NCCSD State Lessons Learned Webinar Series

Notes from 10/8/2021
Pre-Planning + Planning
Order of States Presenting: Oregon, Indiana, Arizona, Pennsylvania

Introduction

Robin Arnell, 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 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 Pre-Planning and Planning webinar today are shown in the graphic below:

Pre-Planning + Planning

PRE-PLANNING - IV&V/QA Vendors:
How did you:
Make sure everyone was clear on the difference between Independent Verification and Validation ("IV&V") and Quality Assurance ("QA")?
Determine and differentiate their roles for your project needs and decide whether to procure both (since IV&V is mandatory for system replacement projects, but QA is not)?
Decide timing on the procurement(s) (e.g., do you need a QA vendor to come in early)?

PLANNING - Executive/Key Stakeholder Support:
With an official Streamlined Feasibility Study submission, OCSE also wants assurances that the state has funding commitments and executive support for the entire project. Furthermore, given the cost and length of these projects, ensuring broad support is critical from the outset.
What was your strategy for ensuring official support for the project from the Governor/Legislature/Fiscal/Other key agency executives?
What statistics/presentation materials were needed for these groups?

PLANNING - Creating the IAPD:
Who was charged with writing your Implementation Advance Planning Document ("IAPD")?
What were OCSE's expectations for both the IAPD and the Advance Planning Document ("APD") documents for your existing system?
How much time was needed to write this, vet it internally, and receive approval from OCSE?
Creating or updating all the plans (e.g., Resource, Project, Risk Management, etc.). When, how, and by whom?

PLANNING - DDI Planning:
When did you begin discussing Design, Development, and Implementation ("DDI") steps in more detail in preparation for your procurement documents (and what did you ultimately decide), including, but not limited to:
Implementation and rollout strategies - Big bang or incremental approach?
If incremental, pilot system modules, regional rollout, etc.?
Do you need to expand your office space for additional vendor or state project staff?
Who is providing equipment (laptops, monitors, etc.)?
What were your final decisions on tools, or will you ask your vendor to propose them?
Staff support and training approach during implementation?
How will you determine and document any data quality issues so that potential vendors are aware of them?
Data conversion – do you have a preference on how to conduct, (e.g., mock conversions, manual and automated conversion)?
Testing – requirements for test plans, managing bugs and change requests identified during testing, monitoring progress. What about a Backout strategy?

Oregon

The first presenter was Karen Coleman from Oregon:
Karen Coleman, Business & Technical Services Chief
Oregon Department of Justice, Division of Child Support
Karen.Coleman@doj.state.or.us

Karen's slides and her presenter notes follow:

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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 Enterprise Information Services (office of the State CIO) and Legislative Fiscal Office
 	
NCCSD Systems Modernization Committee's Systems Modernization States Lessons Learned Webinars– For State Staff Use Only
	To provide you some context, the Oregon Child Support Program is state administered by the Oregon Department of Justice Division of Child Support. The program is state operated and 22 of the 36 counties in Oregon contract with the department to provide some level of child support services. The application is managed within the Department of Justice with a Division of Child Support technology team dedicated to supporting the new system.
	
	In preparation for and during the system modernization project, we engaged in case closure and case cleanup efforts, bringing our caseload numbers down to the current level of approximately 160,000.
	
	The State of Oregon has an unfortunate history of troubled large-scale technology projects. That history has prompted both new requirements and processes, such as the requirement for independent quality assurance (we will talk more about that next); projects over $1 million must engage in the state's Stage Gate process and receive oversight from Enterprise Information Services, which is the office of the State Chief Information Officer, and the Oregon Legislative Fiscal Office.
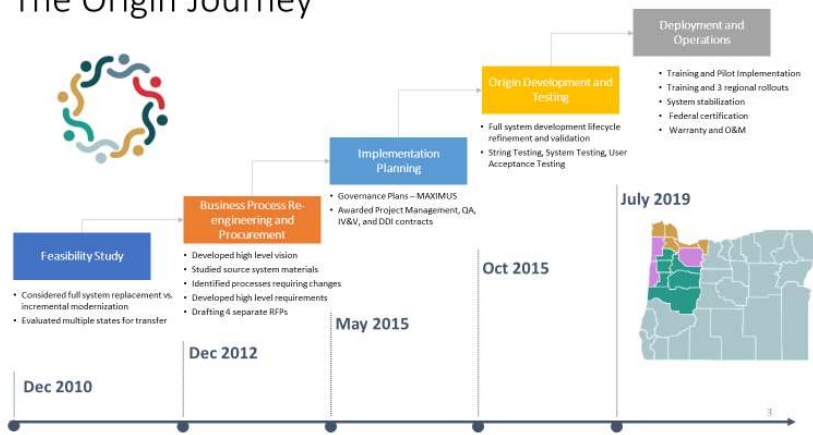
	(See the Full PowerPoint for a better view of the slide) To recap the project timeline, Oregon conducted a full Feasibility Study with the guidance and assistance of Maximus starting in 2010. Ultimately Oregon decided to implement a hybrid solution, transferring the base system from California and building modules that mirrored those seen in Michigan and New Jersey. Those modules included document generation, business intelligence, and reporting. Following the Feasibility Study, the Implementation Advance Planning Document was submitted and approved by OCSE. In 2012, the program engaged in a Business Process Reengineering project to develop "To-Be" processes to leverage the automation in the new system. During that same time period, our procurement workgroup began drafting four separate RFPs – for project management services, independent quality assurance, DDI services, and independent verification and validation. Oregon hired Maximus to provide project management, organizational change management, and staff augmentation services for additional business analysts; CSG Government Solutions to provide independent quality assurance services; SLI Government Solutions to provide federal IV&V services, and finally by late 2015 Deloitte Consulting to provide DDI services.

