The Implementation Advance Planning Document

(IAPD)

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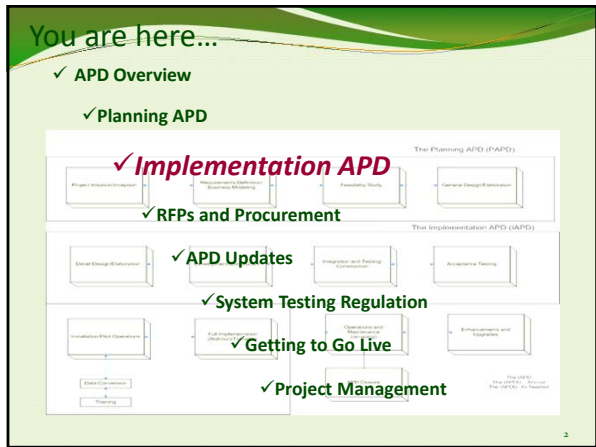
You are here…

✓ **APD Overview**

✓ **Planning APD**

✓ *Implementation APD*

✓ **RFPs and Procurement**

✓ **APD Updates**

✓ **System Testing Regulation**

✓ **Getting to Go Live**

✓ **Project Management**

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Acronyms used in this module:

APD – Advance Planning Document
APDU – Advance Planning Document Update
CBA – Cost Benefit Analysis
FFP – Federal financial participation
FFY – Federal Fiscal Year
FNS – Food and Nutrition Service
IAPD – Implementation Advance Planning Document
IS – Information System
IT – Information Technology
M&O – Maintenance and Operations
NSA – Nutrition Services and Administration
SAE – State Administrative Expense
SNAP – Supplemental Nutrition Assistance Program
USDA – United States Department of Agriculture
WIC – Supplemental Nutrition Program for Women, Infants, and Children

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Learning Objectives

After completing this module, learners will:
- Understand the purpose of the IAPD
- Understand the components that comprise the IAPD
- Understand the contents of each component
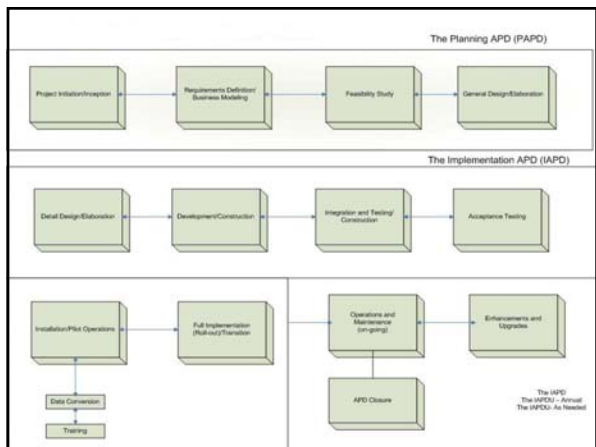- Know the process and steps for an IAPD submission and review

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Purpose

- Prior approval and requests use of Federal funds to carry our the proposed project

- Includes the design, development, testing and implementation activities; including acquisitions

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Tips for Submitting an IAPD

➢Well written and meet all review criteria

➢Incomplete or poorly written documents will result in delays or disapproval

➢Don't underestimate FNS review time

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An IAPD Tells Us

• Who you are
• What it is you want to automate and what benefit it is to FNS
• Why you want to automate it
• When you want to do this
• How you want to accomplish it
• How much it will cost
• Who pays for it

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An IAPD Tells Us

• Culmination of the Planning process
• Provides results of the analysis and feasibility of various automation alternatives
• Describes proposed automation project
• Provides initial management plan for acquiring, developing, testing and implementing selected alternative

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IAPD Submission Thresholds

Stakeholder	Program/Funding Source	
	SNAP	WIC
State agency prepares and submits IAPD 60 days before project initiation. FNS reviews within 60 days.	For all projects >$6 million total project costs	For all projects requesting funding ≥$500,000 total costs

HINT: It's in the 901!

