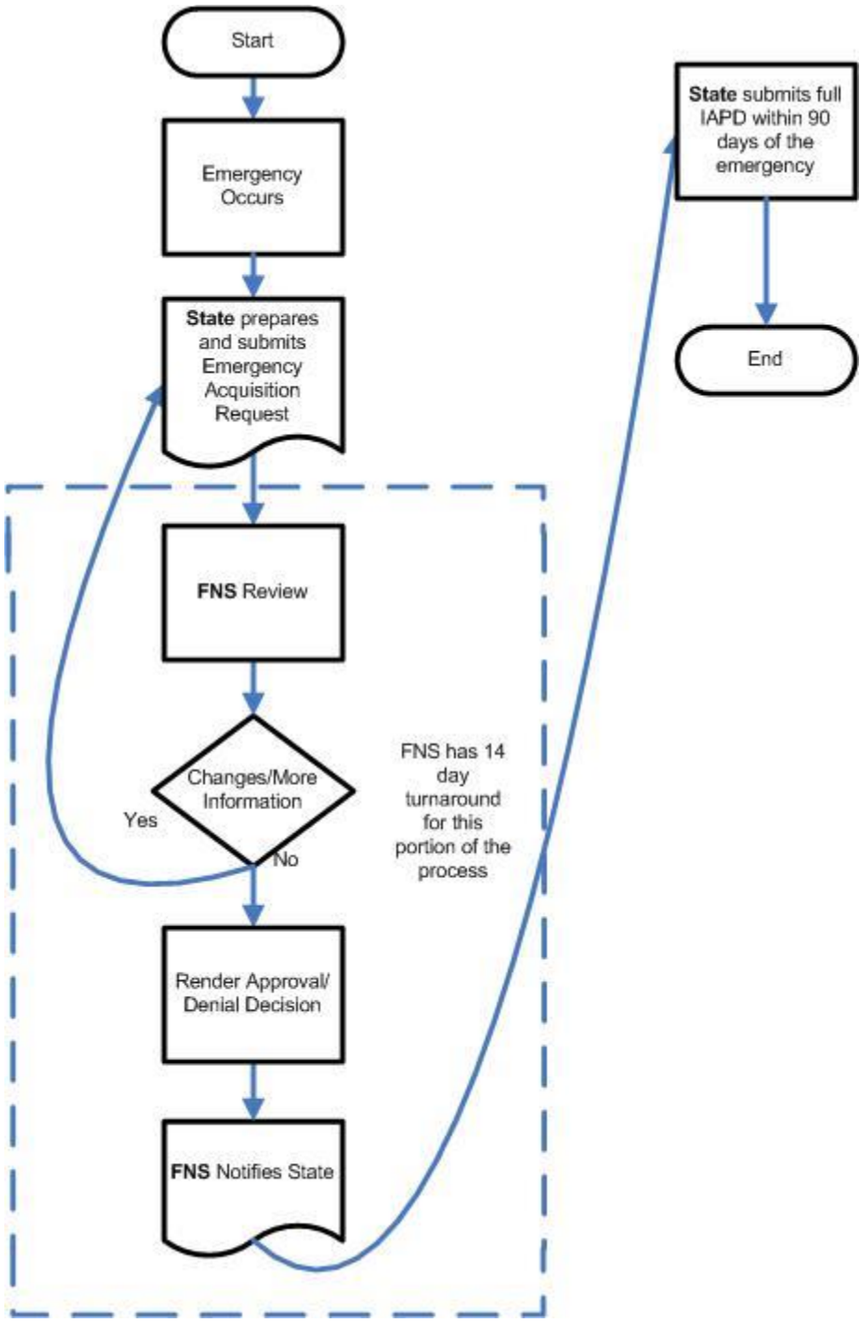
2.5.1. Overview of the EAR Process

A high-level overview of the EAR process follows. The process map (see Figure 0-19) provides a graphical representation of the EAR process.

The State agency prepares and submits electronic copies of the EAR and scanned copies of a transmittal letter signed by an official authorized to commit State resources. One copy is submitted to the Regional Administrator, the other to the State Systems Office Director.

