	4.1 FACTS II Requirements Summary	4.11 Interfaces
	4.2 Functional Requirements	4.12 System Development
	4.3 Technical Requirements	4.13 System Testing
	4.4 Customer Relations Management Tools	4.14 System Training
	4.5 Project Initiation and Management	4.15 Conversion
	4.6 System Hardware	4.16 System Implementation
	4.7 System Planning and Analysis	4.17 Post Implementation Support
	<b>4.8 Requirements Verification</b>	4.18 Support Federal Review
	4.9 System Design	4.19 Security
	4.10 Reports	

DE\_SACWIS-002h\_4

## 4.8 Requirements Verification

RFP reference: 6.8 Requirements Verification, Page 45

**Deloitte's Requirements Verification approach results in a FACTS II solution that meets federal, SACWIS and DSCYF requirements using a transfer approach. We fill in the gaps in the system against Delaware specific requirements resulting in a system accepted by your end users.**

Requirements Traceability is defined as the ability to describe and follow the life of a requirement, in both a forward and backward direction. It documents the dependencies and logical links between individual requirements and the other system elements. These elements include other requirements of various types, business rules, architecture and other design components, source code modules, test cases, and help files, whatever is applicable in the expected solution. There are a number of reasons to make requirements traceable:

- Where and how is a requirement implemented?
- Have we met all requirements?
- What is the impact of changing a requirement?
- Is the implementation compliant with the requirements?
- What acceptance test is used to verify that a requirement has been implemented?

The goals of the requirements verification phase include:

### section **HIGHLIGHTS**

- Embedding Federal compliance starts from Requirements
- Requirements traceability to SACWIS, AFCARS, NCANDS, NYTD and DSCYF requirements
- SACWISMate traces requirements throughout the systems development lifecycle, to issues, and risks

- Help verify completeness of the solution (Forward Traceability): All business requirements have been met successfully by the project solution.
- Help verify Adequacy of solution (Backward Traceability): Every unit of work done satisfies at least one business requirement
- Provide accurate data for effective impact analysis

## FACTS II Playbook Method

### RFP reference: 6.8 Requirements Verification, Page 45

During the Requirements Verification phase of the project, the requirements will be loaded into a traceability tool or other tracking system that will support the cross-referencing of each State and Federal requirement to deliverables throughout the Software Development Life Cycle (SDLC) and that will support the preparation of the SACWIS Assessment Review Guide (SARG). The Department's assigned subject-matter experts will review each requirement identified in Appendix E System Requirements with the Bidder's design team analysts. Documentation of clarifications, details, and/or examples that more thoroughly define the requirements will be added to the requirements traceability matrix and will be used during the development of Requirements Verification phase deliverables, as well as subsequent design activities. It is important to review current FACTS data at this phase. Test data will be decided upon and plans for testing will be created. A testing tool will be chosen at this time if appropriate. Not only existing production data but pre-built test cases should be reviewed.

The Bidder's proposal should include a synopsis of the methodology and recommended tools that the Bidder has successfully used in conducting requirements verification and proposes to use for FACTS II.

In common with all of the other systems' related activities we have proposed, the tasks we undertake for this activity are aligned with our FACTS II Playbook methodology and are fully compliant with the DTI's Project Management methodology.

Deloitte's FACTS II Playbook method is based on the Software Engineering Institute's (SEI) Capability Maturity Model Integration (CMMI®) and Project Management Body of Knowledge (PMBOK®). The FACTS II Playbook supports all activities for requirements verification through its Requirements Engineering process area. The FACTS II Playbook's Requirements Engineering provides a structured process to define, clarify, and verify requirements that the system must meet. Requirements engineering facilitates the development of quality software applications by working with requirements stakeholders to gather, analyze, verify, and validate the business, user, and software (functional and non-functional) requirements for the initial development, modification, or enhancement of a software application. The scope of this process area includes:

- Establish the business requirements for the software application
- Plan the Requirements Engineering activities, including stakeholder involvement
- Elicit and document requirements (user, functional, technical, and so on)
- Analyze requirements to establish stronger understanding of the client's needs and to facilitate a joint agreement of the project's scope
- Elicit and gather the application's functional and non-functional requirements (that is, software requirements specification)

- Verify and validate requirements
- Develop baseline records of the application’s agreed requirements and scope
- Establish requirements traceability

The FACTS II Playbook is highly customizable to allow us to meet Delaware FACTS II project specific needs. The ability to customize the methodology is a key for aligning our project management approach to the DSCYF requirements and DTI standards. The FACTS II Playbook methodology is shown in the Figure below.

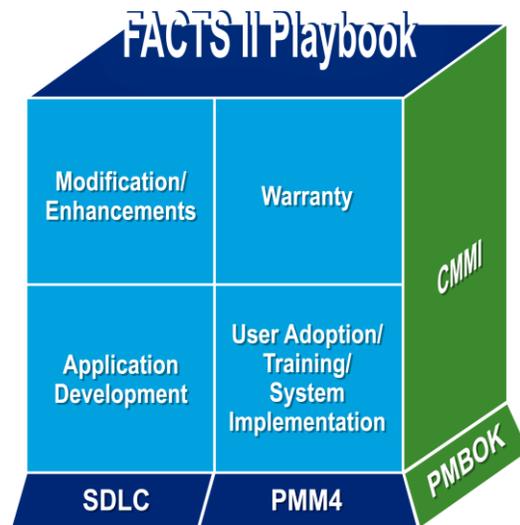


Figure 4.8-1. The FACTS II Playbook.

Following are the features of our approach to requirements verification and the benefits our approach provides to DSCYF.