Source: FNS Handbook 901, Figure 2-8

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Remember

Costs that otherwise might be approvable, may be disallowed if you do not obtain prior approval of your IAPD from FNS

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IAPD Documentation Requirements by Program

Documents	SNAP	SNAP EBT	WIC	WIC SAM	WIC EBT
1- Transmittal Letter with Official Signature	X	X	X	X	X
2 - Executive Summary	X	X	X	X	X
3- Functional Requirements Documents	X	N/A	X	X	X
4 - Feasibility Study/Alternatives Analysis	X	N/A	X	X	X (optional)
5- Cost-Benefit Analysis	X	N/A	X	X	X (optional)
6- General Systems Design	X	N/A	X	N/A (from transfer)	X
7- Capacity Planning or Study	X	N/A	X	X	X
8- Project Management Plan	X	X	X	X	X
9- Resource Requirements	X	X	X	X	X
10- Schedule of Activities, Milestones, and Deliverables	X	X	X	X	X
11- Proposed Budget	X	X	X	X	X
12- Cost Allocation Plan	X	X	X	X	X
13- Security Planning	X	X	X	X	X
14- Request for Waiver of Depreciation	X	X	X	X	X
15–Test Plan	X	X	X	X	X
16-Training Plan	X	X	X	X	X

HINT: It's in the 901!

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FNS Timeframes
6o DAYS

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**50 States
x 2 programs (WIC & SNAP)
+ WIC ITOs & US territories
+ states with multiple systems
x ~6 docs/project
÷ FNS staff
----
60 days**

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Components of the IAPD

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WHO

Transmittal Letter

➤ Letter signed by a State official with authority to commit State resources

➤ Demonstrates you have executive involvement and backing

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WHY

Executive Summary

➤ Describes business need at a high-level
➤ Identifies the stakeholders
➤ Summarizes advantages, challenges and shortcomings the proposed system will address
➤ Identifies resources required
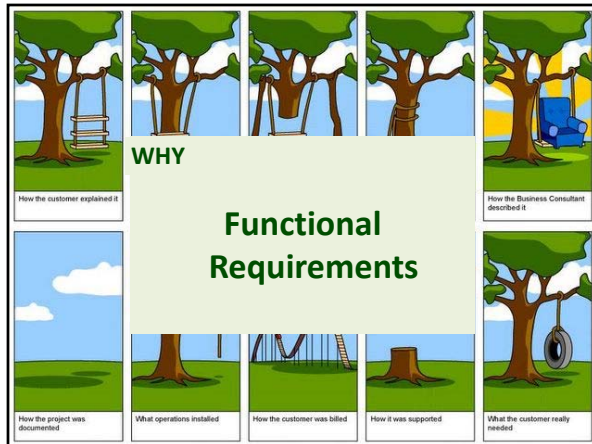➤ States the technical, financial, and program impacts of the project

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WHY

Functional Requirements

How the customer explained it

How the Business Consultant described it

How the project was documented

What operations installed

How the customer was billed

How it was supported

What the customer really needed

WHY

Functional Requirements Document

Comprehensive description of functions to be included in the system

- Federal SNAP requirements defined in ADP/CIS Model Plan (7 CFR 272.10)

- Federal WIC mandatory and optional requirements are available in WIC FReD

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WHY

Requirements Definition

Functional: "The What"
- Non-technical
- Plain English
- What it is and does
- Features and capabilities
- Customer oriented

Technical: *"The How"*
- Detailed components
- Particular technology
- Performance specifications
- Project team oriented

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WHY

Good Requirements are:

- Complete
- Valid – based on legitimate business needs
- Clear – unambiguous and precisely written
- Consistent
- Feasible
- Testable
- Traceable – linked to a source

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Overview of the Feasibility Study

➤ A preliminary study that determines whether the project being considered is technically, financially, and operationally viable

➤ Is directly linked to the Functional Requirements Document (FRD) in that the FRD is the baseline against which various approaches are assessed

➤ **Must include an <u>alternatives analysis</u>**

WHY

Alternatives Analysis
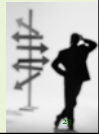
➤ Analysis of alternatives for hardware, software, and functionality

➤ Demonstrates if a system is feasible – technically, financially, operationally, and functionally

➤ Demonstrates which alternative is the "best fit"

WHY

Alternatives Analysis
What's the Point?