1. FNS reviews the EAR and notifies the State agency if there is a need for more information.
2. FNS approves or denies EAR. FNS informs the State agency of the decision.
3. The State agency conducts acquisition activities.
4. The State agency must submit an approvable IAPD or IAPDU no later than 90 days after the date of the initial EAR or the FFP/Federal funding for the EAR may be disallowed.

Figure 0-19. EAR Process Map



The State agency should confirm receipt by FNS of its request. FNS has up to 14 days to render an approval recommendation and to inform the State agency of the results. To expedite communications during emergency situations FNS may provide its decision informally, followed by an official written statement.

2.5.2. Required Documentation for an EAR

The information required in the EAR may be included in the State's transmittal letter to FNS, or the EAR can be a separate document enclosed with the transmittal letter. Requirements for an EAR include the following:

- √ **Description of the IT equipment or services** to be acquired
- √ **Estimation of the costs** of the IT equipment or services to be acquired (include only costs not recovered by insurance).
- √ **Description of the circumstances** that have resulted in the State agency's need to proceed with the acquisition before obtaining formal FNS approval through the normal prior approval procedures. The State agency must document that its immediate need to acquire IT equipment or services was unexpected and could not have been anticipated or planned.
- √ **Description of the adverse effect that would result** if the State agency did not immediately acquire the IT equipment or services.
- √ **Justification of any sole-source procurements**.

The letter must identify the request as an EAR and include the name, title, telephone number, and e-mail address of the Project Manager. Moreover, the State's letter must specify the requested level of funding. It must also include a statement specifying which method of procurement will be used and that the procurement will be conducted in accordance with USDA CFR 7 CFR 3016.36 (http://www.gpo.gov/fdsys/pkg/CFR-2011-title7-vol15/pdf/CFR-2011-title7-vol15-sec3016-36.pdf).

2.5.3. EAR Review and Approval

If the EAR is approved, FFP will be available to the State from the date the State agency acquires the IT equipment or services. State agencies may proceed with such acquisitions after they receive FNS written acknowledgment that an emergency situation exists, which will constitute FNS approval to proceed and ensure the availability of Federal funds for allowable costs. This acknowledgment must be in specific reference to the State's request for an emergency IT acquisition. Any other FNS correspondence regarding disasters, disaster declarations, or other emergencies will not constitute an approval for emergency IT acquisitions.

If a State agency elects to proceed before receiving FNS written acknowledgment, it does so at its own risk, pending an FNS decision or until an approvable IAPD or IAPDU is submitted. Likewise, if the State agency does not submit the required IAPD or IAPDU no later than 90 days or submits a document that cannot be approved, FNS may disallow the FFP claimed for the emergency acquisition.

An IAPD submitted in conjunction with an EAR will be evaluated in the same manner as other IAPDs. Based on the severity of the emergency, FNS may electronically acknowledge the EAR as soon as possible, ensuring that copies of all correspondence, written or electronic, are retained as a record in the official files and available for review and formal IAPD response purposes.

2.6. APD CLOSURE

It is the responsibility of FNS to close formally an APD once the State agency has successfully completed all activities approved in the APD. Closure of an APD occurs when all activities associated with the SDLC phase, approved through the APD, have been successfully completed to the satisfaction of FNS and any other contributing Federal agencies. FNS may request a final report from the State before closing the APD. Official closure of the

APD must occur to document the end of the approved activities and the actual costs incurred, and to terminate FNS funding activities.

If projects become dormant (display no activity for a substantial period of time) or are abandoned (no longer being conducted by the State agency) before they attain the goals set forth in the APD, FNS will make every effort to contact the State to determine if a need still exists for the project. Should the State not respond to FNS communications regarding the project, FNS may close the APD at its own discretion, terminate funding availability, and recover any funds owed. FNS will make every effort to close an APD only when it has been completed or when there is mutual agreement with the State agency.

Closing a PAPD or an IAPD entails confirming that the project objectives have been met and determining the actual costs incurred. Once all approved activities are satisfactorily completed, FNS will close the IAPD or PAPD. FNS requires submission of final documentation to validate all aspects of the project prior to closure. Since the closure process may include document review as well as on-site review(s), the standard FNS review timeframe does not apply.