Features	Benefits
Participation from key stakeholders, including representatives from various user categories and DSCYF offices	<ul style="list-style-type: none"> <li>• Determines stakeholder needs early in the requirements definition process</li> <li>• Reduces number of iterations since stakeholders are convened earlier</li> <li>• Facilitates buy-in early in the process</li> </ul>
Use of prototyping, where needed, to foster design reviews and approvals	<ul style="list-style-type: none"> <li>• Provides users with visual representation of requirements and functional design</li> </ul>
Leverages business processes, requirements, screen designs, systems flows and design specifications from efforts similar to DC FACES.NET	<ul style="list-style-type: none"> <li>• Supports the DSCYF’s need to accelerate the releases of deliverables into production</li> <li>• Maximizes the time provided by the DSCYF and other stakeholder organizations</li> </ul>

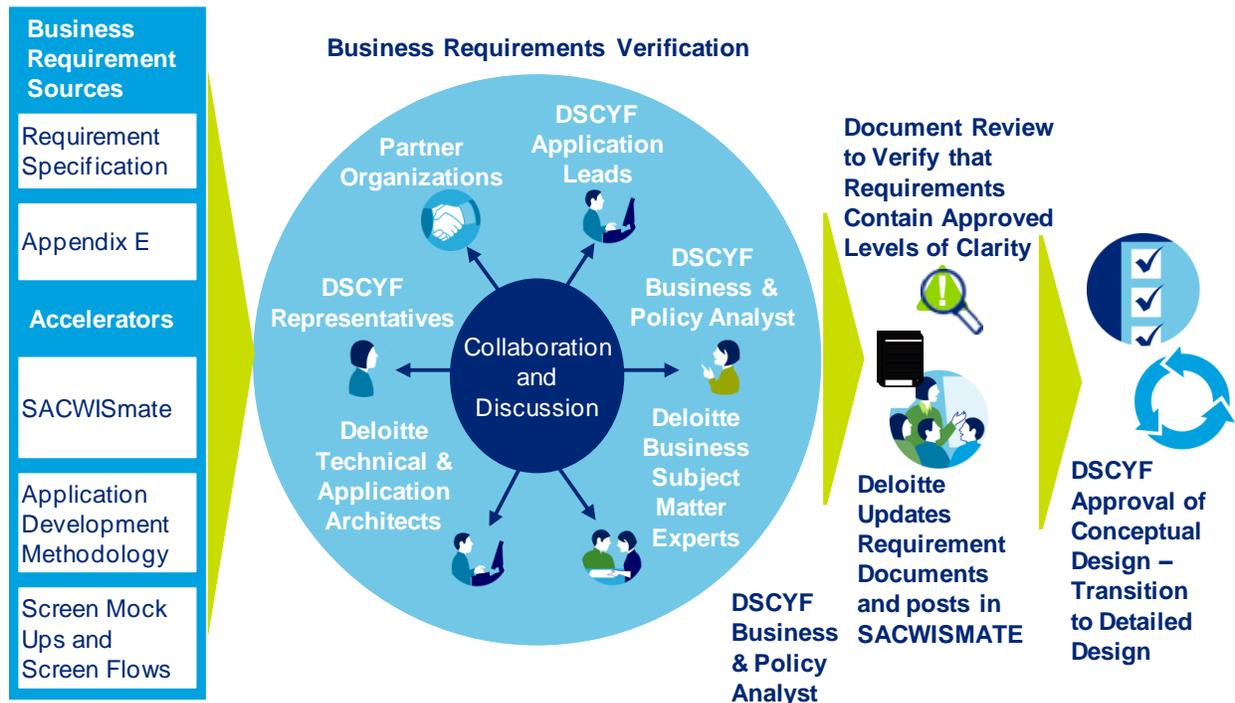
Table 4.8-1. Features and Benefits of our Requirements Verification Approach.

## Facilitating a Common Understanding of Requirements

The Deloitte team provides training to DSCYF staff in the usage of SACWISmate to provide DSCYF with full visibility with the intent of openness in the project. Traceability of every requirement begins from day one and continues through design, testing, training, implementation, statewide rollout, and beyond the entirety of the SDLC. By sharing the use of SACWISmate, the project fosters open communication, status monitoring, and continuous knowledge transfer by everyone using SACWISmate.

The Deloitte team places a premium on teaming with DSCYF to determine the quality of the verification. Our Requirements Verification Session provides a transparent process in which DSCYF and Deloitte works side-by-side on every requirement, documenting in detail

how it is already met or will be met by the transfer solution. The end result is that there are no surprises for DSCYF in the end product. By the time we hand over the deliverables, DSCYF already knows what is in them because they have been present for its creation in the requirements sessions. This close working relationship is maintained for the rest of the project's life cycle. The figure below shows the Deloitte team's collaborative approach to Requirements Verification.



DE\_SACWIS-043\_2

Figure 4.8-2. Deloitte's Collaborative Approach to Requirements Validation.

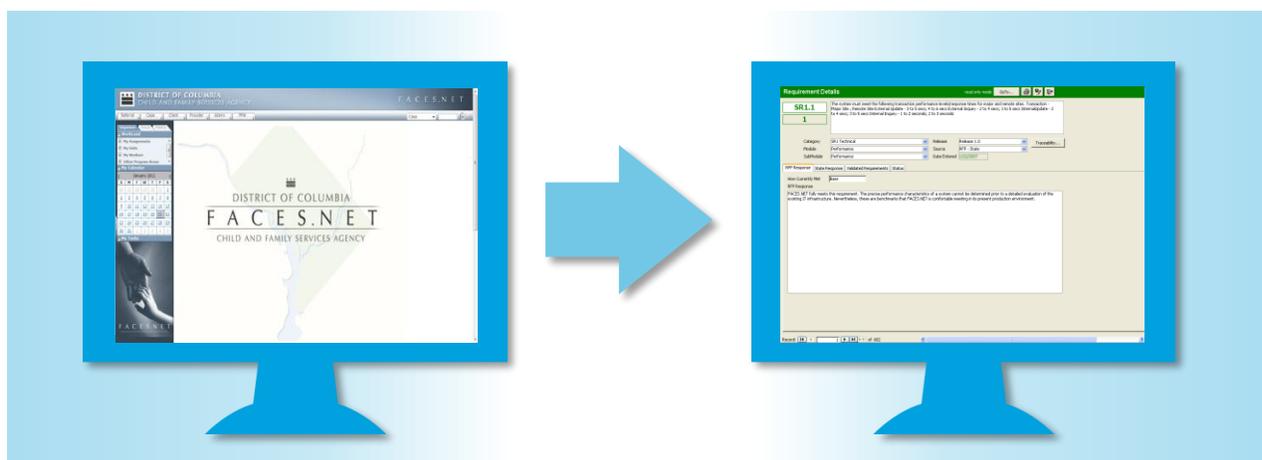
### Approach to Requirements Verification Sessions

The goal of requirements verification is to confirm with DSCYF details about how the transfer solution already meets the requirements set forth or will meet the requirements through modification as well as identify potential needs for requirements to be clarified or changed. Deloitte's Requirements Verification approach accomplishes this by conducting sessions where Deloitte and DSCYF team go through each requirement item by item and comparing the requirements to the transfer solution's demonstrated functionality. Furthermore, the sessions brings together representatives of business, technology, reporting, interface, and conversion to verify that the transfer solution either already meets or will meet each and every requirement set forth by the Delaware RFP. The diversity of personnel present determines that all technology, business, and services delivery dependencies are identified from the very beginning and resolved.