Demonstrates which alternative is the "best fit"
  ➤ *Technically*
  ➤ *Financially*
  ➤ *Operationally*
  ➤ *Functionally*

WHY

WHY

Alternatives Analysis
What's the Point?

Demonstrates which alternative is the "best fit"
- *Technically*
- *Financially*
- *Operationally*
- *Functionally*

WHY

What are "Alternatives"?

*Alternatives **MUST** include*:

- Transferring a SAM (WIC only)

- Transferring a system from another State (SNAP)

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WHY

What are "Alternatives"?

Alternatives MAY include:
- Upgrading or enhancing the existing system
- Transferring a system or components from another State
- Integrating with other systems (Medicaid, etc.)
- Developing a new system from the ground up
- Hosted solution (another State, cloud)

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WHY

Alternatives Analysis

The number of alternatives is driven by the State agency; as long as the same analysis and methodology are applied to each alternative.

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WHY

Alternatives Analysis

➢How will changes to existing systems and processes be accomplished (interfaces, data exchanges)?

➢Organizational effect upon personnel and skill requirements

➢Data conversion activities required

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WHY

Alternatives Analysis

➢Operational impacts on existing procedures, user relationships, system support plans

➢Resource effects during development and operations

➢Cost to operate the new system once implemented

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Alternatives Analysis is essential in determining the best direction for a State to take in developing a new system.

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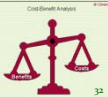
WHY

Cost-Benefit Analysis

- Determines which alternative will provide the greatest benefits relative to its costs

- Identifies the tangible and intangible benefits

- Provides the estimated cost of developing and operating each alternative

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WHY

FNS Cost Benefit Analysis Requirements

- IAPD must show a meaningful cost comparison was completed.
- Requirement for demonstrating the number of years to break even is *eliminated*.
- Tracking and reporting on the CBA beyond the initial approval is *eliminated.*

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WHAT

General System Design (GSD)

➢A broad high-level description of how the system will look from the technical side

➢Describes generic system architecture with possible components and processes

WHAT

General System Design (GSD)

- Combination of narrative and technical diagrams
- Identifies overall logic flow and systems functions desired
- Identifies performance requirements
- Identifies operating environment

WHAT

Capacity Planning

Determines overall size, performance and resilience of an information system
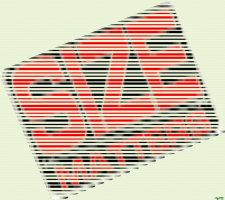
WHAT

Capacity Planning

Helps to establish a computer installation that meets current and projected systems needs

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WHAT

Capacity Planning

Considerations:

• Expected storage capacity

• # of on-line processes and contention

• Performance and response time

• Level of resilience

• Impact of security

• Hours of operation

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HOW

Project Management Plan

• Project oversight

• Governance

• Reporting requirements

• How you will achieve professional project management

• *The State's own roles, responsibilities and expectations*

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HOW

Resource Requirements

- Describes resources the State expects to use
  Staff
  Funding
  Facilities
- Requests funding from FNS
- Ties closely to Project Management Plan
- Describes all staff resources that will be used
  10% or more throughout the project

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WHEN

Schedule of Activities, Milestones and Deliverables

Schedule of key design, development, and implementation tasks, events, and deliverables for the life of the project

Hot!

Be sure to include Federal review times!

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HOW MUCH

Budget

- Capture **all** anticipated expenditures of project implementation phase described in detail.
- Reflect the **duration** of the development/implementation phase **broken out by FFY and quarter.**
- Provide **narrative text** as needed to support line items.

