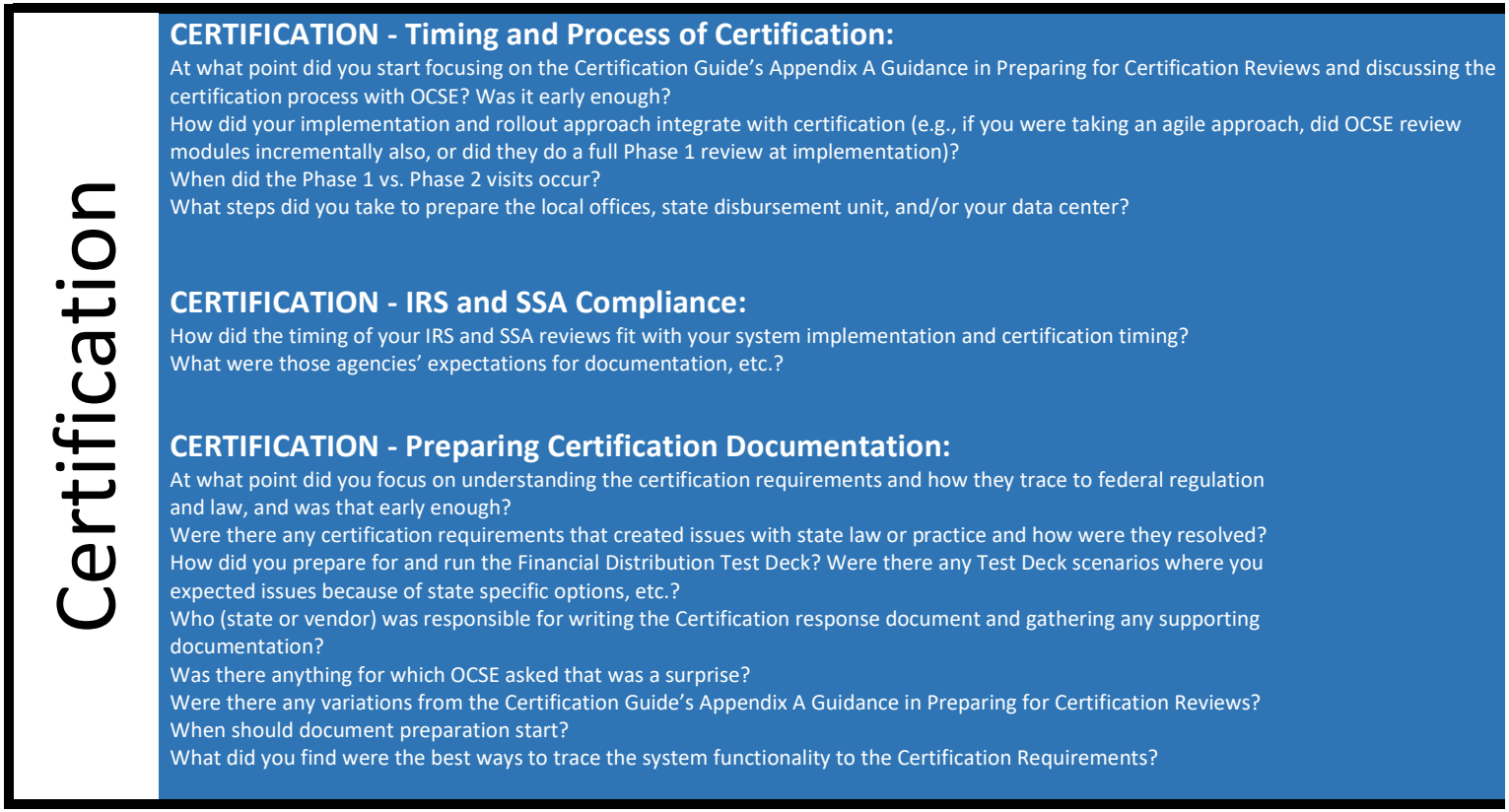
NCCSD State Lessons Learned Webinar Series
Notes from Certification 10/22/2021 organized by presenter
Order of States Presenting: South Carolina, Oregon, Massachusetts
Also includes Maryland Certification notes from 11/5 about new OCSE approach

Introduction

Carla West, co-chair of the NCCSD committee sponsoring the webinars gave a brief background:

- The committee spent multiple meetings coming up with the most important areas related to systems modernization projects, and then specific tasks or questions in each of those areas.
- The areas were Pre-Planning, Planning, Procurement, Design/Development/Implementation (DDI) and Certification.
- The IV-D Directors were then asked to prioritize which specific questions in which areas they would like their state colleagues to focus on.
- Because the large number of questions would have resulted in too many webinars, only the top-rated questions were then distilled into the five sessions: Pre-Planning and Planning, Procurement, Certification, and two different sessions on DDI.

The specific topics and questions for the Certification webinar today are shown in the graphic below:



South Carolina

The first presenter was Richard Maxwell from South Carolina:
Project Manager, PACSS. Richard.maxwell@dss.sc.gov

Richard's slides, notes, and the note takers' information (that is in addition to the information on the slides) follow:

Systems Modernization States Lessons Learned Certification is Easy! *I have news, the date isn't changing…* *I literally spent 20 minutes with the Certification Manager, printed out a Fed Cert Requirements RTM and never talked to him again.* *I can't believe this is real!* *A successful certification starts with requirements management.*	Quotes from staff about SC Certification: 1) Project Director telling everyone that the end date can't change since SC is so late and under penalties. 2) Test Manager talking about their work for certification and that it has been planned well so most of the work to do the certification testing had been done. 3) OCSE lead who was skeptical that what was being presented was real, it looked staged. 4) Requirements Manager saying that good requirements and requirements management are your cornerstone and what got SC certified.

South Carolina Child Support
 	
• Department of Social Services (DSS) is the IV-D agency for SC
  • Administrative State
  • 131k IV-D cases, 32k non-IV-D cases
• Child Support Services Division (CSSD) of DSS Administers the IV-D Program
  • Central Office, Four Regional Offices and 46 County Clerks of Court
• Several Functions Performed by County Clerks of Court
  • Scheduling of Hearings (admin, RTSC)
  • Cash Payments Accepted in the Counties
  • Majority of Child Support Payments Were Handled in the Counties Prior to PACSS
  • Many Rural Counties Do Not have Dedicated IT Departments
 	
NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only
	Background
	• Stakeholders include all branches of State government (Judicial, Executive, Legislature) as well as local County Clerks of Court
	• 46 Clerks of Court, elected officials, elected every two years
	• Prior to PACSS, all payments were in the counties, now it is only cash
	• Many rural counties have no IT dept; Some IT help is provided from the State Project Team
	• Minimum IT hardware requirements established for county workstations, networks, etc.; DSS provided firewall appliances to counties

South Carolina CFS Project

- PACSS is Part of the CFS Project
  - Family Court Case Management System (FCCMS)
  - SDU Implemented and Certified Concurrently to PACSS
- Previous Attempts to Implement a Certified System were Unsuccessful
  - New DSS Management Team for PACSS Project
    - State Team Fully Engaged in Running the Project and in Oversight of Vendor
  - Regular Reporting to the Governor and Legislature
    - *Certification was Top of Mind Every Day*
  - Full Time IV&V Presence
- Palmetto Automated Child Support System (PACSS) Certified on 10/1/2019
  - Started August 2015
  - Transfer system from DE
  - Replaced Mainframe Application and 46 Unique County Systems
  - Completed On Time and In Budget

Background

- The initial project in the early 90s failed in Pilot.
  - Ambitious architecture
  - Stakeholders involved in requirements gathering did not fully represent all county stakeholders
  - State team did not sufficiently verify or validate the product until late in the testing cycle
  - Test phases truncated and/or combined in order to meet schedule
    - WBS fulfillment vs. "meeting' the schedule
  - Focus was too much on schedule and not enough on quality
  - Ended up in litigation
- The second project failed for multiple reasons
  - Lead Company had not done a child support system, and their subs (BAs, Developers) were from different companies with different cultures)
  - Two companies bought out, culture change, management changes, multiple extensions
  - Every six months the project slipped six months, went from a 5 year project to a 7 year project
  - State let the vendor run the project and weren't validating enough
  - Determined that product had zero value, so State abandoned the project, also ended up in litigation
- Third attempt was successful, began in 2015
  - Started after previous contract settlement and with a flood
  - Even a natural disaster did not prevent the project from meeting the date
  - Many processes and plans were brought forward from the 2nd project
  - Completed on time and in budget
- New system replaced Central 1980's mainframe and 46 unique systems at the County Clerks (counties had unique business processes, computer systems, data definition, etc.)
- State Team participated in requirements gathering and refinement, design reviews, code reviews and development oversite, testing throughout the project for each sprint, unit acceptance test.
- County and central stakeholders involved in requirements gathering and verification, unit acceptance testing, conversion, data verification.