The success of any such session rests upon a number of factors:

- The session participants include all stakeholders with a viewpoint on the functionality under consideration (or a fully representative sample of those stakeholders)
- The session participants are empowered to make decisions "in the room" without reference to superiors or other non-represented stakeholders
- The session participants are those who developed the requirements contained in the RFP
- The session participants are fully committed to all of the sessions in which they are expected to provide a perspective
- The session participants are fully committed to complete the pre-work assigned to them in advance of their attendance

Each session begins with two displays; one display with show SACWISmate's Requirements Tracking module, which has all requirements preloaded, and the other shows the transfer solution DC FACES.NET. The Requirements Tracking module of SACWISmate, tracks the original requirements and all comments from the requirements sessions. There are data fields in the Requirements Module that capture the "Original Requirement per RFP", "Deloitte's response as submitted", "DSCYF Response" from the requirements session, and the final "Validated/verified requirement". DSCYF and the Deloitte team review all 723 requirements together. Deloitte demonstrates how the transfer solution meets the requirements and collectively, we validate our understanding of the intended vision. For requirements that are not already met by the transfer solution, DSCYF and Deloitte discuss and come to an agreement on how the requirement is met by modification of the transfer solution. This side-by-side comparison allows DSCYF and Deloitte to achieve a mutual understanding of how the final solution meets all requirements to move forward.



DE\_SACWIS-333

Figure 4.8-3. Side by Side Comparison.

DSCYF responds with its approval or concerns, which are recorded in the “DSCYF Response” tab. When an agreement is reached for any requirement, the final validated requirement is entered into the “Validated/Verified Requirement” tab. Finally, the “Status” tab keeps track of the current progress on each requirement and determines that every requirement is accounted for and traceable.

## Tracking Compliance

**RFP reference: 6.8 Requirements Verification, Page 45**

Bidders will be responsible for developing a tracking compliance component that identifies compliance with Federal programs, such as Health Insurance Portability and Accountability Act (HIPAA), Adoption and Foster Care Analysis and Reporting System (AFCARS), National Child Abuse and Neglect Data System (NCANDS) and National Youth in Transition Database (NYTD).

SACWISmate allows each requirement to be traced to one or more of the federal programs like HIPAA, AFCARS, NCANDS and NYTD thus providing compliance tracking and traceability with these programs. Through this process, some requirements may be identified as either needing changes or clarification. Changes to requirements are updated instantaneously in SACWISmate and under full supervision of DSCYF so that there are absolutely no surprises. If a satisfactory solution is not immediately available, notes are made to the requirement for further analysis or escalation (see below for Approach to Managing Change).



- 1030 Requirements were verified for Alabama SACWIS in 14 weeks to define the AL FACTS solution.

Through these Requirements Verification Sessions, the Deloitte team creates an open and collaborative environment with DSCYF. Requirements traceability starts from the very first day and remain in focus through design, testing, test results, defect resolution, etc the entirety of the project life cycle. The features of SACWISmate’s Requirements Tracking module and the corresponding benefits are listed in the table below.

Features	Benefits
Traceability to Federal requirements	Determines compliance and success in passing Federal review.
Deliverable (e.g. Requirements Traceability Matrix) Generation	Reduces time required to create deliverables and increases accuracy.
Reports	Provides openness and transparency to DSCYF in a quick and efficient manner.
Easy to use	Novice users document and generate reports

**Table 4.8-1. SACWISmate Requirements Tracking Features and Benefits.**

## SACWISmate as a Requirements Traceability Tool

The Deloitte team uses SACWISmate, a project tracking tool designed specifically for SACWIS projects to document, track and trace requirements. SACWISmate is customized for SACWIS projects. SACWISmate is accessible by all project stakeholders throughout the project life cycle to facilitate and “open” and “no surprise” culture of communication across the project team.

The Deloitte team uses SACWISmate’s Requirements Tracking module to document, validate, verify and trace system requirements. This module provides these capabilities as well as the capability to generate summary and detailed requirements reports and deliverables. The different modules in SACWISmate are linked together so that requirements are linked to designs, test scripts, issues, and incidents, making sure that none are overlooked and all components are fully traceable through the SDLC. Additionally, large sections of many deliverables are generated directly from SACWISmate, including the Requirements Traceability Matrix Report (See sample requirements traceability matrix report at the end of this section) and Detailed Design System Documentation. SACWISmate has features to support the cross-referencing of each State and Federal requirement to deliverables throughout the Software Development Life Cycle (SDLC) and that support the preparation of the SACWIS Assessment Review Guide (SARG).

To jumpstart the requirements verification process, SACWISmate is preloaded with requirements from Delaware’s FACTS II RFP.



did you

**KNOW?**

Deloitte’s SACWISmate identifies compliance with Federal programs such as Health Insurance Portability and Accountability (HIPAA), Adoption and Foster Care Analysis and Reporting System (AFCARS), National Child Abuse and Neglect Data System (NCANDS) and National Youth in Transition Database (NYTD) determining full compliance with federal mandates.

## Requirements Tracking in SACWISmate

### Requirements Tracking in SACWISmate

The screenshot shows the main menu of the SACWISmate Requirements Tracking module. It features two primary columns of options. The left column, titled 'Access Requirements', contains five dropdown menus for filtering: 'Release' (All Releases), 'JAD Session' (All JAD Sessions), 'Category' (All Categories), 'Module' (All Modules), and 'SubModule' (All SubModules). Below these are three buttons: 'Search', 'Open these Requirements...', and 'All Requirements'. The right column, titled 'Filtered Reports', contains three buttons: 'Detail and List Reports', 'StatusReport', and 'OutcomeReport'. At the bottom left, there is a text field with the value 'C:\Alabama-Chessmate'.