To close out a PAPD or an IAPD, the State must submit the information as show in Figure 2-19.

Figure 0-20 Document Closure Requirements

Closure Documentation Requirements		
Documents	**PAPD**	**IAPD**
Transmittal Letter	X	X
Final project plan showing all work complete		X
Final summary of work complete	X	
Final budget showing all expenditures by line item by FFY & Quarter	X	X
Final cost allocation across all contributing entities (if applicable)	X	X
List of all deliverables and payments made to contractors or State IT staff	X	X
Description of the goals met by the project and any deviations from the last approved APDU	X	X
Description of any problems encountered during system development and implementation and their resolutions		X
Description of any outstanding issues and how these will be resolved (these should be minor or closure cannot occur)		X
Estimate of annual operating costs for the new system		X
Documentation of any post-implementation reviews or reports conducted by the State or contractors, if available		X

2.6.1. Post-Implementation Reviews

The APD Approval process, as described in 7 CFR 277.18 (http://www.ecfr.gov/cgi-bin/text-idx?SID=61958349b5909e9586190b85ab9dd0d2&node=20140102y1.13) of the regulations states that FNS may conduct a post-implementation review of the system once it is fully operational statewide (approximately 6 months after system deployment statewide and to accommodate the initial user learning curve). FNS may conduct an onsite post-implementation review to ensure the State accomplished the goals stated in its APD. This review encompasses the program, technical, security, and financial aspects of the system. FNS' post-implementation review will include verifying the following:

- √ Program policy is correctly implemented by the system
- √ The implemented system is an adequate reflection of the specified system requirements as approved in the IAPD

- √ Project goals and objectives were met
- √ The information systems equipment and services are being properly used in meeting objectives described in the IAPD and accurate equipment inventory records exist as required by 7 CFR 3016.32 of the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments Regulations (http://www.gpo.gov/fdsys/pkg/CFR-2013-title7-vol15/pdf/CFR-2013-title7-vol15-sec3016-32.pdf).
- √ The actual costs of the project and any significant divergence from the cost estimates in the most recently approved APDU
- √ The cost allocation methodology was complied with and all charges made were for eligible costs
- √ The system meets the FNS program's system functional standards
- √ The system satisfies requirements in the areas of accountability, management, user training, documentation, security, and use of automated tools
- √ All aspects of the system have been validated before the warranty period expires.

A critical reason for the post-implementation review is to ensure that the system is reviewed and evaluated before the warranty period expires. After implementation, States often forget they have a limited time to identify any problems or shortcomings with the system and to get them fixed during the warranty period. The FM portion of the review is often conducted separately as part of the planned FM reviews of States conducted by FNS Regional Offices.

FNS will prepare a detailed report of its findings and submit the report to the State agency within 60 days of the review. The State agency has 45 days from the date of receipt of the review findings to inform FNS of its proposed corrective actions.

2.6.2. Regional Office Fiscal Closure

Once the State Systems Office (SSO) has determined a project may be closed from an APD standpoint, it will be referred to the FNS Regional Office (RO) for fiscal closure. The FNS RO will compare expenditures reported in the annual APDU with reported expenditures for IS development from: Form SF-269: *http://www.whitehouse.gov/omb/grants/sf269.pdf* (through FY 2011) and Form SF-425: *http://www.whitehouse.gov/sites/default/files/omb/assets/grants_forms/SF-425.pdf* (beginning FY 2012), or other expenditure reports. Any differences are to be examined and reconciled. There should be no significant differences between expenditures reported on the Form SF-269/SF-425 and those reported in the annual APDU. Reconciled expenditures should be compared with the approved APD budget to determine if budget revisions are required. In addition, the FNS RO should examine that the State has complied with the requirement to submit an APDU-As Needed with revised budget projections. The FNS RO shall notify the designated SSO representative of any inconsistencies or inaccuracies in project budgets that cannot be reconciled. Otherwise, the SSO should be notified when the budget is reconciled and send a closure letter to the State agency.