SC PACSS Project

- Rollout consisted of Pilot and Four Regions
  - Rollout initiated August 2018 and completed September 2019
- Data Conversion Effort
  - 47 Unique Projects: 46 Counties and Central
- X-Large Outreach Program with Stakeholders
  - Clerk of Court Committee, ITAC, OCM, SMEs from CSSD
- Servers Hosted at the State Data Center
  - Leverage State Data Center Resources
  - Leverage State Disaster Recovery Services
  - Production and Development

Background

- Delaware Transfer
- Project under high scrutiny, SC under $14-15M in penalties every year. New state PM reported to the Governor's Office every month, presented to both houses of the legislature every quarter + yearly written report to legislature
- Basically 48 projects: PACSS + 46 county conversions + central conversion
  - Multiple rounds of mock conversions (three / region) and data cleanup efforts (bi-monthly)
- Extra-large communication effort with stakeholders; key to the project's success.
  - Previous disagreement of data ownership, lack of understanding of the impact of the new system mitigated by regular meetings with Clerk of Court committee, ITAC (county IT staff)
  - Stakeholders involved in most phases of the project including requirements definition, design verification, testing, data verification, cleanup reports, etc.
  - Message from OCM team – business processes have to change.

Certification: Planning

- RFP included Requirements for Federal Certification Specialist in addition to Federal Certification Manager on the State team.
  - Certification Resources Involved with the Project from the Start
    - Previous Experience in Other States
    - Participated in Requirements, Design and Testing
- RFP Included Requirements Management Plan
  - Developed by SDC
  - Approved by the State Team

- SC required that the vendor have a Certification Specialist to work with the state's Certification Manager.
- Early preparation and planning for Certification is key.
- BA's that were leads in a functional area became leads for certification.
- Requirements Management Plan is extremely important to Certification success. It was developed by vendor but approved by state. More detail on the next slide…

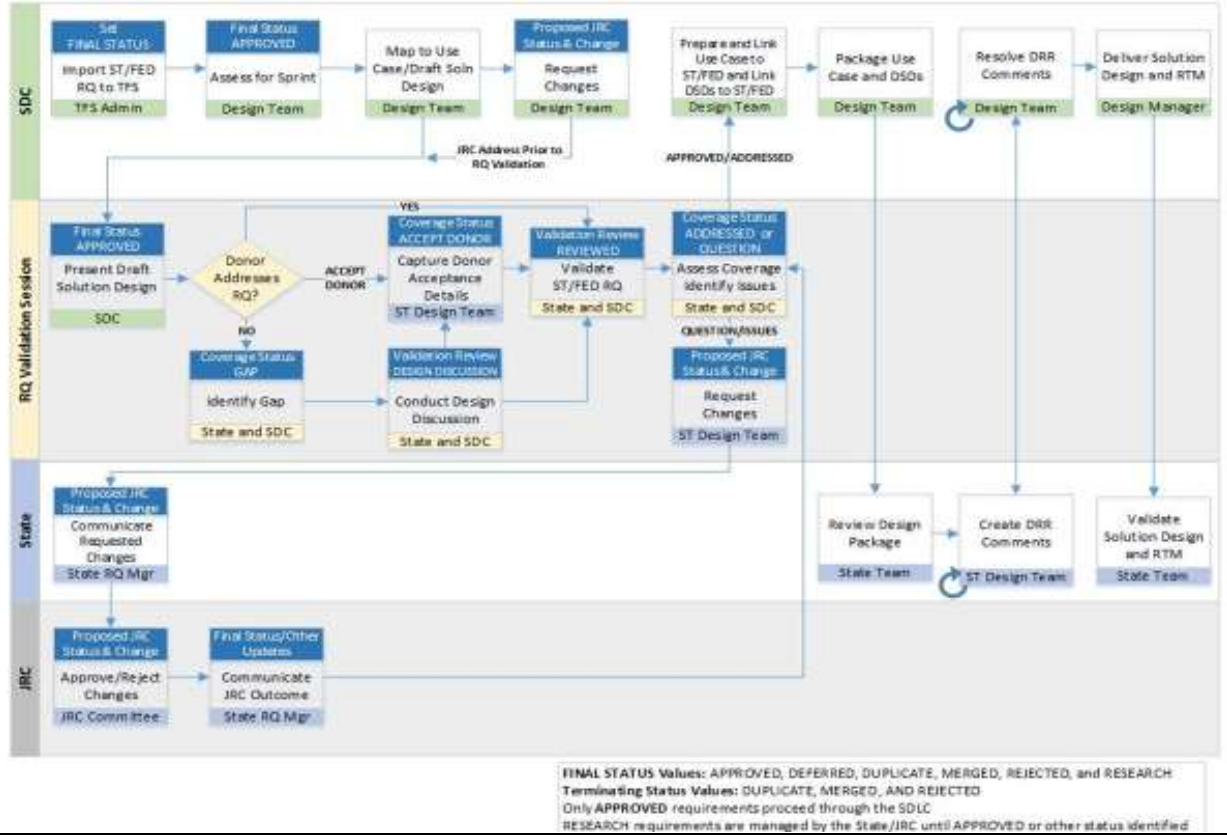
Certification: Planning

Requirements Management Plan

- Fed Requirements were Loaded and not Decomposed
- A Requirements Traceability Matrix (RTM) could be generated at any time to show the status of requirements Regarding Design, Development, Test
- The Joint Review Committee (JRC) Controlled the Requirements
  - Consisted of State and SDC Members
  - Requirements had Owners
- Requirements Linkage
  - Requirements Linked to Components (Designs)
  - Components linked to Code
  - Test Scenarios Linked to Requirements
- Test Scenarios were Written to the Requirements
  - If the Desired Functionality Changed, the Requirements had to be Changed before the Test Cases were Updated
- Key in Organizing all Requirements and Keeping the Most Important in Focus
  - Certification Requirements and Bugs were fast tracked
- RTM Built Daily, Monitored Weekly, Trended Monthly

Requirements management role in Certification:

- Federal Certification Requirements are loaded but <u>not decomposed</u> so they could be traced directly
- 4900 State requirements
- All requirements are in a vertical list, and a Requirements Traceability Matrix could be produced at any time to show the status of a particular requirement
- JRC met every two weeks, controlled the requirements, had both state and vendor reps
- Requirements Manager and Test Manager were the same
- Test scenarios were written to the requirements, and test cases were not updated until the requirements were updated.
- Requirements had SME owners; this was key to success.
- Tool used was MS Team Foundation Services



See this slide in full PowerPoint to see more details.