DE\_SACWIS-038

**Figure 4.8-4. SACWISmate Requirements Tracking Module Main Menu.**

Action caption.

SACWISmate provide an intuitive and easy-to-use user interface. From the main menu, it is easy to access requirements and generate reports. The Requirements Tracking module is used to:

- “Open the Requirements” allowing the user to review or modify the details of all Delaware FACTS II requirements. Requirements may be opened in Read Only mode to avoid inadvertent changes.
- Perform a keyword search of requirements captured in the database.
- Generate “Detail and List Reports” allowing the user to create, view, and print custom Requirement reports.
- Generate “Validation Reports” to create a report of the Validated, Pending, and Not Validated requirements broken down by category. This report is used in the Requirements Verification Process.

## Sample Requirements Validation Report

Category	Not Validated	Pending	Validated	Total
Adoption	0	7	58	65
Alerts	1	10	62	73
Assessment/Investigation	0	6	21	27
Case Plan	0	2	51	53
Financial Management	0	9	44	53
Forms and Correspondence	0	3	8	11
Foster Care	0	3	30	33
General	67	0	0	67
CPC	0	6	24	30
ICWA	0	5	2	7
Intake	0	5	36	41
Interfaces	7	0	0	7
IVE Eligibility	0	2	11	13
Legal	0	0	4	4
Medicaid Rehab	0	2	14	16
Provider	0	10	31	41
Reports	8	0	0	16
Security	13	0	0	13
Technical	32	0	0	32
<b>Totals:</b>	<b>128</b>	<b>70</b>	<b>396</b>	<b>602</b>


AL SACWIS Project - Requirements Validation Report  
02/2007
Page 1 of 1

DE\_SACWIS-039

**Figure 4.8-5. Print preview of Sample Requirements Validation Report.**  
 SACWISmate provides real-time data about the progress of requirements validation.

- Generate “Outcome Reports” to create a detailed report of the Validated, Pending, and Not Validated requirements along with the Statuses of the Reports (Added, Added From Split, Modified and Split, Deleted, No Status, Unchanged)

### Requirements Details Screen

DE\_SACWIS-040

Figure 4.8-6. Requirement Details Screen.

SACWISmate stores the following fields for each requirement:

Field	Description
Number	Unique requirement identifier that follows the schema SRx.x
Description	Text description of the requirement
Category	Requirement category
Module	Requirement module
Submodule	Requirement submodule
Release	System release version of requirement
Source	Source of the Requirement i.e. RFP, DSCYF, or Enhancement
Final Validated Requirement	Text description of the requirement which is identical to the description if validated at the time of addition

Field	Description
Results	Results of the requirement (No status, Added, Deleted, etc.)

**Table 4.8-2. Requirements Fields captured by SACWISmate**

In addition, the details screen contains the following tabs to document information during the Requirements Verification Sessions:

Tab	Description
RFP Response	Describes how requirement is currently met (in transfer system) i.e. Base, Base +New, New as well as the RFP Response
DSCYF Response	Narrative field where the user fills out information about the DSCYF's Response
Validated Requirement	DSCYF and Deloitte's agreement on the final validated requirement. Includes: <ul style="list-style-type: none"> <li>• Results</li> <li>• Related Requirements</li> <li>• Priority</li> <li>• Status</li> <li>• Validation Date</li> <li>• Final Validated Requirement</li> <li>• Comments</li> </ul>
Status	Documents activities during Requirements Verification Sessions. Includes: <ul style="list-style-type: none"> <li>• Assigned To</li> <li>• Requirements Verification Session</li> <li>• System Location/Navigation</li> <li>• Requirements Verification Activity</li> <li>• Related Functional Areas</li> <li>• Comments/Notes</li> <li>• Sort Order</li> </ul>

**Table 4.8-3. Additional SACWISmate Fields.**

These fields are specifically created to track progress in the Requirements Verification Sessions.

SACWISmate facilitates the generation of reports throughout the life cycle of the project. These reports provide up-to-date information regarding the requirements including whether or not the requirement is Validated, Pending, or Not Validated.

## Requirements Tracking Report

Microsoft Access - [Reports]

File Edit Insert Records Window Help

### Requirement Tracking Reports

Select Report: Requirement List Report

Enter Title: Requirement List Report

Sort Report by: Requirement ID Ascending clear all

Filter by...

Release/Source/Assignment JAD Category/SubCategory Release/Status History Individual Requirements (667 requirements as filtered)

Release	Source	Assigned To
Release 1.0	RFP - Federal/Local	Amit Rastogi
Future Release	RFP - Federal/State/Local	Eddy Jones
No Release/Not Included	RFP - State/Local	Gary Matthis
	RFP - State	Nicole Fuller
	RFP - Local	Valli Thirugnanam
	Enhancement	Jeanne Knight
		Abby George
		Anthony Capozzoli
		Manickam Kalimuthu

With the selected filters, you have created the following report: 667 requirements in this report

All Requirements

<-- Run This Report!

Open Report in Excel

DE\_SACWIS-041

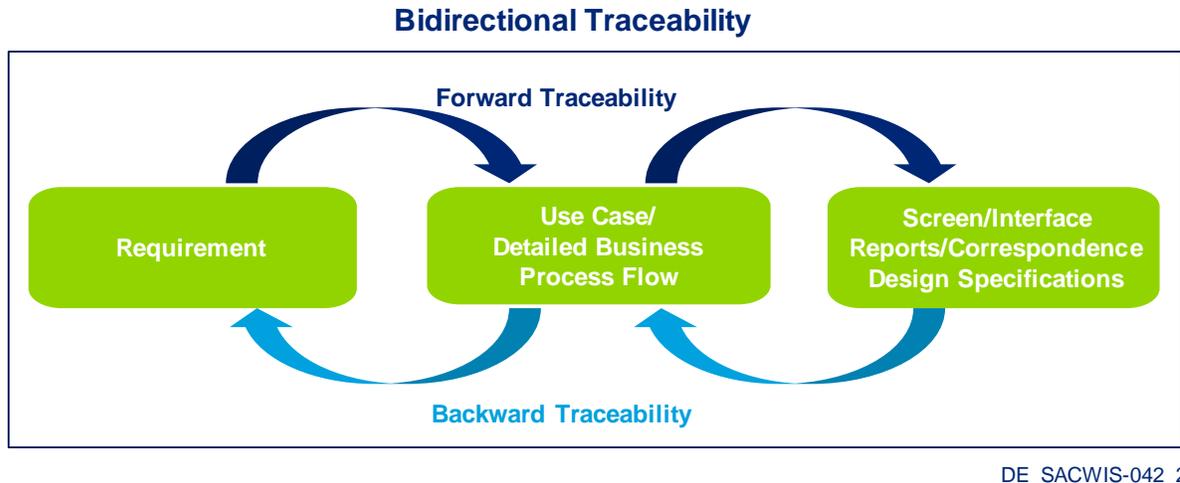
**Figure 4.8-7. SACWISmate Reporting Interface.**

SACWISmate has a comprehensive reporting component that is used to track the status of each SDLC element.