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IAPD Budget - Areas of Concern

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IAPD Budget - Areas of Concern

- Failure to include indirect costs

- Program staff costs not included or charged inappropriately

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IAPD Budget - Areas of Concern

- Multi-year budget is not broken down by FFYs and quarters

HOW MUCH

IAPD Budget - Areas of Concern

- Budget includes primary contractor costs but fails to include other contracted services

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HOW MUCH

IAPD Budget - Areas of Concern

- State "body shop" contractor costs not included

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HOW MUCH

Budget Examples

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HOW MUCH

ATTACHMENT THREE
Development Budget

DEVELOPMENT COST COMPONENTS	FFY 02 10/1/01-9/30/02	FFY03 10/1/02-9/30/03
I. Personal Services		
DFS State Staff	$ 247,145	$ 351,627
DFS Field Staff	$ 20,761	$ 57,091
Transition	$ -	$ -
Training	$ -	$ 26,456
Total Personal Services	$ 267,906	$ 435,174
II. Overhead (15%)	$ 40,186	$ 65,276
III. Development (Contract/Consulting)		
State At Will Employee Contracts	$ 205,879	$ 358,421
Implementation Contract	$ 2,476,816	$ 7,117,599
IVE Contract Amendment	$ -	$ -
Total Development (Contract/Consulting)	$ 2,682,695	$ 7,476,020
IV. Hardware/Systems		
Hardware	$ 108,884	$ 236,871
Software	$ 466,463	$ 309,100
Travel	$ -	$ -
Total Hardware/Systems	$ 575,347	$ 545,971
Total Components Costs	$ 3,566,134	$ 8,522,441

HOW MUCH

Task/Line Item	FY 04 Q1	Q2	Q3	Q4	FY Total	Project Total
State costs						
Project Travel	16,678	19,795	8,414		44,887	66,515
LA Staff Travel	14,207	16,863	7,168		38,238	86,227
Project staff time	52,416	44,928	29,952		127,296	489,460
State staff time	31,601	34,474	22,723		88,798	248,189
LA Staff Time	26,919	29,366	19,357		75,642	165,963
LA staff time - training	70,700	65,640	43,760		180,100	180,100
LA staff travel - training	65,500	91,700	51,800		209,000	209,000
Capitol Outlays					0	75,312
Equipment	0	0	0		0	832,368
Communications	4,200	3,600	1,800		9,600	16,291
Printing/Supplies/misc.	9,130	5,010	4,490		18,630	119,890
Indirect	19,864	11,000	6,698		37,562	258,818
State subtotal	311,215	322,376	196,162		829,753	2,748,153
Contractor Costs						
Developer -	216,326	288,000	165,000		669,326	2,716,739
Project Support	27,498	3,730	3,730		34,958	484,922
Banking	0	0	0		0	24,540
					0	
Contr Subtotal	243,824	291,730	168,730		704,284	3,226,201
Total Costs	555,039	614,106	364,892		1,534,037	5,974,354
Funding						
Amt Funded St WIC	31,601	34,474	22,723		88,798	248,189
Infrastructure Funds					34,024	826,123
Amt 1/2% Carry Over					160,000	453,260
Amt Requested OA					1,251,215	4,646,782
Original Approved Total					1,252,760	
% Change					99.88%	

WHO PAYS

Cost Allocation Plan - Do I Need One?

If it's an integrated system:

YES

- State agencies must develop and submit a methodology for allocating costs among benefiting programs.

- Direct charging of project costs should be done to the maximum extent possible.

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WHO PAYS

Cost Allocation Methodology (CAM) Toolkit

- Helps States determine how to allocate software development costs to Federal and State benefiting programs over the system development lifecycle

- Expedites the Federal approval process for State Cost Allocation Plans

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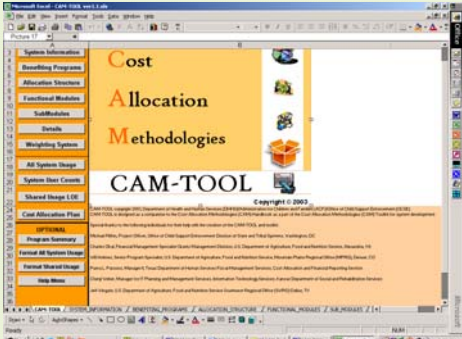
WHO PAYS

CAM Toolkit Contents

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HOW

Security Plan

Provides the approach and requirements of the security plan

Describes the physical, electronic, and operational security of the system

HINT: It's in the 901!