- Illustrates the workflow and who was responsible for what.
- SDC = vendor
- JRC = Joint Review Committee
- Focus on the RQ Validation Session row and the “Accept Donor” question. Because this project was a Delaware transfer, the main question was always “Can SC live with the way the Delaware system works and change the SC business process?”
- About 67-68% of Delaware was accepted, which was higher than predicted.
- Another focus was focusing on meeting certification and putting aside what was not needed for it.

Certification: Planning

- PACSS Federal Certification Plan Developed Before Pilot
  - Developed by SDC
  - Reviewed and Approved by the State Team
  - Documented Which Certification Guide was Used
- As much as possible Leveraged the Certification Effort in DE
  - Updated DE Federal Certification Questionnaire for use by PACSS

- Certification was planned by the vendor; review and approval by state.
- Delaware certification artifacts were leveraged as much as possible, including using the Delaware certification questionnaire as a basis.
- All project artifacts were maintained under change control with established deliverable expectation documents

Certification: Executing

- State Tested Early and Often
  - 20 State Testers for the Whole Project
    - 25 BAs for Testing and 20 UAT Testers
  - Tested after every Sprint
  - Testing Targeted Current Sprint And Previous Sprints
- Defects
  - ~2500 bugs in State
  - ~100 in UAT
  - ~50 Field Test
- Converted Data and Test Data for all Testing
- UAT Scripts Linked to Fed Cert Requirements
  - Reports Presented to OCSE Showing When and How Often Fed Requirements Tested

Role of testing and conversion:

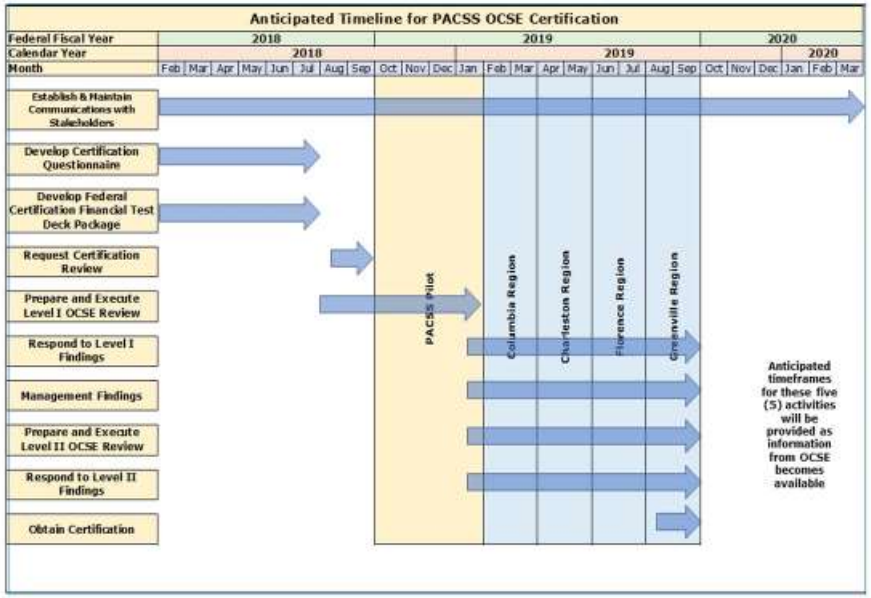
- Focus on testing early and often helps your Certification effort
- Important to have state team involved; the 20 UAT testers were from the pilot counties and central.
- The state team found 2 defects for every 1 that the vendor found
- Dashboards helped know where they were at every point and showed specifically how they were doing on Certification requirements
  - requirements passed
  - bugs/sprint
  - Test Cases blocked
  - Length of time bugs open
- OCSE visited on a quarterly basis during the project, they were shown where the state was in every step

Certification: Executing

- Federal Test Deck Executed Multiple Times Throughout the Project
  - 3X by the Software Development Contractor (SDC)
  - 1X by State Test Team in UAT
  - Final Test by SDC to Submit to OCSE
- Certification Narrative Response and Documentation of Federal Financial Test Desk Submitted Prior to Pilot
- Phase I Review
  - Conducted after Completion of Pilot
    - The State Team had multiple practice sessions to prepare
  - Certain Functionality was not in Production
    - CSENet, generation of Intergovernmental forms, eIWO, Lottery Intercept, instate FIDM,
  - Discussed Bugs in Current System Before Observed
- Phase II Review
  - "Mock" Review after 2nd of four Regional Rollouts
    - Visited multiple Counties, SDU, State Data Center, State DR Site
  - Official Phase II Review after State-Wide
    - Demonstrated Bug Fixes and New Functionality and Responses to Findings

Test Deck and reviews:

- Test Deck was run 5 times (see slide). Not many questions on it from OCSE.
- Phase I Review after completion of pilot
  - State SMES presented various areas
  - Used simple cases to demonstrate to OCSE
  - Batch queued up depending on what was needed to demo
  - Some functionality not ready, couldn't demo (see slide for list)
  - Result was seven findings and six management findings
- Phase II Review was first a "mock" review
  - OCSE visited SDU, State Data Center (Dept. of Admin), State DR Site, Newberry, Lexington, Richland, CSSD
  - 50% of the state was rolled out at the time of the mock review
- Phase II Final Review after statewide
  - Showed how they fixed issues and finalized incomplete functionality
  - Sumter, Florence, Charleston



See slide for timeframes

Certification: Executing

- Multiple Practice Sessions to Prepare for Audits
  - *Stick to the Point* in Requirements Demonstrations
  - Use Common Cases to Flow Through Requirements
  - If Batch Needed, Demonstrated Similar Case Where Batch Had Already Run
  - "Expert" SMEs Presented for Each Functional Area
  - One Screen with Fed Cert Requirements
  - One Screen with PACSS
  - One Screen for State Policy Documents, Backend Data Access, etc.
- Collaboration with OCSE
  - Requirements Clarification Throughout the Project
    - Strategies for Current Situation in State
  - Quarterly OCSE Reviews Were Helpful for Preparation
    - Previewed Areas
    - Provide Project Status, Progress, Issues
    - IV&V Reports and Responses Provided Ongoing Updates

See slide

Lessons Learned

- The State Team Should be in Charge of the Project
- Communicate the Project Vision to all Stakeholders Often
  - Involve Stakeholders in Design, Testing, Verification
- Establish and Track WBS
  - Don't Complete Schedule Tasks Until Package is Delivered
- Identify and Track the Minimum Viable Product (MVP)
- Establish Meaningful and Accurate Dashboards to Measure Progress
- Honest Reporting of Project Status and Issues
  - Develop Corrective Action Plans when Status Falls Behind
  - Use Risk Planning Often to Anticipate and Mitigate Issues

See this slide and next for more overall lessons learned, but:

- Biggest lesson is that state team should be in charge of the project, which leads to successful Certification. For SC, this hadn't been the case in their previous failed projects.