	During 2014 and into early 2015, the project team worked with Maximus to develop all the project management and governance plans. All plans required review by the independent quality assurance vendor. Oregon had the official implementation project kickoff in October 2015, and it was full steam ahead with design, development, and testing. By July 2019, Oregon had conducted a three-month pilot, then rolled out the new system, Origin statewide in three geographical phases, and was welcoming OCSE for the onsite federal certification demonstration. And finally, in December 2019, Origin was federally certified and sailing into operations and maintenance.

	IV&V and QA vendors – Let's talk about the difference, do you need both, and if so, who should join first.
What's the difference? - Oregon's QA requirements - OCSE advise requested **Do I need both Independent Verification and Validation and Quality Assurance?** **Who should join the project first?** - Oregon requires QA to onboard first Pre-Planning – IV&V and QA Vendors NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only 4	I spoke moments ago about Oregon's requirement that all large-scale technology projects are required to have independent quality assurance (QA) oversight. And we are all aware OCSE requires independent verification and validation (IV&V). So, what's the difference? That's a good question and one that created some confusion early in the Oregon project. Based on Oregon's QA requirement, Enterprise Information Services had created a robust quality management program which includes an IV&V component. Oregon's Enterprise Information Services argued their IV&V component should satisfy OCSE's requirements for IV&V services. After a meeting with OCSE representatives it was determined that Oregon would have a separate vendor for federal IV&V services. So, we did indeed need both. OCSE did not feel the QA vendor could also perform IV&V services. Some of the differences - To meet the Oregon requirement, the QA vendor contract cannot be held by the Child Support Program's umbrella agency – for us the Department of Justice and that's due to its independent nature. QA staff are onsite daily interacting with the full project team, attending regularly scheduled project meetings and reviewing and providing written feedback on all project deliverables before the agency formally accepts the deliverables. QA is also required to perform ongoing independent risk assessments and provide a monthly status report to the oversight groups, including the Oregon Legislative Fiscal Office, Enterprise Information Services, and the Project's Steering Committee. For Oregon, OCSE prescribed semi-annual onsite review by the IV&V team. Generally, the IV&V review is a retrospective view, looking back over the past six months. However, we did make some changes in collaboration with our IV&V vendor during the course of their engagement to also look ahead in the project schedule and provide any advice based on their experience to assist Oregon with our success. Who joins the project first? – We were required to bring on the QA vendor early in the project so they can participate in the review of the foundational project management and governance documentation. And IV&V generally wants to time their first onsite visit to coincide with the arrival of the DDI vendor and formal project kickoff.

Planning – Drafting your IAPD **Collaborative approach** - Maximus (FS vendor) and agency **Internal vetting** - Program leadership and project steering committee **OCSE approval** **Annual APDU and the IAPD** - One document with two distinct sections **Creating project management and governance plans** NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only 5	Drafting your IAPD – For Oregon, development of the Implementation Advance Planning Document followed OCSE's approval of the feasibility study and was a collaborative effort between our vendor Maximus and the Oregon project team. Drafting the IAPD took approximately four months. Meetings were held to discuss in greater detail the approach Oregon wanted to take in its implementation project – documenting details related to agency project roles and responsibilities, what vendor support would be procured, where would the design and development work be conducted, and what implementation strategy could be supported. After the IAPD was drafted and delivered to the project team, it was vetted internally with the Executive team, senior managers, and the project's steering committee. After incorporating their feedback and once the final draft was submitted to OCSE, it took approximately 60 days for the OCSE team to complete its review and provide feedback. What were OCSE's expectations for both the IAPD and Annual APD documents for the existing system? After final approval of the IAPD and when the annual update was next due, Oregon submitted one Advance Planning Document broke out in two distinct sections – one section that reported planned and actuals for the legacy system and another section that reported specifically on the implementation project. We followed that process each year through 2020. Now that the legacy system is decommissioned and the implementation project is formally closed out, we are back to submitting the annual APDU where we are only reporting on one system - the new system. Creating and updating plans – We had project management and governance plans for the feasibility study project, BPR, and for the implementation project. The plans were created by our vendor Maximus in collaboration with the agency. New, more robust plans were needed for the implementation project considering its scope and the coordination required between the various vendors. Also, during the implementation project, Maximus delivered project controls training to all vendors to familiarize project team members with each project plan, its purpose, and how it applied to team member's individual project role. Plans included Governance plan, Risk and Issue mgmt.

| Planning – Executive / Key Stakeholder Support | OCSE

- Analyst guidance was crucial

State funding assurance

- The chicken or the egg?