## Maintaining Requirements Traceability

The maintenance of requirements traceability is a fundamental task for large-scale systems development project. Without it, we are never certain that we have really completed the project. However, for a SACWIS project, there is an additional requirement for traceability parallel to that pertaining to the approved system requirements. Ultimately, the Federal review process focuses upon the Delaware FACTS II system's ability to meet the functional requirements defined in your federally approved Advanced Planning Document (APD). The approach that we recommend additionally provides traceability from the APD to the approved roster of validated requirements thereby simplifying the response to the Federal SACWIS review process and lessening the risk of federally identified deficiencies.

Deloitte utilizes the traceability matrix adhering to our FACTS II Playbook methodology to maintain requirements traceability throughout the project life cycle. The figure below shows bidirectional traceability feature facilitated by SACWISmate.



**Figure 4.8-8. Bidirectional Traceability.**

Maintaining and following a bidirectional traceability process provides DSCYF with the means to validate that business stakeholder requirements are met by the project, thus improving the quality of the end project.

## Conceptual Design

RFP reference: 6.8 Requirements Verification, Page 45

Following Requirements Verification, the Bidder will conduct an analysis of the updated requirements and will develop a conceptual design for submission to the Department and DTI. The purpose of the conceptual design is to ensure that the requirements are understood by the Bidder and that the proposed design corresponds to the Department's vision for FACTS II, prior to moving into the System Design phase.

The Bidder's proposal should include a synopsis of the methodology and recommended tools that the Bidder has successfully used in conducting requirements verification and proposes to use for FACTS II. Additionally, the Bidder should note the preferred method for managing changes to the core requirements at this phase, including deletions, additions, and modifications.

The conceptual design forms the foundation for a successful Delaware FACTS II. We use our SACWIS experience, knowledge from the requirement verification sessions, analysis of modifications, and technical architecture considerations to create the FACTS II conceptual design. We understand that the conceptual design is a "vital" stage in the project life cycle that defines how move forward.

Technical, functional, and usability design decisions made during the conceptual design stage propagate throughout the remainder of the development of Delaware FACTS II. It is vital for DSCYF to have a systems integrator alongside its project staff that facilitates this process from a number of equally vital perspectives:

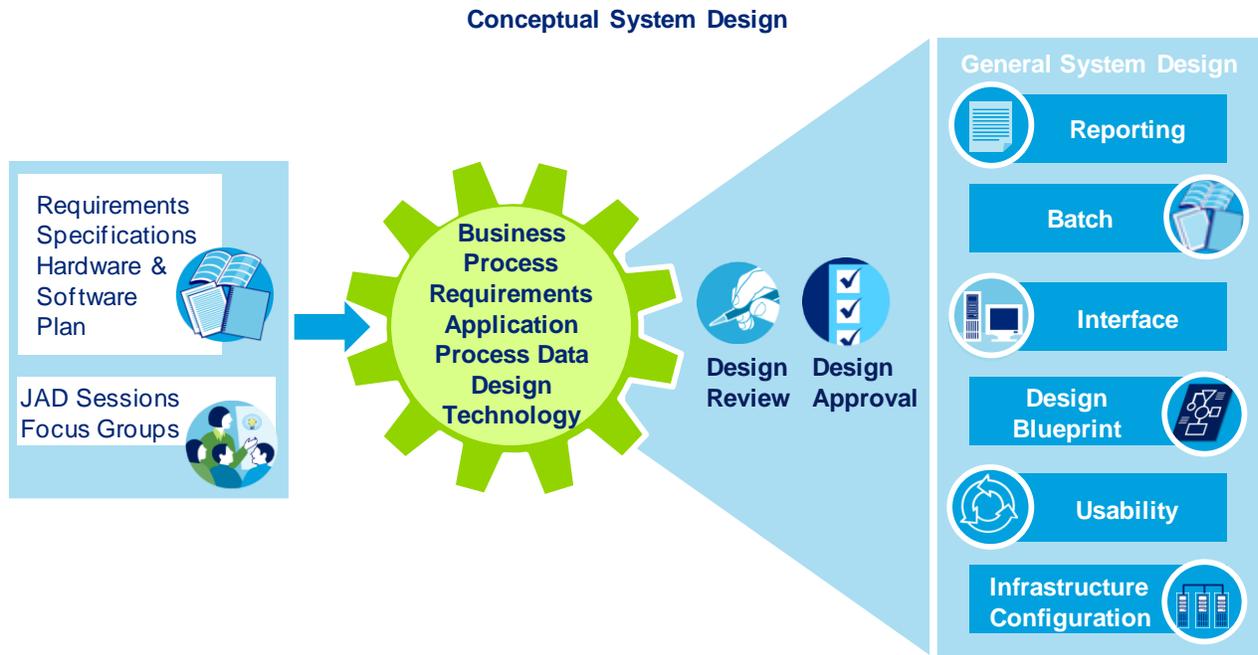
- **Technology fit.** We are confident that the technical architecture of the Delaware FACTS II is a good fit within the rest of the DTI technical standards, hardware, and software portfolio.

- **Functional fit.** The functionality embodied within Delaware FACTS II meets the business needs of your stakeholders.
- **Usability.** Delaware FACTS II offers a user experience that improves upon the current FACTS experience to a significant and measurable degree.
- **Capacity for enhancement.** It is a truism that the business of integrated children services never stands still. Legislative changes, best practice improvements and policy initiatives all contribute to a constantly fluid operating environment. Delaware FACTS II takes all of these in its stride for years to come.
- **Federal compliance.** Every design decision is viewed through the prism of Federal SACWIS compliance to see that we do not stray from the Federal requirements as embodied in the approved Advance Planning Document (APD).