Lessons Learned

- Use Requirements Management to Obtain a Common Understanding of the Final Product
  - Cheaper to Resolve Disagreements and Misunderstanding Early
  - Base Test Scenarios on the Requirements
    - Enables Common Understanding
- Verify and Validate Design and Development Early and Often
  - Do Not Just Rely on SDC Testing

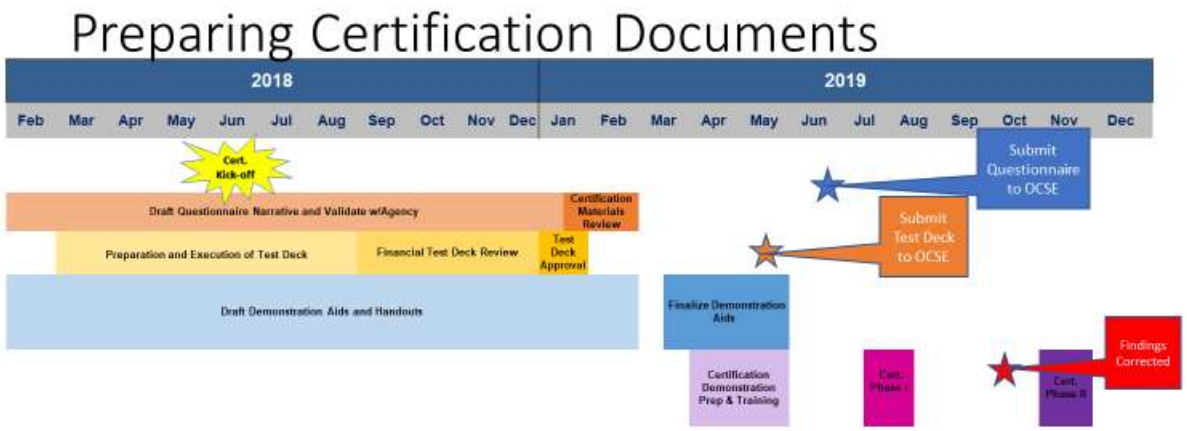
Oregon

The second presenter was Gene Gustin from Oregon:
Business & Technical Services Deputy Chief, Oregon Department of Justice, Division of Child Support
Gene.Gustin@doj.state.or.us

Gene's slides and the note takers' information (that is in addition to the information on the slides) follow:

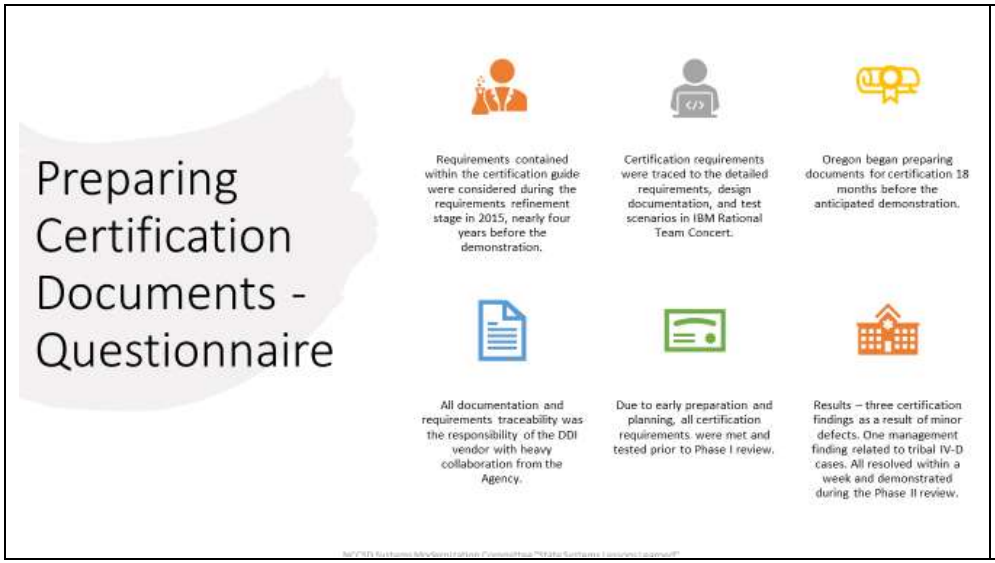
Oregon Child Support Program
• Oregon Department of Justice Division of Child Support
• State administered and state operated program
  • 22 of the 36 counties contract with DOJ to provide some services
• Current caseload – approximately 160,000
• Oregon's history with large technology project prompted new processes and requirements
  • Independent Quality Assurance
  • Stage Gate Process
  • Oversight by Office of the State CIO and Legislative Fiscal Office
	Background
	• Gene's role during the project was the Business and Functional Design Manager. He is now the Business and Technical Services Deputy Chief.
	• Current caseload is 160,000; there was a large cleanup effort for the project to get down to this level.
	• Some counties contract to provide some services.
	• Because of other large system project issues in other agencies, the state approval process required Enterprise and Legislative oversight.

The Origin Journey  	Background. See full PowerPoint slide for more details on complete timeline. • Oregon's new system is called Origin. • It is a hybrid: Base is a transfer from California; Doc Gen and Business Intelligence (BI) from Michigan and New Jersey. • Official DDI kickoff October 2015 (including requirements management.) • Oregon agrees with South Carolina that good requirements management provides the foundation for successful Certification. • OCSE was onsite for the Phase II visit end of October 2019, and Oregon received their full certification letter one week before Christmas, which was a great present! Vendors: PM/OCM – Maximus QA – CSG DDI – Deloitte IV&V – SLI



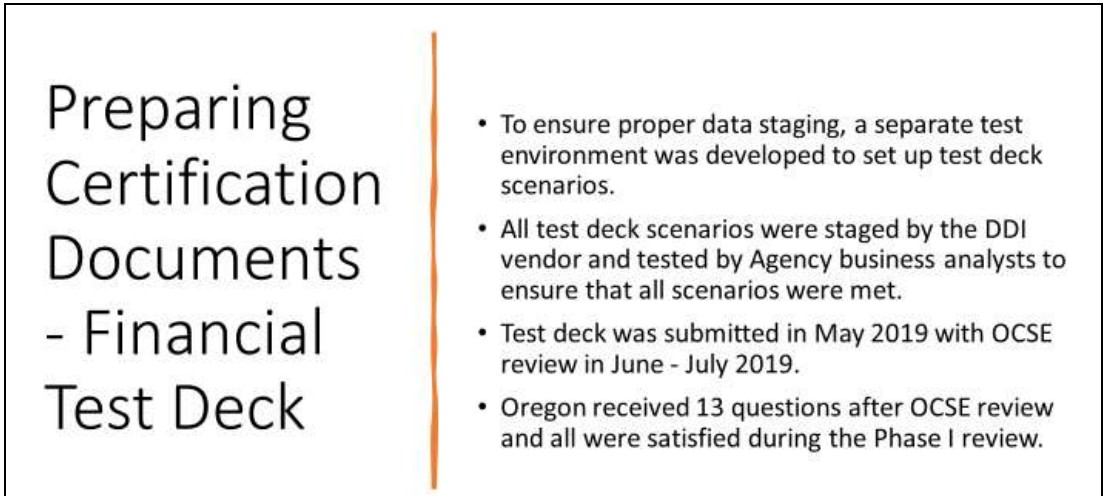
Certification Timeline notes:

- Preparation of the certification documents began 18 months before they anticipated OCSE being onsite for their Phase I visit.
- OCSE was invited to a June 2018 Certification kickoff, which was approx. one year before they anticipated the Phase I review. At the meeting, the formal and layout, level of detail needed, table names, screen shots, etc. were discussed with OCSE. This kickoff and discussion were key.
- Letter requesting certification visit sent to OCSE after statewide rollout and stabilization period began April 1, 2019.
- The Test Deck was submitted to OCSE May 2019.
- The draft of the Certification Questionnaire was sent to OCSE in late June 2019.
- The Phase I visit was end of July 2019.
- Letter with findings received October 2, 2019.
- Findings were corrected October 2019.
- Final OCSE visit for Phase II was end of October 2019.
- Certification letter rec'd December 2019.