Executive support

- IV-D Director = Executive sponsor

Ensuring key stakeholder support

- No easy task and critical for your success

Materials used to garner support

NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only 6 | Key stakeholder support – As a reminder, due to timing Oregon did not use a streamlined feasibility study process, however broad support and funding commitment were equally important. The Oregon Child Support Program Director was instrumental in the communication strategy to educate the Attorney General, Governor, legislators, and other key stakeholders about the modernization project, emphasizing the commitment is a multi-biennia commitment and stressing the risks related to not moving forward. The Director and I also met with several legislators to share additional high-level information and answer questions.

So, the chicken and the egg – During the review and approval of the IAPD we struggled a bit with the financial commitment piece in that the state of Oregon didn't want to commit until the federal office did, and OCSE wanted assurance the state would commit before they'd give final approval. We were able to schedule a meeting with the Oregon Legislative Fiscal Office where our OCSE analyst team joined us by phone to discuss OCSE's confidence in the Oregon Child Support Program's ability to effectively manage an implementation project, and to share that OCSE was ready to make a financial commitment if the state of Oregon was ready to commit to the same. And they did.

Let's talk a moment about what materials may be helpful when engaging with key stakeholders. Early in the project, key stakeholders were interested in whether we'd done our homework and had a full understanding of the level of coordination and effort it would take to successfully complete a modernization project and whether we had realistic budget estimates. We shared we had met with other state child support programs and other Oregon State agencies to hear lessons learned and we had completed an initial risk assessment to identify risks and described how we planned to mitigate those known risks. We presented information from the feasibility study report regarding estimates for cost and schedule, openly admitting we didn't have large technology project experience and outlining what vendor support was needed to help ensure our success, and ultimately how the state would benefit from a modernized system. For some stakeholders, the Executive Summary from the feasibility study report is a great communication tool. Legislative stakeholders also wanted information about the return on investment and how we could ensure that a full system replacement wouldn't be needed in another 10 or 15 years. We shared information about the transfer system and how it's layered architecture would make it easier to make future upgrades and enhancements to keep the system in its modern state.

Stakeholder communication will necessarily change during various phases of your project. Once our funding was approved, we also had to provide project updates to the Joint Legislative Committee on Information Management and Technology. There is extensive communication with interface partners, extensive and frequent communication surrounding organizational change management, and of course planning and timed communication with program participants and employers. For any states that would like more specific information or examples of various communication strategies, please reach out to me. |

Planning – DDI – What and When?
 	
• When to start planning for design, development, and implementation in more detail?
  • Office space – One project facility for agency staff assigned to the project and all vendor project staff
  • Equipment – Facility set up was a collaborative effort and paid for by the program; computer equipment provided by DOJ
  • Tools – DOJ and Deloitte (DDI vendor)
 	
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	When did Oregon start planning for design, development, and implementation in more detail? High-level details were discussed during the feasibility study project for cost estimations, but more detailed planning was necessary in order to outline the state's approach in the IAPD including documenting processes, identifying key personnel, identifying potential risks, and to further elaborate scope, schedule, quality standards, and costs. And then planning advanced in more granular detail when we began drafting the DDI RFP.
	
	Those details included office space – Oregon made the decision that all DDI work was required to be performed onsite in Oregon. The DDI procurement included a requirement for the vendor to stand up a project facility large enough to house the entire project team – agency staff and all our vendors – that included project management, QA, and DDI staff – with room for the IV&V team to join us two times each year.
	
	The Oregon Child Support Program purchased and provided all computer equipment because we require vendor staff to use DOJ issued devices and not transfer any data, code, or other documentation to their firm's laptop or device.
	
	What were our final decisions on tools, or did we ask your vendor to propose them? In most cases, we asked the vendor to propose which tools to use based on their experience. The project team did collectively decide to establish a collaborative workspace using SharePoint where all project related documentation was developed, delivered, and stored.

Planning – DDI – What and When? - continued
 	
• When to start planning for design, development, and implementation in more detail?
  • Rollout strategy – Pilot and phased geographical rollout
  • Data conversion – Start early; practice, practice, practice
  • Data quality – Start identifying early
  • Testing requirements – Clearly defined
  • Training and site support – Collaborative effort between Deloitte and agency trainers and project staff
 	
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	For Rollout – Oregon chose early to implement using an incremental approach. We gathered information from other states and looked at other large-scale projects in Oregon. Overall, there were fewer risks associated to an incremental approach. It was decided during negotiations with the DDI, and later in greater detail, how the incremental rollout would be managed. We decided to roll out full functionality in a 3-month pilot, in one large and two small offices. The Pilot was followed by three geographical rollouts – two months apart. Pilot took place in September 2018; Rollout 1 in December; Rollout 2 in February 2019; and finally, we were statewide with the final Rollout in April 2019.
	
	Determining your rollout strategy will also impact data conversion planning. We required automated data conversion in our RFP. Having experienced manual conversion during the implementation of our legacy system, we knew we didn't want to do that again! It was during contract negotiations with the DDI vendor that we learned we should have started data clean up months earlier. It took the entire program pulling together to achieve timely data clean up in preparation for data conversion. The project team performed a number of mock and mini-mock conversion exercises in preparation for the cutover weekends for pilot and each of the rollout phases.
	