2.7. OVERVIEW OF THE RFP PROCESS

The State agency will use an RFP to obtain contractor support or purchase hardware and software. The RFP is developed to solicit contractor services for a variety of efforts, including planning activities, document development, software and information system development, QA, operations, maintenance, training, and other program life-cycle services. The State agency is responsible for ensuring that the RFP contains the components required by FNS and that it is consistent with State procurement regulations. The State must submit RFPs to FNS for review and comment prior to release to the vendor community. FNS will review the RFP and notify the State agency of the review status within **60 days**. Upon FNS approval, the State agency may release any RFPs to the vendor community. However, if a State makes any changes to the approved RFP prior to publication, these changes will need to be submitted to FNS for approval. Once the RFP is published, notify FNS of the publication date and submit any subsequent amendments that are made to the RFP.

2.7.1. Planning RFP Review and Approval

The primary goal of the Planning RFP is for the State agency to hire professional, consultative services for planning and management activities. State agencies must receive prior approval from FNS for all RFPs and contracts before entering into any agreement for contractor services (see Figure 0-20).

Figure 0-20. RFP Submission Thresholds

Stakeholders	Competitive Procurements		Non-Competitive Procurements	
	SNAP	WIC	SNAP	WIC
State agency prepares and submits Planning RFP FNS reviews within 60 days	For all acquisitions >$6 million	For all acquisitions >$100,000 (see Figure 4-1 for submission requirements below the APD threshold)	≥$1 million acquisition costs	>$100,000 acquisition costs

2.7.2. Implementation RFP Review and Approval

The Implementation RFP is more detailed and comprehensive than the PRFP. It is focused on hiring technical services that result in the creation of new software and implementation of a new system. As with a PRFP, State agencies must receive prior approval from FNS before entering into any agreement for contractor services (see Figure 0-20). The State agency is responsible to have performance expectations, prescribed conditions and remedies in place that protect them in the event of a failure in performance by contracted vendors, such as holdbacks, regular monitoring of performance, or liquidated damages. Acquisitions and subsequent undertakings that fail to meet approved APD requirements may be subject to disallowance in accordance with 7 CFR 277.18 (h).

2.7.3. Contracts and Contract Amendments

Base contracts are subject to FNS prior approval consistent with the thresholds for RFPs as shown in Figure 2-20. Base contract means the initial contractual activity for a defined period of time. The base contract includes option years but does not include amendments.

Contract amendments that do not cumulatively exceed 20 percent of the base contract cost do not require FNS prior approval as long as the contract was competitively procured. (FNS may make exceptions to this requirement on a case-by-case basis.) Contract amendments that cumulatively exceed 20 percent of the base contract must be submitted for FNS prior approval. This may mean, for example, that the first amendment for 15 percent would not be subject to approval but a subsequent amendment for 6 percent would. When a project crosses the 20 percent

threshold, FNS may at its discretion review the entire scope of the changes, but would not disallow costs that were not subject to approval. FNS may require States to submit contract amendments for approval even if they are under the threshold amount if the contract amendment is not adequately described and justified in an APD or APDU. Contract amendments must always be submitted for approval if the base contract was not competitively procured. Copies of contract amendments, regardless of cost, must be sent to FNS for the record.

Refer to Figure 6-1 for additional details.

2.8. KEY STAKEHOLDER RESPONSIBILITIES IN THE APD PROCESS

The State agencies and FNS have the primary responsibilities in the APD process. The State agency administers FNS programs depending heavily on IS. The FNS SSO is responsible for the review and approval process for APDs. SSO is a State agency's initial point of contact regarding the APD process or State systems issues. SSO collaborates with the program and FM entities in the FNS ROs. SSO also ensures consistency and collaboration within FNS and between Federal agencies. Figure 2-21 identifies major responsibilities for these key stakeholders in the APD process.