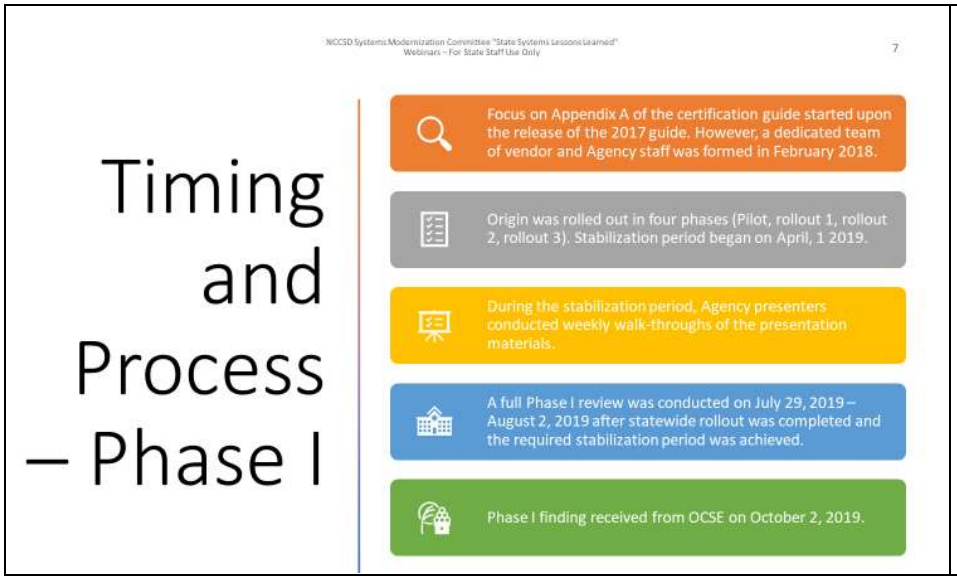
Questionnaire

- The DDI vendor was responsible for the documentation, but the State had a dedicated team of agency staff who were integrated with the vendor. These staff did lots of reviews of the Certification documents. The goal was that the BAs were take over at the end, so they were very invested in the document preparation.
- Requirements mapping was done using Rational Team Concert, an IBM product, with specific cross referencing for Certification requirements.
- One complicating factor was that they were working from the 2009 Certification Guide at the beginning but knew that the 2017 Guide was in process.
- Entire process was a heavy lift for agency staff and vendor.
- Result was good – only 3 certification findings with minor defects which were resolved within a week, and therefore fixes could be demo'd at the Phase II visit.



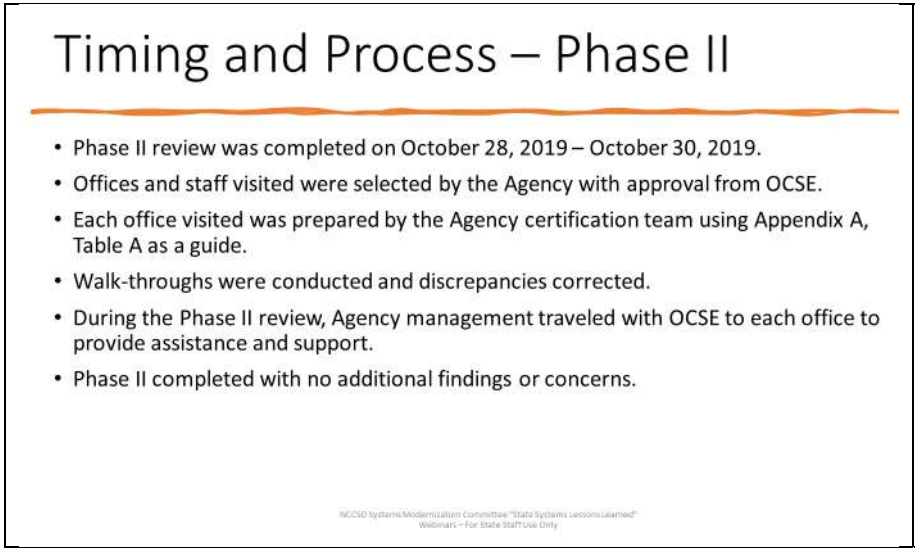
Test Deck

- Important to have a separate environment to run the Test Deck
- Heavy collaboration between Deloitte and the state BAs.
- OCSE was invited to review the Test Deck format, layout as they were developing.
- After submission, OCSE had 13 questions which were resolved.



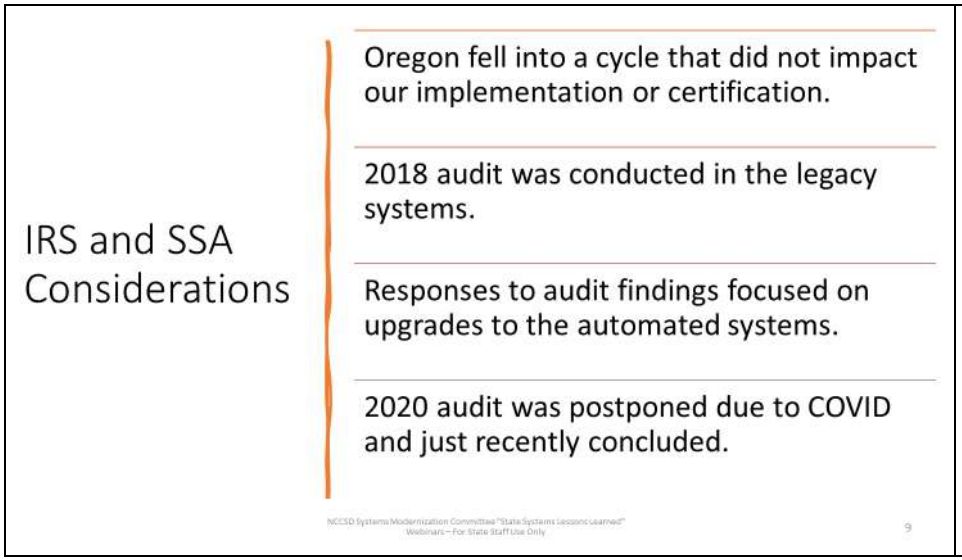
Phase I

- They were focused on Certification early, but also needed to wait for the 2017 version to be out officially.
- 2017 Guide out in September of 2017; Dedicated team started February of 2018.
- A stabilization period (code freeze) after statewide rollout was required by OCSE before they would come for the Phase 1 visit. Stabilization period was 2-3 months.
- Stabilization started April 1, 2019 and that's when official letter was sent to OCSE requesting visit.
- During this time, weekly practice of demonstrations for OCSE done, reviews to make sure any gaps were addressed.
- One-week review period by OCSE, July 29-Aug 2, 2019.
- Findings letter received Oct 2, 2019.



Phase II

- Local office preparation was conducted in person by the state certification team. As an example, they went through Case Initiation steps together and made sure staff understood each process.
- State identified offices to be visited.
- Worked hard to address any anxiety that the local office staff had.
- Review occurred shortly after Phase I findings resolved.
- Agency management traveled with OCSE.
- There were no additional findings from this visit.



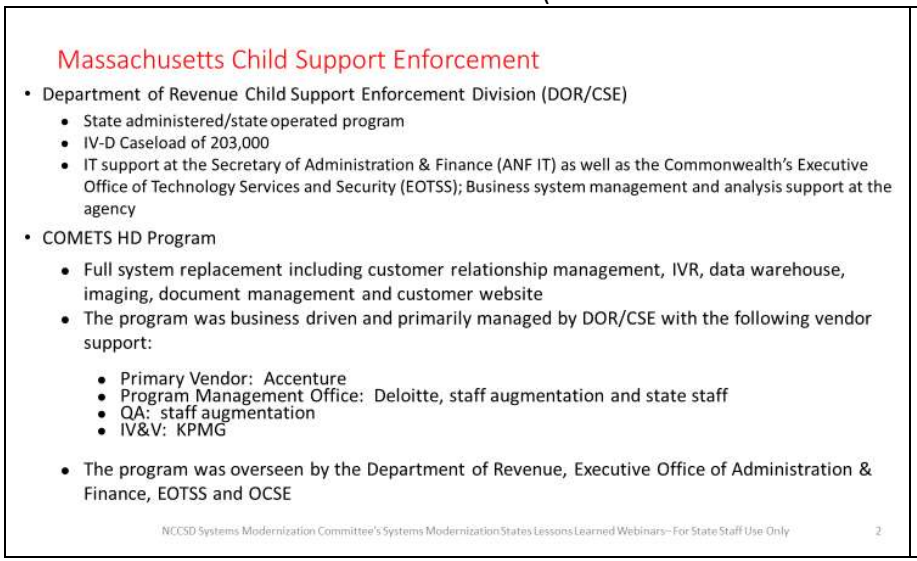
IRS audit

Oregon's IRS audit schedule worked out so that their IRS audit on the legacy system was in 2018, therefore the next one wasn't scheduled to occur until they were fully on Origin. That one was subsequently delayed because of Covid until September 2021.