	Testing – Did we have requirements for test plans – Yes, our RFP did require test plans – one for system testing and one where they collaborated with the agency to develop the user acceptance test plan. Our QA vendor also performed independent system testing and user acceptance testing to validate testing results. We defined in the DDI contract the severity level definitions for defects and how those would be prioritized and resolved. We also developed a change control plan and a Change Control Board to

	review, vet, and approve all change requests identified during testing. Did we have a Backout strategy? – Yes, during cutover weekends, there were "go," "no-go," and "roll back" points. Although we were prepared to, we did not have to use our roll back strategy. And finally, for training and site support – We knew early in the project that we wanted our trainers to work side-by-side with the DDI trainers. The teams worked together collaboratively to develop and deliver training. We also had a combined group of Deloitte and agency staff that provided onsite support in each office during rollout. The Site Support team generally arrived one week prior to assist with office readiness and remained in the office for 30 days after go-live.

Indiana

The second presenter was Dawn McNeal from Indiana:
Dawn McNeal, Interim CIO (over child support and child welfare systems)
Indiana Dept. of Child Services, Child Support Bureau
Dawn.mcneal@dcs.in.gov

Dawn's slides and the note takers' information follow:

Indiana – INvest Project

- **IV-D Caseload** – 230K+, State administered/County operated
- **Infrastructure** – Managed by Indiana Office of Technology (IOT)
- **Applications** – Managed by Agency – Dept of Child Services (DCS), CIO directed move to COTS solution (Salesforce)
- **Project** – managed by DCS IT Team with some dedicated Child Support Bureau (CSB) staff
- **Agency requested** an agile approach in RFP – Scrum was proposed in winning bid

- **Vendors:**
  - Design, Development, Implementation (DDI) – Deloitte
  - Project Mgmt Office (PMO) – netlogx
  - Quality Assurance (QA) – CSG
  - IVV – KPMG

- **Timeline:** June 2020 start – November 2023 implementation

- Indiana is currently going through two modernization projects. Child Welfare and Child Support
- Prior CIO mandated a standardized approach for the two projects
  - COTS- Salesforce
  - Agile
- 4 vendors – see slide

Clarification – implementation is scheduled for November of 2022 not 2023.

Pre-Planning

How IN determined roles and responsibilities for QA vendor and IV&V?

- Scope for QA:
  - Goal - agency proactive approach to quality
  - Updated the Governance Manual (PM/SDLC processes)
  - Focus vendor mainly on DDI deliverables, checklists created
  - Key Deliverable - Monthly QA Assessment
  - Team needs to have skills and experience based on DDI scope/approach
  - Vendor onboard prior to pause – some scope/skill sets weren't aligned

- Scope for IV&V – understood this would be reactive
  - OCSE required 6-month reviews, IOT required monthly due to project budget
  - Team needs to have skills and experience based on DDI scope/approach

Quality Assurance
- QA is mandated in Indiana.
- QA – proactive, focused on DDI deliverables, Master PMP and Master Schedule
- Doing a monthly assessment, focused on six areas
- Important that QA team has skills and experience based on DDI Scope and approach. If you are going to mandate how DDI vendor will work (e.g. Agile), make sure QA staff has those skills also.
- For Indiana, the pause between QA procurement and DDI was 2 years.
- QA first on Board; project paused for 2 years; Some QA skills not aligned after, needed to ask for a change in personnel

IV&V
- Federally required but is always reactive approach
- For IN, OCSE required 6 months, but state's IOT required monthly
- Skills issue is the same with IV&V vendor, particularly if agile requirement

Pre-Planning
 	
What was IN strategy for ensuring official support for the project?
 	
• Planning Steps:
  • Invited potential vendors in to have modernization discussions
  • Determined high level technology approach, vendors needed, state staff, costs
  • Ensured agency on board with plan (budget, legal, execs)
  • Reviewed plan with OMB/SBA, IDOA, IOT
  • Money is always hurdle – know your ballpark costs (save incentive funding, other streams, cost cutting) – bring solutions
 	
• Communication is Key – ensure the staff telling your story can relate it well plus can articulate the risks of not moving forward, use data
 	
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	• Over 10 years of planning
	• Share strategic plan with the agency to get everyone on board with the plan.
	• Set up workgroups and meetings to discuss the plans
	• Take your show on the road- budget, state, administration, procurement
	• Communication is key, including why to move forward and risk of not doing so
	• IV-D Director carried the bulk of the communication with officials
	• Know ballpark cost and bring solutions; Nobody likes to say they need more money
	• Identify multiple funding streams: saving incentives over time, cost cutting, etc.
	• Indiana recommends states consider inviting vendors in to show you what they have *prior* to procurement stage. Doing so will:
	   o Give you the opportunity to see and discuss options so you get a feel for vendors,
	   o Allow you to ask questions you want to ask without worrying about procurement,
	   o Assess the culture and skillset of their team,
	   o Begin to figure out what you like and don't like which helps further determine what you would like to do with your project.
	   o Help level-set approach, state staff, cost.