It is not sufficient to bring experience in a few of these areas. Nothing less than the application of skills, lessons learned and expertise from all of these domains is sufficient to construct a successful Delaware FACTS II implementation. The Deloitte team brings exactly that.

As we discuss the design direction of Delaware FACTS II, the value of our deep and wide-ranging experience becomes apparent:

- A good design preserves maximum flexibility for the future. It is not cost-effective to build functionality now, only to have to modify it through a change order in a few years time as circumstances change. We help the DSCYF map out how design decisions made today impact its ability to support the business for years to come.
- A good design embodies everything that is known about a functional area. We keep ourselves informed of upcoming changes in legislation and bring that knowledge to bear during design, the Delaware FACTS II system is ready for that legislative change when it occurs hopefully avoiding a change order.
- A good design incorporates an understanding of the performance characteristics of the technical architecture upon which it is built and the implementation environment in which it runs.
- A good design embodies an understanding how social workers like to structure their day, the challenges they face, and the supports that would most aide their productivity. Working with children and families is not a desk job, not a data entry job. The easier we make the Delaware FACTS II to use for frontline staff, the more they embrace it as an essential tool. More importantly, the quicker it is to use, the more time they have to spend time with their assigned families.



DE\_SACWIS-044

**Figure 4.8-9. Conceptual System Design.**

In Conceptual System Design we take the requirements, apply a sound design process, and develop high-level design documents. The results of our Conceptual Design phase act as inputs to detail system design and business change management.

Features	Benefits
<b>Deloitte staff bridge the divide between technology and integrated children services business functionality</b>	<ul style="list-style-type: none"> <li>• A SACWIS that complies with federal and state needs today</li> <li>• A SACWIS that expands and evolves to cope with changing demands</li> <li>• Documents seed the system development and change management threads in a manner that is entirely aligned</li> </ul>
<b>Inclusive and engaging requirements and design sessions with DSCYF stakeholders and other Deloitte project team members</b>	<ul style="list-style-type: none"> <li>• Better supports the DSCYF throughout the requirements and conceptual design process</li> <li>• Lowers effort, schedule and performance risks</li> <li>• Reduces the need for downstream changes or re-work</li> </ul>
<b>Use of our solution to foster design reviews and approvals</b>	<ul style="list-style-type: none"> <li>• Provides users with visual representation of requirements and conceptual design before any coding takes place</li> <li>• Lowers the risk of misunderstanding and missed expectations</li> </ul>
<b>Our approach leverages business processes, requirements, screen designs, system flows and design specifications from DC FACES.NET</b>	<ul style="list-style-type: none"> <li>• Supports accelerated progress through the project activities</li> <li>• Allows DSCYF, partner organizations, and end users to focus on the core business processes</li> </ul>

Features	Benefits
<b>SACWISmate enforces traceability across systems artifacts</b>	<ul style="list-style-type: none"> <li>• We offer traceability of artifacts, thereby allowing full linkage of system requirements to the business process changes that were made in support of those requirements—not merely to system code and screens</li> </ul>
<b>FACTS II Playbook is aligned with DTI’s Project Management Methodology</b>	<ul style="list-style-type: none"> <li>• Our methodology sets the DSCYF on the road towards CMMi Level compliance</li> <li>• The DSCYF is familiar with our methodology, and we are familiar with the DSCYF’s methodology</li> </ul>

**Table 4.8-6. Features and Benefits of Our Conceptual Design Solution.**

The conceptual design activity is the final step before project activities split into technical and business related streams. We verify that both streams are aligned before that split occurs since it is much harder to rectify later. This is the value of a Deloitte professional over someone sourced from another vendor. We deliberately train our staff to be sufficiently business savvy and technically savvy to see that this alignment exists before the conceptual design activity closes. Once that alignment is achieved, our traceability mechanisms stay that way. A sample Conceptual design document is shown in the figure below.

The image shows a sample conceptual design document. On the left is a sidebar with a table of contents and descriptions for each section. On the right is the main document page, which also has a table of contents and a footer.

**Table of Contents (Left Sidebar):**

- Section 1 – D Outline
- Section 1.1 – This section will p the Database Arch
- Deliverable Secti
- Deliverable Secti This section will d project.
  - Conceptus relationshi Architectu
  - Logical D among the
  - Physical D columns, f
- Deliverable Secti This section will d all the stored proc
- Deliverable Secti This section will d integrity, relations FACTS database
- Deliverable Secti This section will d
- Deliverable Secti This section will d the FACTS datab
  - Cross Refi
  - Cross Refi
  - Cross Refi
  - Cross Refi

**Table of Contents (Main Document):**

Section 1 – Executive Summary .....	2
Section 2 – Data Model .....	9
Section 3 – Stored Procedures and Triggers .....	12
Section 4 – Data Integrity Rules .....	15
Section 5 – Database Views .....	17
Section 6 – Cross Reference .....	20
Appendices .....	21

**Footer (Main Document):**

Deloitte. Conceptual Design Deliverable 1 of 2

DE\_SACWIS-1511

Figure 4.8-10. Sample Conceptual Design Document.

The effective implementation of the Delaware FACTS II solution begins with proper business requirements validation and conceptual design. Our approach is focused on a quality requirement validation and design that serves multiple purposes. Communication of the execution plan in a manner that is easily understood by non-technical stakeholders is a key part of our design. Another key to a quality, well defined design is providing a clear technical directive to the development team regarding how the modification is to be approached and completed. Our in-depth SACWIS experience positions us to use forward thinking and mitigate downstream challenges. The DSCYF benefits from our forward thinking as it accelerates the development process and reduces the need for rework.

Through our time working in various SACWIS and other HHS engagements, our team has focused on creating sound designs and our success in implementing effective solutions speaks to that fact. This vast experience has helped Deloitte in building a repository of business and technical services in the HHS space.

## Our Approach to Managing Change

RFP reference: 6.8 Requirements Verification, Page 45

Additionally, the Bidder should note the preferred method for managing changes to the core requirements at this phase, including deletions, additions, and modifications.