Figure 0-21. Key Stakeholder Responsibilities in the APD Process

Stakeholder	Responsibilities
State Agencies	▸ Administer FNS programs through the use of IT ▸ Identify program needs or requirements best addressed through IT ▸ Assess the planning and implementation steps to successfully meet these needs ▸ Prepare and submit necessary documentation to appropriate Federal agencies to secure approval of IS projects and Federal funding ▸ Implement IT plans ▸ Conduct the overall project and the integration of system solutions ▸ Manage all aspects of the systems project throughout its life cycle, including reporting, project management, financial management, and risk management ▸ Demonstrate through thorough testing that the system meets all program functional and performance requirements ▸ Ensure active involvement and communication with the State's oversight/executive committee at all stages of the SDLC ▸ Track and report on project funds ▸ Respond to FNS requests and update APD documentation when needed ▸ Ensure fair and open competition in the procurement process and manage contractors ▸ Enforce contract provisions, including boilerplate requirements, key personnel clauses, program-specific requirements, and performance guarantees ▸ Adhere to Federal requirements for status reports, State plans, funding process requirements, and policy implementation

Stakeholder	Responsibilities
FNS	▸ Oversee the APD process for State agencies; coordinate all phases of the process with the State agency and monitor progress under approved APDs ▸ Review and render decisions on all APDs and required documentation submitted in accordance with established guidelines and time frames; coordinate APD-approval activities among the regional organizational components (e.g., program and FM) ▸ Approve specific program waivers (SNAP only) (Except waivers of depreciation that are reviewed when total FFP involved is more than $6 million thresholds for SNAP and total Federal funding is more than $3 million thresholds for WIC) ▸ Coordinate and confer with other Federal partners in approval process to ensure consistency ▸ Arrange visits to State agencies during the project life cycle, especially during testing, pilot, and rollout, as appropriate ▸ Participate in conference calls and project meetings, as necessary ▸ Arrange dates and preliminary agenda for post-implementation reviews and prepare final reports, including any corrective action items, as necessary ▸ Provide technical assistance (e.g., training, acceptance testing, budgeting, and cost allocation) ▸ Officially close APDs

Ensuring accountability, efficiency, and effectiveness in program operations requires a commitment to quality service from all key stakeholders. Communication and coordination between FNS SSO, financial, and program entities is critical for the successful management of these IS projects.

2.8.1. State Planning for Information System Acquisitions

A major responsibility of the State agency is to know whether it is ready for a new system and able to use FNS funds effectively and efficiently engage in the SDLC. The following are some questions the State agency should ask itself to make this determination:

- √ Are there sufficient resources dedicated to the task?
- √ Do you have a champion, such as Department head, Commissioner, State Chief Information Officer (CIO)?
- √ Do you have access to people with the necessary knowledge, skills, and abilities?
- √ Do you have access to long-term funding for maintenance and operations?
- √ Do you have technical and management abilities? If not, where will you get them?
- √ How will you develop or access the knowledge you will need to complete the project?
- √ What are your strengths and weaknesses and how can you fill any gaps?
- √ Will the new system—
  - ✔ Improve program effectiveness
  - ✔ Strengthen controls and accountability
  - ✔ Increase operational efficiency
  - ✔ Meet Federal reporting requirements
  - ✔ Better serve program participants?

If the State can positively answer these questions, it is probably ready for a new system, but must be able to obtain buy-in from its key stakeholders.

2.8.2. FNS APD Reviews

In general, when FNS reviews APDs, it seeks to ascertain the program benefits and overall process improvements to be obtained through the proposed IS.

PAPD and IAPD

FNS focuses on areas of program functionality that may benefit from IT solutions, program resources, improved Federal reporting and accountability, local agency efficiencies, allowable costs, budget and cost/benefit analysis, staffing levels, maintenance and security issues, compatibility with other existing or anticipated State projects, procurement rules, contractual terms, and transitioning costs from development to operations. FNS' review typically addresses the following questions:

- √ Who is/are the requesting State agency (ies)?
- √ What is the purpose of the APD?
- √ Which Federal/State programs are involved/affected?
- √ How will the project be conducted (contractor support, in-house, combination and lease/purchase of software/hardware, etc.)?
- √ Which State and Federal funding agencies are involved?
- √ What is the cost of the project?
- √ What are the benefits of the project to the affected program(s)?
- √ Will the project benefits support the costs (CBA)?
- √ What is the project schedule?
- √ Does the budget reflect all allowable costs (staff time, training, equipment, travel, testing, etc.)?
- √ Was a feasibility study/alternatives analysis conducted prior to the submission of the APD? Are the results included?