Pre-Planning When did IN begin discussing DDI steps in more detail for preparation of procurement documents? – through vendor discussions/RFP writing • Implementation/rollout strategies • Incremental, pilot and regional roll-outs • Expanded office space - Virtual project • Who provides equipment – vendor provides laptops, state VPN • Final decisions on tools (HW/SW, methodology, hybrid) • Staff support and training approach • How demonstrate and document data quality issues for potential vendors • Data Conversion- (3 mocks, data cleanup) • Testing-requirements for plans, introduced User Testing, UAT NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only 5	• Best understanding of what DDI entails really starts with the informal vendor discussions and details you get into when writing the RFP. • RFP writing can be internal or vendor. • The highlighted items came into the picture after the fact. • Original plan was to have vendor face-to-face but turned into virtual project because of Covid. This worked but you miss out on side conversations, and • Watching/learning was not as easy. • Vendor brought their own equipment, and the VPN was from the state • Clean up data you know you want in the new system. If you are not sure, hold off until DDI vendor is on board to assist. IN started clean-up of data prior to DDI on-board; stopped and then waited as not useful • Know end data model before deciding conversion strategy • DDI vendor does Validation testing after every 3 sprints • State decided to follow along with testing after every sprint – not UAT but still testing ("User Testing"), useful because IN staff worked with the DDI vendor to learn about testing. • Talk through lessons learned from vendor

Pre-Planning

How did IN determine operational needs for project?

- Management Team – Contract Managers

- Staff augmentation – utilized state's managed service provider (MSP)

- Procurement methods – created Procurement Plan and communicated frequently with IDOA (RFP and MSP Project work)

- Resource management plan – know what roles/skills needed, work with HR or MSP if possible, may require training, need to work as team and support each other

- These are complex projects and you must have dedicated and large enough group of resources to assist.
- Contrast in Indiana between child support and child welfare system projects has become clear. Child Support has 9 dedicated state managers assisting, but Child Welfare only has 4.
- Important that state management team has different skill sets and can watch different areas of the project.
- Project moves at a fast pace so dedicated staff is needed;
- You need to be able to delegate
- You need contract managers also since you are managing multiple vendors – 4 in IN.
- Managed Service Provider mechanism augmented state staff: 50 state positions and 30-35 contract positions via support legacy work and new project.
- Make sure you have a Procurement Plan:
- Full RFPs for the big 3 vendors (DDI, PMO, QA)
- MSP vehicle for IV&V
- Need Resource Management plan also - skills needed, training, work as a team together

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Pre-Planning

OCSE Discussion

- When and how IN engaged OCSE – had monthly calls for years

- How IN decided to do formal PAPD - felt necessary to ensure FFP

OCSE
- IN was speaking with OCSE frequently having monthly calls for years.
- Showed OCSE PP when approach changed to Salesforce
- The calls recently moved to quarterly as the IV&V reports provide sufficient information.
- Project is going well

- Decided to do formal PAPD to ensure FFP
- PAPD wasn't huge, covered Feasibility Study, IAPD and RFP writing, laid out change approach clearly, demonstrated seriousness to OCSE

	Project Management Office • Eventually decided to procure PMO because there were very few PMs in Indiana (4-5) and not many had done an Agile project before, or a project of this size. • PM vendor deals with Master Schedule and Master Project Management Plan – all vendors (DDI, QA, IV&V) submit their schedules to PM and they integrate. • Indiana is able to submit the Master Project Management Plan with the APD each year. • Important that PMO understands all tools (Atlassian, Jira, Confluence) • Just because Agile does not mean no project management oversight • States could consider combining PMO and QA but be aware of the needed skill sets.

	DDI Vendor Scope • Had full training in the DDI vendor scope but reduced it • DDI vendor only writes training materials & does a "train-the-Trainer" • OCM: DDI vendor writes OCM plan and State administers During pause and prior to DDI vendor • Lots of IT training, see list • You will need to get staff thinking about how things will look in the future if you have mainframe geared staff. • Also trained business staff on agile/scrum • OCM work started

Pre-Planning Use Cases Development • Wrote Business Process Models, User Stories & Services (High Level) • Requirements=Features for IN =User Stories by DDI • Traceability using Jira • Certification Guide - Feature - User Story - Test Case NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only 10	• Functional requirements were originally done 2011-2015 • Indiana first wrote user stories at a high level and spent several weeks going through with DDI vendor; important requirements confirmed with both DDI vendor and state product owners • DDI vendor wrote out test cases providing the traceability. • DDI familiar with the certification guide requirements

Arizona

The third presenters were Heather Noble and Tammy Fogle from Arizona.
Heather Noble, IVD Director, HNoble@azdes.gov
Tammy Fogle, Systems Administrator TFogle@azdes.gov

Note: The AZ slides have extensive detail in them, so while they are presented here for context, they are hard to read in this size. It is recommended to look at the full PP slides in conjunction with the notes.