Based on our extensive experience in implementing large-scale integrated children services solutions, we understand that in this phase core requirements may need to be changed; to this end the Deloitte team brings a process that identifies, manages, and facilitates change to project requirements. Any requirement considered for future enhancement is defined as requests that are at the time out of the scope of the project and are documented and tracked through the SACWISmate Management Issue Tracking database.

Deloitte understands that, if not managed effectively, changes to existing system resources and processes as well as contractual changes pose a potential risk to project progress. We use change control methodologies to justify changes in the processing environment and to determine that those changes do not adversely affect performance or stability. Deloitte clearly understands and acknowledges the consequences of non-payment for providing products or services prior to the issuance of a contract change notice.

Deloitte recognizes that with each change request, the level of risk on the project's success and progress is raised. It is hence important for Deloitte and DSCYF to manage the scope of the project and control the extent of changes. The change request process may further trigger reviewing the risk management plan and making contingency plans for certain types of project risks.

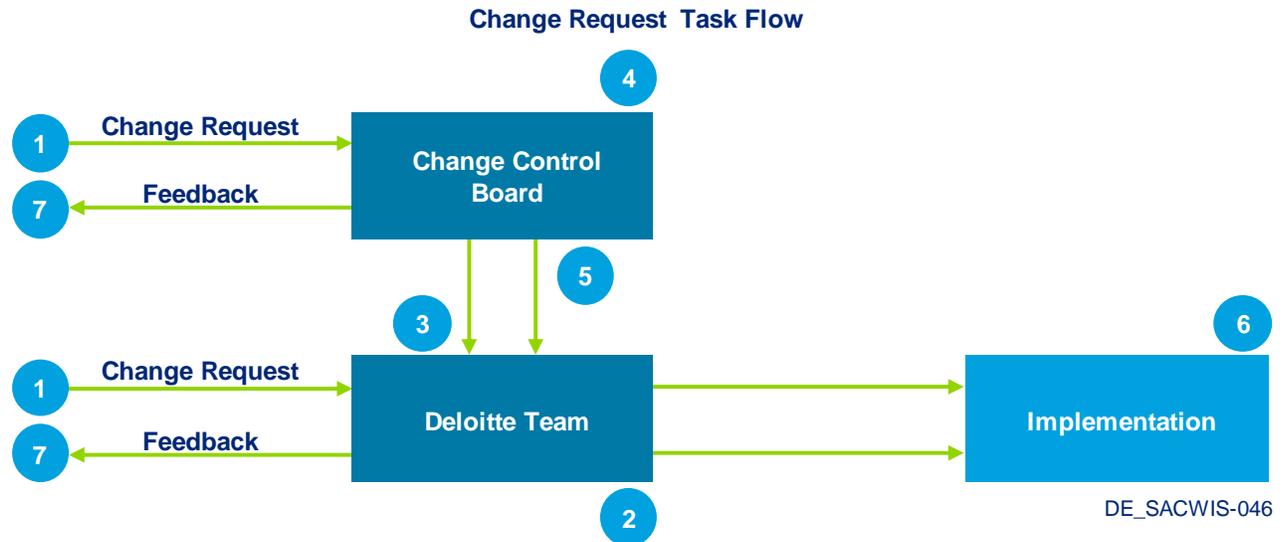
Key considerations for contract scope control process include:

- With few exceptions, projects of the magnitude of the Delaware FACTS II project are subject to proposed changes throughout the life cycle due to unforeseen circumstances which arise during project execution.
- Scope is the responsibility of all the project team members. Scope changes creep in anywhere on the project. The most frequent are the numerous, small scope changes that occur at the detail level of the project and are not escalated.
- It is important to track the scope of changes, regardless of size.
- Status reports are sufficiently detailed to alert DSCYF management of issues that may cause future scope issues.
- Each change order is accompanied by a completed request form. Work on the change order does not begin without signed authorization.
- A change in scope, especially undocumented changes, has an impact on schedule, budget, or functionality or any combination of these three items.

Project scope is measured against scope statements made in this RFP/proposal in addition to any approved change orders. Guidelines for scope management are communicated and adhered to by all project team members, the extended project team, and project management.

## Change Control Process

If changes to the documented scope are identified at any point in the project, the Deloitte team recommends the process outlined below for all changes.



**Figure 4.8-11. Change Request Task Flow.**

Requests for change are received by DSCYF or the Deloitte team, but both parties review and approve before implementation so that there are no surprises.

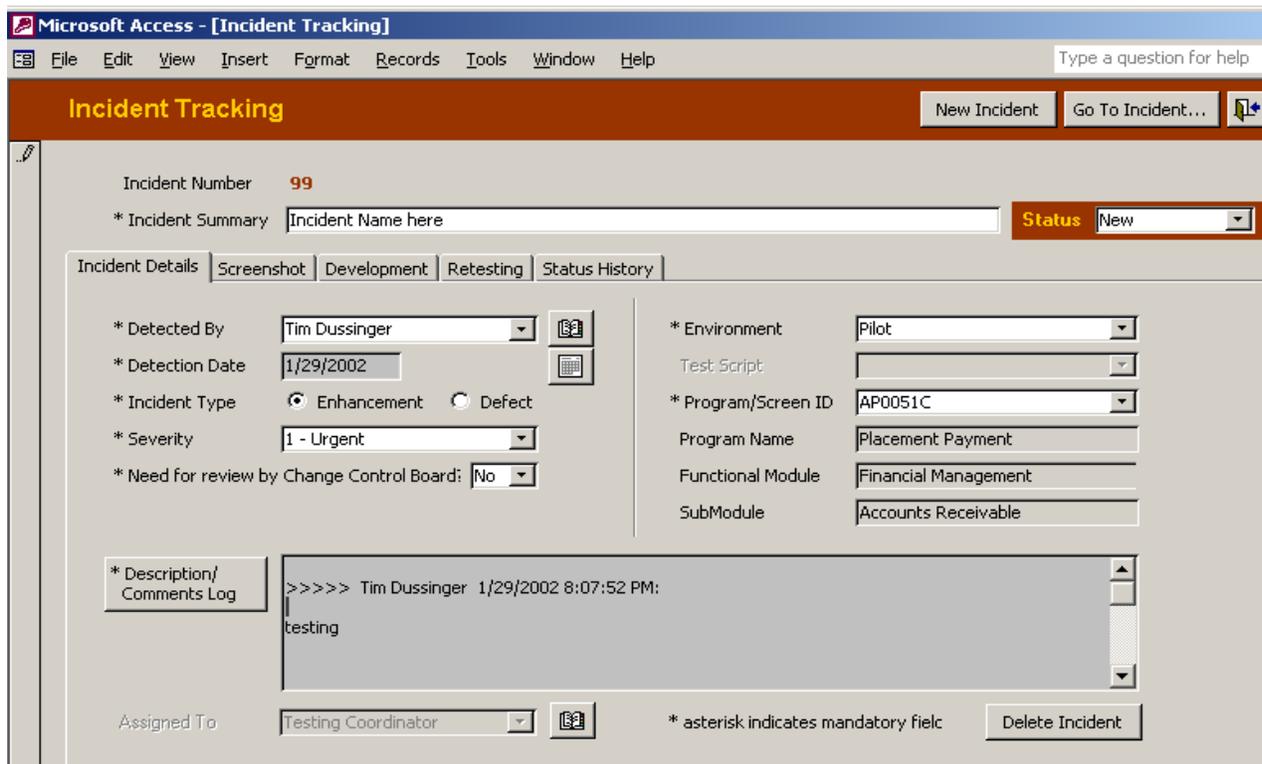
The following items are the basic steps of the change order process:

Steps	Description
<b>1) Scope Change Identification</b>	A scope change is typically identified as either a consequence of Validation sessions and determination of the detailed requirements or as a result of subsequent discovery.
<b>2) Analyzes and Evaluates Change Impact</b>	The Deloitte team evaluates change requests sent by a Deloitte project team member. If Deloitte determines that a change requisition does not affect a baselined configuration item, it accepts the change and proceeds.
<b>3) Send Request for Change to Delaware SACWIS CCB</b>	If Deloitte determines that a change requisition affects a baselined configuration item, it sends a recommendation for the change requisition to the DSCYF SACWIS CCB, including its impact on baselined configuration items.
<b>4) DELAWARE FACTS II CCB Evaluates the Change Impact</b>	Delaware FACTS II CCB evaluates the change based on the Deloitte team's recommendations and approves the change, reject the change, or request more information about the change and its impact. For potential changes to any of the external interfaces, the affected teams are contacted to provide notification of the potential change to their system. The team's feedback is incorporated in the evaluation of change impact.

Steps	Description
5) Receive Change Approval and Recommendation	If the change requisition is accepted by the Delaware FACTS II CCB, the Deloitte project manager as a member of the CCB receives the change approval and proceeds as directed.
6) Implement	The Deloitte team implements accepted change requisitions from the CCB. If the change has impact on the contract, then a contract amendment is required. Version control of the CCB meeting document tracks the changes over time for audit purposes.

**Table 4.8-7. The Change Order Process.**

We use SACWISmate’s Incident Tracking module as the primary tracking mechanism for the raising and disposing of change requests. If change requests are accepted, the project plan is updated to include the additional work activities and status reporting amended to include this newly approved work. A screenshot of SACWISmate’s Incident Tracking module is shown below.



DE\_SACWIS-066

**Figure 4.8-12. Incident Tracking to capture Change Requests.**

Change Requests in this context relate to any imposed change to the Delaware FACTS II system. These may originate from project staff after requirements have been finalized by DSCYF staff. Information captured electronically in the Incident Tracking module includes a one-line name of the change request, who logged the change request, the criticality of the change request and the affected programs. The tool also tracks whether or not the

requested change should be escalated to the change control board. This change request is linked to the original requirement thus providing traceability. Once a change request is approved, the implementation process followed is the same that is followed to implement a requirement.

### **Typical Work Products**

During the requirements verification phase, the Deloitte team in conjunction with DSCYF validates and verifies all requirements. The following table summarizes the tasks, responsibilities, deliverables and tools used during the Requirements Verification phases.

<b>Tasks</b>	<b>DC Responsibilities</b>	<b>DYSCF Responsibilities</b>	<b>FACTS II Deliverables</b>	<b>Tools used</b>
Define Requirements Verification Meeting Time and Schedules	Prepare meeting schedule for requirements verification	Finalize meeting time and schedules	Requirements Sessions Schedule	Word
Conduct Requirement Sessions	Facilitate Requirement Sessions Walkthrough each requirement in SACWISmate Update SACWISmate with finalized requirement Capture requirements that need to be escalated and finalized	Actively participate and discuss each requirement Approve Final requirement Escalate and decide on requirements that need to be modified Follow up and complete Action Items	Requirements Traceability Matrix	FACES.NET SACWISmate PowerPoint Word
Create Conceptual Design Document	Prepare and submit conceptual design document that includes finalized list of reports, interfaces, forms/letters and legacy data sources	Review and approve conceptual design document	Conceptual Design Document	Word
Create Logical Data Model	Prepare and submit Logical Data Model	Review and approve logical data model	Logical Data Model	Visio ERWIN

**Table 4.8-8. Typical Work Products.**

## Associated Deliverables

### RFP reference: 6.8.1 Associated Deliverables, Page 46

The following deliverables are required during the Requirements Verification Phase.

- Requirements Traceability Matrix report, which includes updates from the Requirements Verification phase, a schedule for updates corresponding to major project deliverables, preliminary mapping to the Conceptual Design Document, and a subset of the report specific to compliance with Federal requirements. The traceability matrix will also provide continuity from requirements to test plan and test scripts. As a requirement is developed, the method for testing that requirement should be included in the traceability matrix.
- Conceptual Design Document, including finalized list of reports, interfaces, forms/letters, and legacy data sources/
- Logical Data Model.

The outcome of the Requirements Verification phase is the creation and submission for DSCYF approval the following deliverables.

- Requirements Traceability Matrix report, which includes updates from the Requirements Verification phase, a schedule for updates corresponding to major project deliverables, preliminary mapping to the Conceptual Design Document, and a subset of the report specific to compliance with Federal requirements. The traceability matrix provides continuity from requirements to test plan and test scripts. As a requirement is developed, the method for testing that requirement should be included in the traceability matrix.
- Conceptual Design Document, including finalized list of reports, interfaces, forms/letters, and legacy data sources
- Logical Data Model