FNS reserves the right to be included in planning and project meetings, as appropriate.

RFP and Contract

FNS reviews typically address the following questions:

- √ What is being purchased or leased?
- √ What are the functional requirements?
- √ What are the technical requirements?
- √ What standards are in-place for the QA process to ensure the product meets functional and technical requirements?
- √ Do the requirements in the RFP adequately reflect those in the APD?
- √ How will the product be produced and by whom?
- √ What are the terms of the RFP (single or multiple vendors)?
- √ What is the RFP schedule? Does it allow adequate response time for Federal review and for potential

bidders to respond?

- √ Do the tasks and deliverables make sense when compared to the needs of the APD?
- √ Does the RFP follow proper State and Federal procurement law?
- √ What is the purpose of the contract? Does it match the RFP?
- √ What are the contract terms?
- √ Does the SOW adequately reflect the deliverables in the RFP?
- √ Is the type of contract the same as that described in the RFP (firm fixed price, etc.)?
- √ Does the contract reflect that the prime contractor will be responsible for the work products of all subcontractors?
- √ Does the contractual agreement include all mandatory Federal clauses?
- √ Are incentives and penalty and termination clauses included? Are they reasonable?
- √ How are payments to be made to the vendor? Is a schedule included?
- √ Does the Order of Precedence section include reference to the RFP, FRD, feasibility study and/or any other documents needed to clarify the project's outcomes?
- √ Is the Order of Precedence in correct hierarchical order, first to last, for dispute resolution purposes? (For example: Federal standards and clauses, Standard State Appendix x, Body of the Agreement and Exhibits, the RFP, Official Questions and Answers, Revisions to the RFP, the Contractor's Proposal, and any correspondence related to the Contractor's proposal)
- √ Does the RFP and Contract address the process for making significant changes to tasks and/or deliverables?
- √ Does the RFP and Contract address the formal change order process
- √ Does the contract adequately protect the investment being made by the State and Federal agency (ies)?
- √ Does the RFP and contract reflect the "subject to Federal funding" clause?
- √ Does the RFP and contract reflect software ownership by the State and USDA if Federal funding is used?

Annual APDU or APDU As-Needed

FNS' review of APDU documents focuses on project progress in planning or implementing IT solutions; budget expenditures and cost allocation plan updates; project management, technical solutions, project schedule, cost allocation, and major accomplishments; and IT solutions of program functions. The review typically addresses the following questions:

- √ Does the document adequately update the APD since the last update or submission?
- √ What are the major accomplishments during the reporting period?
- √ Have significant changes in scope, schedule, or funding occurred? If so, how do they affect the overall project? Is adequate information and justification for the change(s) included?
- √ Is the most current budget reflected in the document?
- √ Is the most current schedule included in the document?
- √ Have changes occurred to the proposed functionality and/or hardware/software? If so, how do they affect the

overall project? Are they adequately addressed/justified?

√ Are there any changes to the cost allocation plan? If so, has the budget been updated accordingly?