The Arizona IV-D Program

- Under the Health and Human Services Umbrella Agency- Department of Economic Security
- DCSS is State Administered / State Operated within all 15 counties
- Judicial State, limited administrative process
- Collaboration with the Arizona Attorney General's Office and Clerks of Court
  - Navajo Nation operates their own IV-D Program
- Caseload: 141,592 (Rural 22% / Urban 77%) - As of 8/31/21
- Staffing: 525 FTE - 97% work remotely with rotating cohorts for client-facing office coverage
- 21 client facing offices, with an emphasis on limited and virtual services

Project Details, Assumptions and Constraints

- Feasibility Study (2017) - Delaware Transfer
- State IT mandated an "updated" technology platform
  - This occurred post feasibility
- Other prior system projects in AZ have not been successful, requirements added / additional oversight
- Project was required to use an agile approach
- No GF or Automation Project Funds (APF)- Internally Funded
- DDI - Awarded to Deloitte / QA Awarded to Maximus / IV&V Awarded Public Consulting Group / PMO and OCM = Contractors

DELAWARE SYSTEM TRANSFER
- ✓ Functional Efficiency & Technical Scalability
- ✓ Time to Implement
- ✓ Risk Avoidance
- ✓ Cost Effectiveness

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Navajo Nation was part of the modernization project and included throughout.
2017 Feasibility Study conclusion was Delaware transfer. The functionality of Delaware aligned with the process in state. Judicial and scalability of program. System was certified and cost effective.
However, State IT leadership mandated an updated technology approach after Feasibility approved – lesson learned.
There were other major IT projects that were not successful; therefore, an Oversight Committee was setup.
Like Indiana, project to be done as an Agile project.

Project was funded internally.
(AZ has automation money in its budget, but Child Support did not use this money. However, they had to go through the same process as those agencies that did use that funding.)
Additional information on how system was internally funded can be provided upon request.

Deloitte/Salesforce were hired for no code solution, Maximus for QA, and Public Consulting group for IV&V.
A statewide task order was set up for PMO and OCM support, no big vendors were used for these functions.

Executive/Key Stakeholder Support: Strategy for Ensuring Support & Supporting Documentation Governor/Legislature/Fiscal/Other key agency executives:
 	
Stakeholder Groups:
• Those that govern, approve, fund, monitor, regulate the program.
   • Since our Feasibility Study in 2017, we had 4 different Directors and CIOs and State CIO. We had state commitments for funding / support...BUT
     • Document everything, including decision makers and justification at each phase!
   • **Important:** Understand who is involved in the contractual processes (not just federally, but locally)
     • E.g. In AZ, systems projects over $1M require an IT Authorization Committee (ITAC) through the AZ Strategic Enterprise Technology (ASET) which connects to the Joint Legislative Budget Committee(JLBC) - Meetings, Reports, Qtr. Briefings
     • Understand all of these governing bodies processes, meeting cadence, who sits on these committees, who represents the project
       • ASET = CIO and IV-D Director / JLBC = Department Director(s) (Umbrella agency heads) / CFO
       • Observe meetings in advance (other state projects / types of questions / what and how to prepare)
• Those that administer or are involved in the operation of the program (Tribes, County Clerks of Court, Attorney General, IT, Budget)
   • **Expectations-** What are the stakeholder groups regulations, requirements, processes? Important to know timelines, funding, systems options
 	
Statistics and Presentation Materials: Almost all of which can be synthesized straight from your feasibility study
• Project Journey Map - A visual tool that highlights the timelines of the go/no go funding decisions, reviews, timelines of ea. procurement & approval
   • Decision Points, Pros & Cons, Budget Considerations, Impacts of not moving forward
• Distribution At A Glance- Now available (this would have been extremely helpful to state executives)
• Project Technical Review and Outlook - Business case, alternative options, goals, timeline, full project cost forecasts, national outlook / snapshot
   • Technology, approach, cost, timeframe, implementation year, challenges (*Plug: Cynthia Longest's state repository)
• Q&As / Talking Point Documents- Recommended for each audience and explains importance, complexity, why Child Support is "different"
   • Enterprise IT Q&A - Code Repository, challenges with Cloud, integration with G-Suite and other enterprise applications, rules engine, technical platform, security, readiness activities. Plans to bring the proposed technical architecture to the latest technical advancements
     • Important Point: if feasibility study did not align with enterprise IT direction
   • Governor's Office of Strategic Planning and Budget Q&A - Costs; forecasts; projections; sources (general fund, automation project funds); risk avoidance; training; IT and PM skill sets; staffing (during and post) and ongoing operations post implementation
• "1 pager" for the Executives, not in the IV-D program, provides knowledge and understanding to navigate and champion the cause
• Lessons Learned Document - start at the beginning / start now; repository for lessons learned (for other IT projects in your agency, other CSE states)
• **NOTE:** The length of time and changes in leadership will dictate how much you need to do/prepare.
 	