Massachusetts

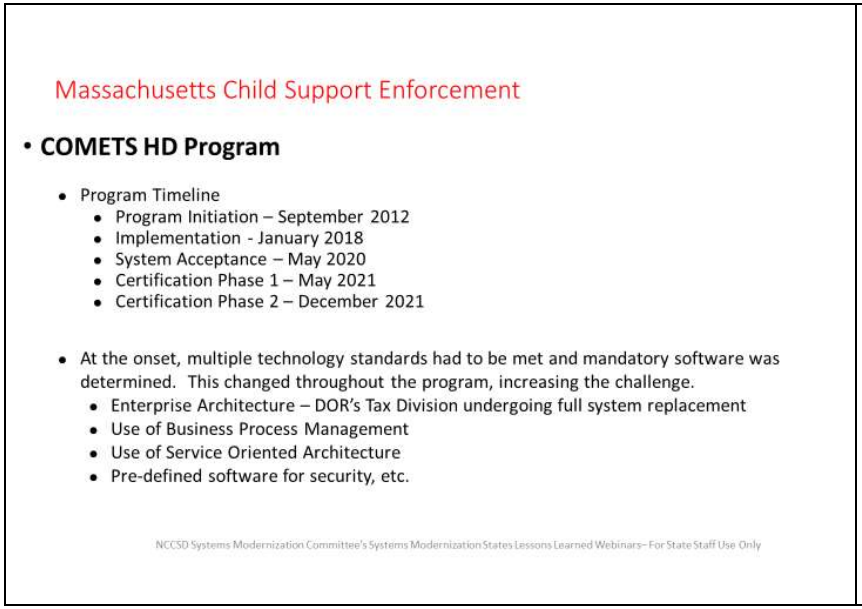
The final presenters were Michele Cristello and Joan Fahey from Massachusetts:
Michele Cristello, Deputy Commissioner, cristellom@dor.state.ma.us
Joan Fahey, Initiative Director, COMETS HD, faheyj@dor.state.ma.us

Their slides and the note takers' information (that is in addition to the information on the slides) follow:



Background

- Michele was originally the COMETS HD Initiative Director, then became the IV-D Director. The certification for their new system is her second round, as she was with Massachusetts when their original system was developed and certified.
- Joan was the OCM Lead, then Business Lead, then became the Initiative Director when Michele was promoted.
- Project primarily managed by state with vendors listed on slide.
- Lots of oversight



Background

- See slide for timeline. Original goal was to have certification within one year of implementation because that would have been within the warranty period. This did not work out. Real certification discussion did not start until spring of 2020.
- Rocky implementation; took two years before MA would formally "accept" the system from the vendor.
- Implementation challenges bled into certification challenges.
- Also, the original plan was to have an enterprise architecture (with the child support and tax systems) and with lots of standards and mandatory software. However, the tax project stopped and started, with the standards becoming a problem, so they went their own way.
- The Phase I certification happened during the pandemic, so was the first "virtual" Certification process by OCSE. OCSE did not visit in person. There were some challenges and delays in getting it set up, but eventually occurred May 2021.
- Make sure you work with your OCSE folks to be on the same page; timing etc. will depend on OCSE's resources as well as yours.

Timing and Process of Certification: Focusing on Certification Guide Appendix A Guidance and discussions with OCSE. Was it early enough?

COMETS HD Process

- An initial certification discussion with OCSE approximately 1 year prior to COMETS HD implementation (January 2018).
- Certification approach discussions between DOR and OCSE leadership started in the spring of 2020.
- Draft Certification Responses were submitted to OCSE and OCSE provided comments which were incorporated in the responses.
- Practice demonstration session to ensure we were providing sufficient detail.
- DOR submitted final Certification Guide Response in March 2021.

Lessons Learned

- Plan to submit drafts and receive feedback as early as possible. Discussion of process did not elicit sufficient detail.
  - OCSE required screen prints showing every step in the process, not just screen prints showing requirement being met. For example, we initially provided screen prints where locate activities were initiated and initiation of a postal verification. OCSE asked that documentation for each requirement include every screen accessed to get to the locate initiation screen.
- Obtain confirmation of requirements. OCSE introduced requirements outside the scope of the Certification Guide. For example, OCSE would not conduct Certification unless we had less than 50 Severity II defects in production. Technical requirements (upgrades/ penetration test). Make sure technical person confirms requirements.
- Confirm environment. OCSE initially insisted on "production" environment. OCSE agreed to Certification within a production-like environment, but it had to be a copy of production taken within 45 days of the start of Certification.
- Expand practice demonstration with OCSE to make it as close to the certification process as possible. We were not aware OCSE would read every requirement and that each requirement would be demonstrated individually, rather than joining requirements or subsets to be efficient. We were surprised by the literal reading of the requirement and level of detail. For example, several findings were issued on text in forms.

Process

- See Lessons Learned on slide; some OCSE requirements for the process and documentation were surprising. Be prepared to be surprised by what they ask you to do/provide.
  - Extreme levels of detail in Certification Questionnaire, e.g screen shots of every screen up to the requirement being demonstrated.
  - Items that are not covered in the Cert. Guide – e.g. number of severity level 2 defects below 50.
  - Level of detail and literal reading of requirement in some of the findings that didn't make sense with child support typical practice, e.g. that letters had to affirmatively state that MA didn't charge any fees.
  - Note on production environment: SC and OR said they did Cert demonstration in production, SC was a shadow of prod.
- Practice, practice, practice. Doing the actual demo with OCSE can be very different than what you have practiced.

Implementation and Rollout Approach and Certification

Implementation Approach and Certification

- Certification activities were not integrated with the roll-out approach.
- COMETS HD was implemented over 2 releases. Certification activities did not start until system implementation was complete (January 2018).
- OCSE conducted a full Phase I review in April 2021 (remote demonstrations).
  - Demonstrations were held 3 days a week over 3 weeks. Government Zoom.
  - Benefits – time to regroup and respond to questions and concerns, easier for staff to come in and out as needed, clearer screen display (no projection), ability to text directions during the presentation.
  - Challenges – identification of system with security to allow for use of production data , demonstrations spread out over longer time period, inability to read body language or communicate via body language.
- Technical review: Cursory review.
- Findings were addressed over 2 releases (August/October 2021).

Phase 2

- CSE staff are working primarily remotely. The Certification process assumes staff are working in offices and OCSE can ask staff randomly to demonstrate work on the system.
- Plan is to have staff available to demonstrate working on the system remotely via Teams.
- Project staff will demonstrate the outstanding requirements on-site or remotely.
- Staff will be available at the data center, SDU, and disaster recovery site to answer questions.

- **Preparation Steps**
  - The relevant Certification requirements have been provided to the SDU and technical staff. A statement will be prepared documenting adherence to the technical requirements. Meetings are scheduled to review the requirements and prepare staff for the on-site visit.
  - Project staff will practice demonstration of outstanding requirements.
  - Field staff will be identified to participate in demonstrations remotely. They will have available a variety of work items that can be processed upon request.