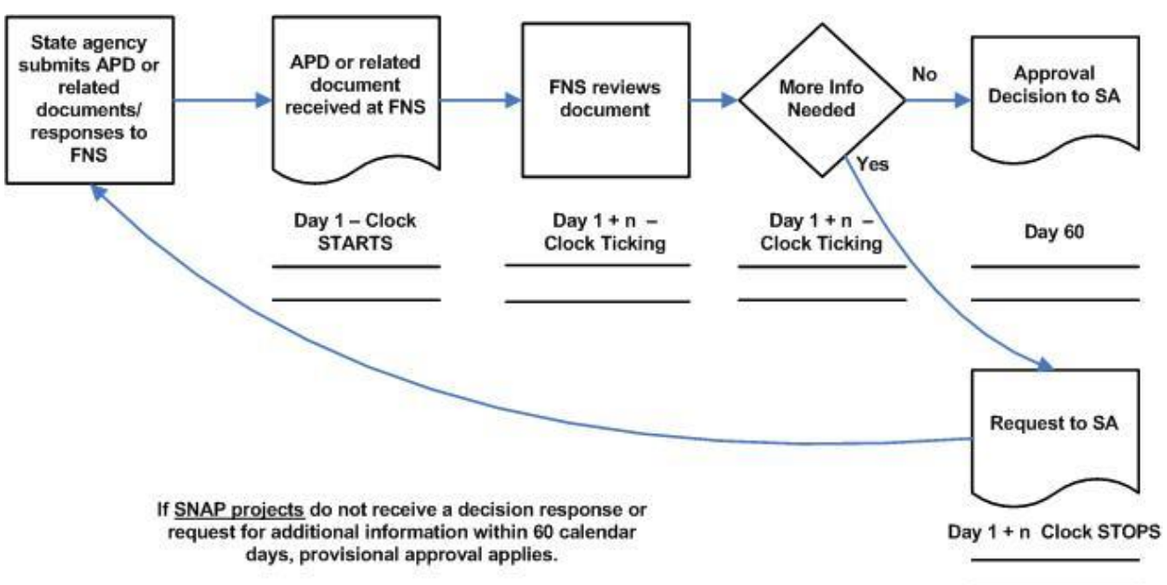
2.9. FNS APD REVIEW TIME FRAMES

Document review timeframes are defined for all APDs and associated documents submitted to FNS. With the exception of the EAR, FNS has 60 days to review a document. It is important that both submitters and reviewers understand how the review "clock" works.

Once FNS **receives** an APD or associated document, the review clock starts ticking. FNS has 60 days to review and disapprove, approve, or request additional information. This includes garnering APD Oversight Committee (OSC) approval/concurrence. The clock stops when FNS communicates to the State the approval, disapproval, or a request for additional information. If FNS requests additional information, the clock starts again when FNS receives the State response. The receipt of additional information starts **another** 60-day review cycle.

FNS strives to review all documents in less than the allotted 60 days. States may request FNS to perform expedited reviews of certain documents if a situation warrants. States requiring expedited review should contact FNS as soon as they are aware of the situation so that FNS can make resources available. State agencies are asked to consult with FNS as frequently as needed. FNS views the APD process as a Federal-State partnership and strives to implement a team effort in fulfilling the requirements of the process. Figure 2-22 provides a map of how the APD Review Clock is applied by FNS.

Figure 2-22. The APD Review Clock



State agencies must be able to properly follow the APD process, regardless of the size of the project or procurement (e.g., interim or full-scale projects) and submit the appropriate documentation based on funding thresholds. The sample timetable (Figure 0-23) presents a timeline using the full 60 days provided for document review and approval. State agencies that adhere to APD requirements and provide complete information as required can

minimize the review clock period, because key documents would be approvable with few or no revisions. A sample SNAP EBT timetable is provided in Figure 3-3.

Figure 0-23. APD Federal Review Sample Timetable

Process Step	Expected Completion Date
Planning Phase (24 months)	
SA submits Planning APD to FNS	January of year 1
PAPD approved by FNS	March—year 1 (60 days)
SA submits Planning RFP to FNS	March—year 1
Planning RFP approved by FNS	May—year 1 (60 days)
SA releases Planning RFP	June—year 1
Proposals due from bidders	August—year 1 (at least 60 days)
Proposals evaluated/selection made	August—year1
SA submits contract to FNS	September—year 1
Contract approved by FNS	November—year 1 (60 days)
Contract signed	December—year 1
Planning phase completed	December—year 2 (one year for planning activities)
Implementation Phase (12 months to contractor-on-board)	
SA submits IAPD to FNS	October—year 2
IAPD approved by FNS	December—year 2 (60 days)
SA submits Implementation RFP to FNS	December—year 2
RFP approved by FNS	February—year 3 (60 days)
SA releases Implementation RFP	March—year 3
Proposals due from bidders	May—year 3 (at least 60 days)
Proposals evaluated/selection made	May—year 3
SA submits contract to FNS	July—year 3
Contract approved by FNS	September—year 3 (60 days)
Contract signed	October—year 3
SA begins implementation activities	November—year 3
Total Estimated Time Before Beginning Implementation Activities: 34 months (Does not account for simultaneous or iterative activities)	