RCCSB Systems Modernization Committee - State Systems Lessons Learned - Webinars - For State Staff Use Only   3
	Executive and Stakeholder support
	• Since Feasibility Study, AZ went through major organizational changes. Individuals critical to the project left the organization. Lesson: make sure everything is documented and plan for key individuals leaving the project.
	• Had to acquire new approvals for project
	• Be aware of who must be involved in not only federal review, but locally. Understand their requirements and processes.
	• Steering committee was set up with 13 members. Committee met with the Department Leaders, Governor, and agency officials in advance to discuss their project. The team observed other departments' legislative process to be prepared.
	• Important to make sure everyone understands the project and process, decision making, funding, system options. Executives and governor's office staff may not go through the feasibility study to understand the project and why it is important. One pagers are important – benefits and what happens if no modernization
	Other Presentation Materials
	• Everything was synthesized from the Feasibility Study, but plan on spending a lot of time creating the documents
	• All documents identified within the slide can be used to reflect why the state needs the new system. There are more documents that could be used, but those listed are the highlights.
	• Arizona is willing to share any documents they have upon request.

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IAPD Planning: Who, Timeline, How, Planning

Who: DES/Umbrella Agency APD Analyst

- Collaborative effort with Division and Department's Budget Office, APD Analyst, Division and Procurement teams, Project Director
- Gather IAPD points of contact from other states - lessons learned, best practices, tips/tricks

OCSE Expectations

- Time to create and formalize
  - 14 months total from creation to submission. This timeline includes three question intervals with OCSE
- Other APDs in the Department may overlap

Risk Management: How much risk we were willing to take ourselves vs. putting things out to bid?

Hired as contractors: Allowed for selecting the the right fit for the project and state and provided state with direct oversight & control

- Project Management Office (PMO)
  - Project Director; Project Administrator; Project Scheduler / Controller; Organizational Change Manager (OCM)
    - Lesson learned - should have on-boarded our Project Controller 6 months prior to QA, so that all plans would have been done for QA review - we brought on our Controller 1 month prior to QA. All plans were complete in 6 months.
  - Senior Business Analysts (3) - Include prior CSE modernization experience (South Carolina - System Certification and WV)

DDI Scope: The OCM work, in house or vendor? If a vendor, part of the DDI contract, or procure a separate OCM vendor?

- Arizona did not go with a vendor for OCM nor did we have OCM under the DDI Vendors scope.
- Instead we hired a contractor that has decades worth of experience in OCM / provides OCM strategy, approach, and guidance
- OCM is part of state established PMO team and work collaboratively with the Implementation Team and the Training Team
- State recruited around 40 change champions from various offices to be part of the OCM to perform the OCM activities
- More cost effective option to obtain this independently, a little more control

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IAPD
- 14 months for IAPD, multiple people involved – Budget Office, Director, Process Teams, Project Director, etc.
- IAPD went through the rounds of Q & A/revision with OCSE. Be aware that if your APD analysts cover multiple programs, all with some level of APD review, their level of effort on the other programs may also be significant.
- Our Department's APD Analyst was not vetted in child support.
- Important to collaborate with IAPD contacts in other states.

PMO
- Timing of onboarding needs to be mapped out to make sure their roles match the timeline. See lesson learned on slide. Make sure the roles and responsibilities are understood.
- Used individuals contracted through Grant Thornton and Knowledge Services.

DDI scope and OCM
- Not through DDI contract. OCM Manager embedded in PMO and supported by internal staff.

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Pre-Planning: QA and IV&V Strategy: Differences, Roles, Options, Timing

Quality Assurance (not mandatory / AZ recommends)

- Nationwide Experience; serves as a trusted advisor
  - If your project team does not have the breadth of experience, this may be a true value add
- Risk identification and mitigation; objective, clear, documented
- Increase visibility for all project leaders
- AZ onboarded QA 6 months prior to IV&V to conduct initial risk assessment
  - Overall project health, project plans and resources
- Enable decisions based on unbiased assessment and metrics
  - Has been extremely beneficial having an objective third party on our project
    - Observations and Monthly Status Reports are helping to keep stakeholders and executives informed
    - Drive decision making, feedback on change requests
  - Provides insight into how other states handle similar challenges
- Assist in early detection of issues, prioritizing issues, identifying critical risks and recommending realistic mitigation strategies
- Help increase the success of the project / daily active involvement in project activities / understanding of the activities w/ staff new or unaware

Independent Verification & Validation

- AZ contracted through our Statewide Contract - onboarded 90 days prior to the DDI Vendor
- National IV&V Leaders with Child Support Enforcement Modernization Experts (CSE IT modernization projects and system certifications)
- Successful in Arizona with over 10 AZ agencies over the last two decades with reports to local governing bodies
- Reporting entity to federal OCSE
- Important to understand who is involved in the IV&V process with your state
  - In AZ, IV&V works with our AZ Strategic Enterprise Technology (ASET) and reports quarterly to Joint Legislative Budget Committee (JLBC)
  - Knowing who will need to be part of meetings, who will receive reports. Not just federally, but locally.
  - Until completion of the project, AZ shall submit quarterly progress reports from the third-party consultant to JLBC pursuant to A.R.S
  - A favorable review by the Committee does not constitute endorsement / Supplemental funding request that may be required for project costs or any operational costs when the project is complete
  - Although the project is funded internally, the project is still being treated as one that would have received APF

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- **QA:** Isn't mandatory but is highly recommended. AZ felt Maximus' experience and knowledge was helpful to make sure things are looked at objectively. Bounce things off. Prioritize issues and handle change request- scope of the project.
- Recommends QA vendor should be hired 6 months prior to the IV&V vendor.
- Maximus was hired January 2021.
- **IV&V**: Hired PCG. Onboarded 90 days prior to DDI vendor.
- Prepares Initial Risk Assessment.
- IT security review comes into play with IV&V. Having IV&V and QA onboard at the start allows them to work with the local technical team when obtaining approvals are needed.
- Important to know who is involved and needs IV&V reports – see slide.