- Hardware
- Software
- Data
- Communications
- Facilities

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HOW MUCH

Waiver of Depreciation

FNS requires State agencies to depreciate the cost of equipment purchases over the expected life of the equipment

UNLESS

a formal waiver is requested

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HOW

Test Plan

- Test Methodology – types of testing to be performed
- Test team organization and responsibilities
- Test database generation
- Test case development
- Test schedule
- Documentation of test results
- Contingency Plan

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HOW

Training Plan

- Describes how all users will be trained
- Describes the methodologies to be used
- Defines materials to be developed
- Includes travel in the training budget
- Provides a timetable for training
- Addresses on-going training needs

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IAPD Documentation Requirements by Program					
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13- Security Planning	X	X	X	X	X
14- Request for Waiver of Depreciation	X	X	X	X	X
15–Test Plan	X	X	X	X	X
16-Training Plan	X	X	X	X	X

HINT: It's in the 90!

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IAPD for
Maintenance & Operations
When do I need one

?

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IAPD for M&O

HINT: It's in the 901!

Prior approval is required when it includes significant hardware upgrades, platform changes, and/or software enhancements.

No approval needed for routine operations, including corrective, adaptive or perfective changes – without introducing additional functional capability.

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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

Source: FNS Handbook 901

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Maintenance and Operations Decision Table Examples		
	IAPD Required	**IAPD Not Required**
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

Source: FNS Handbook 901

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Maintenance and Operations Decision Table Examples		
	IAPD Required	IAPD Not Required
Services	Consultant services are required to develop and implement software upgrades to an existing system that adds new functionality to the system	Contract for routine maintenance and operations services is due to expire, needs to be rebid; SOW does not include any enhancements or upgrades to software that will add functionality to the system

Source: FNS Handbook 901

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The chart indicates I don't need an IAPD. . .

What do I do?

Submit:

➢RFP to FNS for prior approval

➢Signed transmittal letter

➢Contract

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FNS IAPD Review Criteria

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FNS IAPD Review Criteria

Adequately identifies objectives and needs of the system

Did you make your business case?

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FNS IAPD Review Criteria

Provides an acceptable plan for proceeding

Are your goals and objectives feasible and reasonable?

Are your goals achievable?

FNS IAPD Review Criteria

Includes a detailed project plan of all activities

Did you fully describe the scope of the design, development, and implementation activities?

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FNS IAPD Review Criteria

Includes an acceptable Alternatives
and Cost-benefit Analyses

*Do the improvements or benefits justify
the cost of the chosen alternative?*

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FNS IAPD Review Criteria

Identify adequate funds, resources, and skills

*Are committed funds, skilled staff and other
resources adequate to succeed?*

*Does the proposed system duplicate or
conflict with other systems or efforts using
the same resources?*

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FNS IAPD Review Criteria

Comprehensive project management plan

*Does the State demonstrate the ability to
manage the project professionally?*

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FNS IAPD Review Criteria

Includes Line Item Budget by FFY and Quarters and the sources and amounts of Federal and non-Federal funding

Is the budget in a clear format, broken down by phase, FFY, and quarters with narrative explanations of costs as needed?

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FNS IAPD Review Criteria

Approvable Cost Allocation Plan

Are costs allocated to all benefiting programs, using a reasonable method?

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FNS IAPD Review Criteria

Submission of a comprehensive test plan

Does the IAPD contain at least a preliminary test plan with a commitment to submit a fully developed plan for approval?

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IAPD Approval Conditions

- **General** – Related to availability of Federal funds and compliance to FNS regulations

- **Specific** – Funding may be approved for only a specific time period or incrementally based upon specific conditions

  Documents, such as the test plan, must be submitted for approval when finalized

Retroactive Approval

State agencies are urged to communicate with FNS early and often.

Retroactive approvals are granted only in the most extreme circumstances.

Poor planning or communication is not considered a valid reason for retroactive approval of funding.

Retroactive Approvals

Review Learning Objectives

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➢Know the process and steps for an IAPD submission and review

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Your next goal...

✓ APD Overview

✓Planning APD

✓Implementation APD

✓*RFPs and Procurement*

✓APD Updates

✓System Testing Regulation

✓Getting to Go Live

✓Project Management

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Come See Us!

An engraved invitation from FNS Handbook 901
www.fns.usda.gov/apd

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