Phase I

- OCSE conducted full Phase I (remotely) – instead of 1 week, it was 3 weeks long (3 days a week) which was challenging.
- Technical review was very cursory, but strong questioning from OCSE on functional requirements.
- Since virtual, one challenge was not being in the room together and not able to read their body language.
- Eleven findings out of Phase I: Text missing from forms (e.g. affirmative statement that MA doesn't charge fees); missing data; 2 related to functions; missing report; risk assessment.
- Findings have been remediated.

Phase II

- Yet to occur, scheduled for December 2021
- See plan on slide. Having users demonstrate remotely will be interesting. MA will be able to select who will join and prepare them for demonstrations.
- OCSE reps will visit data center, SDU, disaster recovery sites.

MA hopes for a Certification Letter as a Christmas present similar to OR 😊.

Certification: Preparing Certification Documentation

Start Preparation

- Focus on certification requirements and how they trace to federal regulation and law starts at the beginning of the project.
- Certification requirements were taken into consideration at every stage starting with the Request for Response and ending with the Certification Guide Response documentation.
- Leads were required to verify Certification requirements were being met during requirements, design, development and test.
- Certification requirements were verified during the system acceptance process (prior to development of certification documentation).

Certification Requirements Contrary to State Law or Practice

- TANF Interface data elements
  - Our TANF agency did not want to receive the CP address. OCSE issued a finding.
  - The issue was escalated and OCSE has agreed to waive the requirement. Meeting the requirement would have involved changes to the interface and significant testing effort.
- Creating a process for supervisor approval on various requirements
  - OCSE agreed availability of staff worklist items pending and completed was sufficient since supervisors could review and reverse decisions, if needed.

Federal Test Deck

- The Test Deck was the first documentation submitted to OCSE.
- We had a dedicated environment for production of the test deck. It took a significant amount of time to run batches to mimic the changes in time. There was a challenge explaining them to OCSE since there were transaction dates that matched the scenario, but the system date did not change.
- Upon initial submission, we were asked to run one scenario we had not run because it tested conditionally assigned arrears which we do not maintain. However, since the answer included permanently assigned and unassigned arrears, OCSE required it be run.

Documentation

- Start Early!
- MA identified some certification issues during document preparation and running the Federal Test Deck, see examples on slide. These types of issues need time to reach resolution with OCSE.

Certification: Preparing Certification Documentation

Who (state or vendor) was responsible for writing the Certification response document and gathering any supporting documentation?

- The vendor was primarily responsible (via a contract deliverable) for drafting the Certification response document and gathering support documentation. However, the DOR team conducted many reviews and had final approval of the documentation. Work cannot be underestimated.

Was there anything for which OCSE asked that was a surprise?

- Difference in interpretation of the requirements (literal versus practical meaning).
- Documentation of each requirement starting with the first step in any process.

Were there any variations from the Certification Guide's Appendix A Guidance in Preparing for Certification Reviews? When should document preparation start?

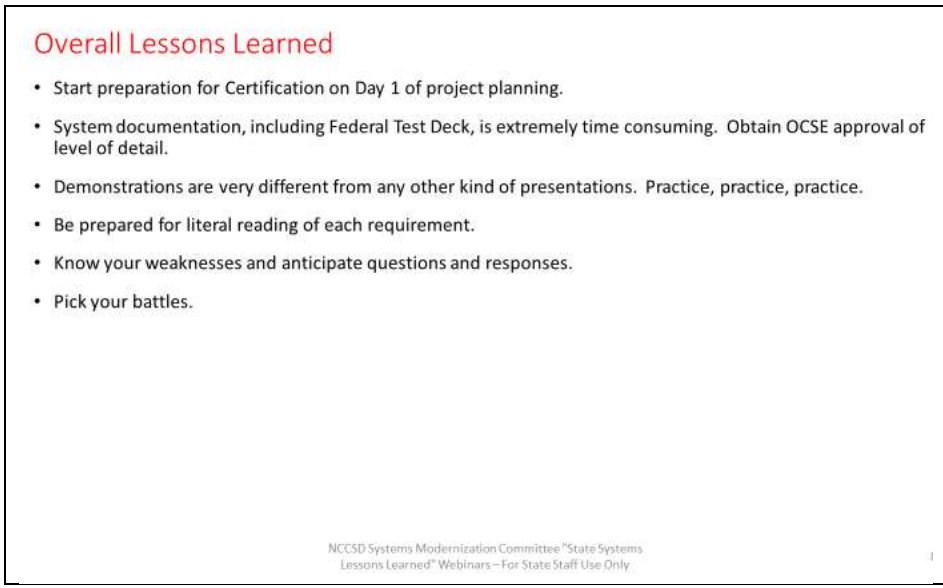
- Federal Certification documentation preparations started in November 2019. DOR submitted our official request to OCSE in April 2021.
- Recommend the process start as early as possible.

What did you find were the best ways to trace the system functionality to the Certification Requirements?

- Matrix was created to track each Certification Requirement to the use case and relevant design documentation.
- Validation of functionality by Business Functional Team Leads.
- Requirements Traceability Matrix & Jazz Suite.

Documentation cont.

- See slide.



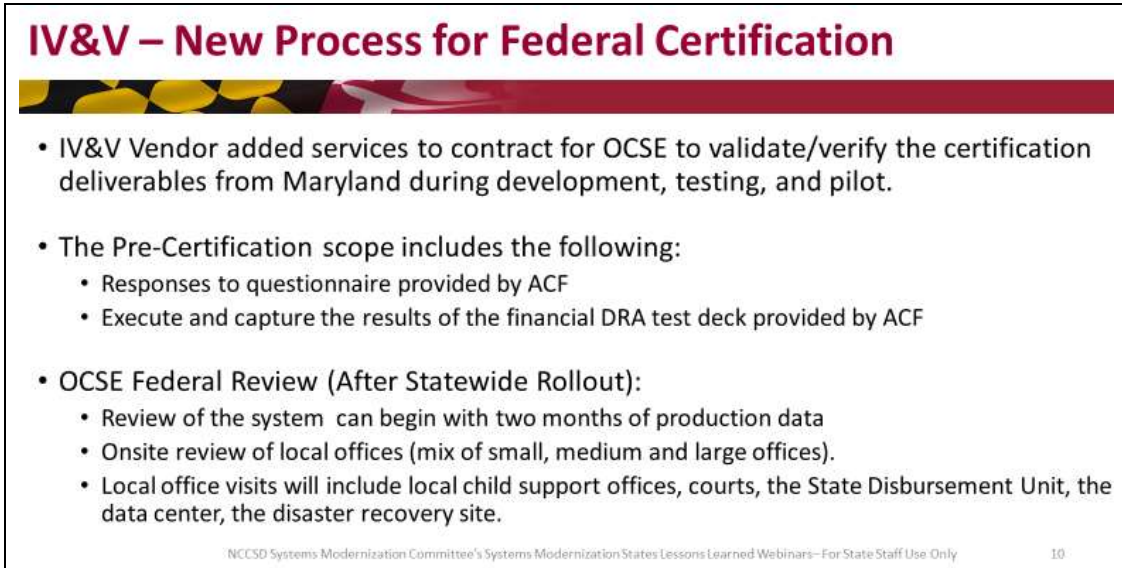
Overall Lessons Learned

- See slide. Things emphasized:
- Make sure your requirements are based on the OCSE wording.
- Demos for OCSE are very different than a training presentation, need lots of practice – come up with possible questions and answers, but be prepared for questions that seem to be out of left field if the OCSE reviewers do not have a solid child support background. MA's OCSE lead reviewer was clearly not experienced in child support.
- Documentation and Test Deck are really time consuming. Leave time for lots of review.
- Have discussions with OCSE on level of detail expected on all aspects – documentation, Test Deck, demonstration…. Present things the way they want them presented.
- If issues, ask them "what will it take to satisfy this requirement?"
- Pick your battles with OCSE; remember that the goal is to get to "yes"
- Overall, a very challenging but satisfying process.