State agencies are encouraged to work closely with FNS to facilitate document review and funding approval in a timely fashion. States may submit RFPs simultaneously with APDs. States may also request that FNS performs reviews in parallel with their internal State reviews, sharing comments and changes, to expedite a project's approval. FNS strives to complete its reviews as soon as possible. Good communications between parties can serve to expedite the review process.

2.10. ON-SITE REVIEWS AND MONITORING

State agencies should have detailed project schedules and establish and maintain frequent status reports to oversee their contractors on the project level and submit status reports to FNS to ensure overall program administration. FNS may require the State agency to provide contractor and project status reports for informational purposes throughout the project. These may be outlined as conditions for funding approval.

2.10.1. Go/No-Go Decision Points

At any point in the SDLC, but especially before continuing to the next phase, the State or FNS may establish go/no-go decision points to assess the project status and determine if continuing on to the next phase is in the best interest of the project. The project should not advance to the next phase until all critical criteria are met.

2.10.2. Status Reports

The results of State agency monitoring may be reported in routine status reports, in addition to APDUs. For management to make informed and timely decisions regarding work efforts, status reports should reasonably reflect current project performance. See Section 5.7.1 for a detailed description of the contents of a status report.

2.10.3. On-Site Monitoring

FNS reserves the right to conduct on-site monitoring in the form of project status visits, local and/or state agency reviews, participating in acceptance testing, and in user training.

State agencies may choose to have FNS participate as "ex-officio" members of project executive steering committees in order to obtain Federal reaction to plans and challenges at the earliest stages and also to obtain Federal buy-in when necessary. FNS may also participate as technical advisors on the project throughout the SDLC or on an as needed basis.

System Functional Requirements Review

After the contractor has developed the system according to the requirements negotiated in the design session, and after the system has passed User Acceptance Testing (UAT) (see Section 5.5.4, FNS may elect to conduct a System Functional Requirements Review before and/or during the initial pilot training—before the deployment of software—for several purposes:

- Evaluate system performance and accuracy
- Look for indicators of successful development
- Verify that functional requirements were met
- Ensure that all policy to be administered through the system is accurate
- Analyze data capture and integrity, edits, and calculations
- Verify that UAT was thorough and successfully completed.

FNS may conduct this review either onsite or by reviewing UAT and/or Pilot Evaluation documentation provided by the State agency. The System Functional Requirements Review ensures the system interfaces successfully with other programs and external entities, including EBT. Please note that this does not have to be an on-site review, because it is a review of the FRD created for the project to ensure it meets all State and Federal requirements.

States are encouraged to review prototypes at various stages of development to ensure that functionality, as well as the presentation layer, is being created in a user-friendly manner.

FNS Post-Implementation Reviews

The APD Approval process, as described in 7 CFR 277.18 (http://www.gpo.gov/fdsys/pkg/CFR-2011-title7-vol4/pdf/CFR-2011-title7-vol4-sec277-18.pdf) of the regulations states that FNS may conduct a post-implementation review of the system once it is fully operational statewide (approximately 6 months after system deployment statewide and the initial user learning curve). FNS may conduct an onsite post-implementation review

to ensure the State accomplished the goals stated in its APD. This review encompasses the program, technical, security, and financial aspects of the system. Refer to Section 2.6.1 for details.

2.11. SUMMARY

The documentation required for each APD varies by type of APD and program. However, to receive approval and subsequent funding, all documentation must be present and of sufficient content to allow FNS to make an informed decision on the APD request. Complete information as required expedites review, along with good communications among partners.

The remaining chapters in this handbook focus on specific aspects of the APD process and SDLC—program-specific requirements, procurement requirements, project and financial management, and systems security—to ensure that State agencies adhere to Federal regulations and requirements, and responsibly manage Federal funds for planning, developing, implementing, and maintaining their IS.