Maryland additional Certification information from 11/5:

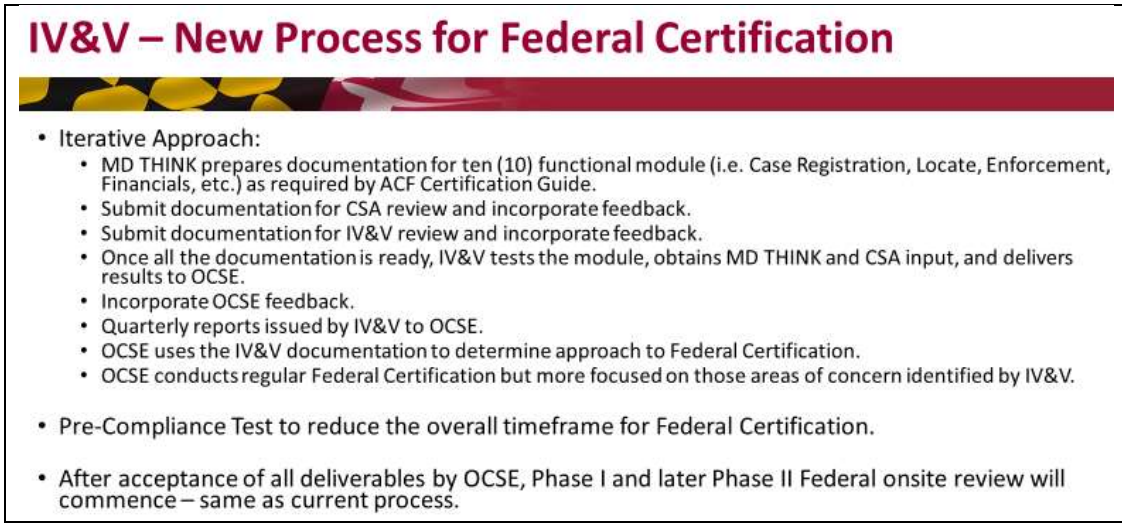
Kevin Guistwite from Maryland was unable to present on 10/22. His 11/5 Certification information is added here to keep related notes together.

Kevin P. Guistwite, Executive Director, Child Support Administration
kevin.guistwite@maryland.gov



OCSE is testing a new process for Certification in MD and DC.

- Thought MD would be a good candidate since they are doing the DDI aspect for their whole project internally (with state and individual contractors, rather than with one big DDI vendor).
- Ernst & Young is their IV&V vendor. OCSE asked MD to augment the IV&V vendor's contract to do "pre-certification" work.
- Goal is to do more Certification work earlier and reduce overall Certification timeframe.
- E&Y will go ahead and review MD's Certification Questionnaire responses.
- MD is changing to DRA Distribution. E&Y will monitor and run their own test to see where MD is at any point in time and be able to share feedback with OCSE.
- This approach will hopefully help validate certification in the process early and give OCSE the ability to focus on more specific areas when they come out for review.



Approach

- Process started about 6 months ago.
- See slide for all steps.
- Important to note that Full certification is still done by OCSE with same Phase I and Phase II approach.
- DC was asked to use this pre-certification approach also.

10/22 Question & Answer segment

Q1: Oregon, who were your vendors?

A: Maximus - project management
CSG - QA
SLI/Public Knowledge- IV & V
Deloitte – DDI

Q2. Massachusetts, how did you define "System Acceptance" and why is that different from implementation?

A. This was a significant point in the contract, where we would officially "accept" the new system, and it was a large payment point for the DDI vendor. After acceptance, contractually we would move into the warranty period. Unfortunately, at implementation the system wasn't where it needed to be so system acceptance happened two years after our "big bang" implementation.

Q3. All, can you please share the most challenging thing that you had to plan or address during the certification process?

A. SC: Our conversion effort that had to deal with 47 data sources.

MA: Michele: Our OCSE analyst. The lead had very little child support knowledge and read the requirements at a level that did not seem reasonable in the child support practical world. It was a very literal line by line requirement reading. This made our presentation hard. Ultimately it was ok because we had few findings, but it was very challenging to get to a good point. This was addressed with OCSE, but they don't seem to have many resources, or ones who are knowledgeable in child support. Joan: The Federal Test Deck is a huge amount of work. Also, on the analyst issue, there were some awkward moments. For example, they said our Transmittal 1 form didn't meet the requirements, and we had to point out this was an OCSE approved form that couldn't be changed. PSOC is optional in the Certification Guide but we had to show information anyway. We were able to explain things, but it took a lot of explaining. It would be good for OCSE to revisit some of the requirements in the Guide.

OR: We didn't have a ton of challenges. Our lead OCSE analyst was very good, our secondary had little child support experience. That person became MA's lead analyst.

Q4. All, can you share who your OCSE analyst was?

A. MA: Natalie Njoku.

OR: John Cheng, with Natalie Njoku as second and two contractors on Phase I. Same but only a single contractor on Phase II.

SC: SC had quarterly visits plus certification reviews, so lots of OCSE representation throughout: Joe Bodmer, James Hicks, David Tabler, Dorothy Wan. Dorothy was the lead during certification. Our main analyst is now Neera Agarwal.

Q5. Is it acceptable that Oregon and SC had such a different experience from Mass? Shouldn't we all be held to the same standards by OCSE?

A. General consensus was No and Yes.

Q6. MA, what platform and software was used for the full replacement of your child support system?

A. Oracle-platform. This was a full custom replacement; moved from mainframe Cobol to Oracle java script. Also have Pega CRM, Adobe Forms, FileNet, IBM Websphere. MA can provide a full list if needed.

Q7. Massachusetts, where does OCSE define severity II defects?

A. MA: These were described in our vendor contract, not defined by OCSE. Our contract said that all severity 1 and 2 defects had to be resolved before implementation. MA staff classified the defects, and this was a mechanism we put into the contract as a vendor management tool. OCSE's requirement of less than 50 severity level 2 defects was very random. Also, none of the defects had to do with any certification requirements, e.g. we had a contact center defect. We felt like we were having circular arguments with OCSE.

Our definitions were Level 1 = showstopper, 2 = significant but temporary workaround available, 3 = significant but easy workaround, 4 = small, e.g. typo.

SC commented that their definitions of defect levels were basically the same, and their contract required no more than 20 level 2s. However, OCSE didn't require anything related to defects with their Certification efforts.

Q8. South Carolina, was a production environment required?

A. We set up a duplicate, shadow production environment.

Q9. Oregon, who did your team 'present' the weekly practice presentations to and how were the practice presentations evaluated and improved?

A. The business analyst presented to Gene, Karen (Project Director), IV-D Director, and other executives. That group gave feedback for improvement.

Q10. South Carolina, how many local offices did OCSE visit?

A. SC: Central office and 3 others that were our pilots. The Phase II review visited four additional offices over and above the initial Pilot offices. Additionally they visited the SDU, the State DR site and SC DTO where our servers are hosted.

OR commented for Phase II OCSE visited 7 local offices and their hosting provider. Some of the offices had been using the system for over a year, some for 3-4 months.

Q11. All, about how many pages were in your response to the Certification Questionnaire?

A. MA: around 600 without the Test Deck

SC: about 300

OR: 577, Gene just looked at it recently.

Q12. All, can you confirm what programs were used for requirements traceability? Was the program decided by the vendor or state?

A. MA: Jazz, chosen by State.

SC: MS Team Foundation Services, chosen by State.

OR: Rational Team Concert, chosen by vendor.