State IT Authority had to review all contracts, who vendors were, why they were needed for the project.

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DDI Planning: When to start Design, Development, and Implementation ("DDI") steps in more detail in preparation for procurement documents	DDI Planning

Pre-Award
• AZ elected to use an optional task that we had added into our Feasibility Study RFP to create a SOW for DDI
• Security Reviews of the top three vendors by the Enterprise IT Organization (ASET) - understanding timing or if additional reviews needed
• Formal Presentation to the State's Information Technology Authorization Committee - Approval with Conditions
  • Should development costs exceed the approved estimates by 10% or more, or should there be significant changes to the proposed technology scope of work or implementation schedule, the Agency must amend the Project Investment Justification (PIJ) to reflect the changes and submit it to ASET, and ITAC if required, for review and approval prior to further expenditure of funds.
  • Prior to moving any State data into the vendor-hosted environment and/or spending of funds, the Agency must work with ASET.
• "New" interfaces planning activities such as initial contact with the new interfacing partner to understand their willingness and ability, having a DSA in place prior to onboarding the DDI vendor - depending on how many, this takes months/years
• One of the key issue we are facing is around the elaboration of requirements and use cases. Would be beneficial to have a Business Process Reengineering (BPR) effort to create business process models and use cases as part of the requirements elaboration scope of DDI
 	
Implementation Strategy: Arizona is going with an incremental approach / Pilot
• Importance of understanding the strain this could have on the technical side vs. program/business
• Training, expectations, and communication on Agile processes for all project team members. Note: RFPs can be heavily deliverable based which does not always coincide with the Agile methodology. Suggest seeing if your RFP can be written to support or aligned with this methodology
• More upfront training on user testing and really conveying the importance to state staff about this. Testing is occurring in each sprint
• Level set on definitions / ensure you are speaking the same language
• Size of groups / sessions need to be the right mix to ensure the sessions need to move at the correct pace and that associated documentation is available. Ensuring the original "author" is in the sessions to help clarify requirements. Visibility of participants that identify the role/office they represent
• If you think you have enough, you don't. Plan for more. Have back-ups and have the back-ups have back-ups (IT and Program)
 	
Office / Vendor Space:
• Optional task built into the RFP as dictated by AZ / DCSS providing project facility space - to date we are working completely remote due to pandemic. At AZ discretion we may require the vendor to provide a project facility. The pandemic created a lot of available space
 	
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	• What is critical pre award?
	• CSG did Feasibility Study and AZ used optional SOW task so they helped create the Statement or Work for the DDI RFP.
	• All vendors proposed had to go through an extensive IT security review. This takes time and needs to be included in the RFP Timeline.
	
	Implementation info
	• AZ has their implementation scheduled for fall 2023. 6 months behind IN. Pilot will be in the Fall of 2022.
	• Implementation strategy is Incremental.
	• Agile process creates strain on IT and business.
	• Lesson: original RFP deliverables not necessarily aligned with Agile methodology, important to align RFP with Agile.
	• See slide

DDI Planning Cont...	DDI Planning cont.
Equipment for IM Resources - State provided • Due to security and logistical constraints this approach has been challenging • IM vendor needs access to the department's network- know what options exist, if providing equipment, what sort of package is needed, how much lead time is needed. Conflicted with our Department's IT refresh strategy (supply chain issues). This number kept changing. Our project is fully virtual due to the pandemic, knowing what other options exist, the cost of all of those options **Tools** - State provided (weigh the risk, cost, effort, capacity) • BIG DEAL! - Large lesson learned, STRONGLY encourage writing these requirements in your DDI SOW / RFP - Have the vendor be responsible & procure while covering the potential transition of licenses to the state up front. Amount of tools, licenses, software is in the dozens • Security reviews for all of these services by your IT or Umbrella IT (competing priorities, length of time, resources) • Procurement teams effort, resources and capacity - in AZ we should have started this two months sooner • Backup / contingency planning is needed if tools are delayed or cannot be approved - risk project delays **Staff training approach** • IM Vendor proposal is "Just In Time" training approach. Vendor will train staff within 20 days of system implementation using the ADDIE Training approach (Analyze, Design, Develop, Implement, Evaluate) • Instructor Led Training approach in a virtual environment -Train the Trainer. • Training materials will include; Instructor guide, student guide, quick reference guide, Web-based training, and online help. • IM vendor partnering with AZDES Training Department (~10 resources) **Data Quality Issues** - Data cleanup activities should be accomplished in workgroups to identify any cleanup activities to case files - Level 1 should be handled by caseworkers on a daily basis when they touch a file and Level 2 should be handled as part of data conversion or adhoc jobs for one time clear up if applicable **Data Conversion** - Mock conversion using a full load of production data with pre-approval from the IRS. Allows us to resolve any issues before moving ahead to full deployment • **Approach:** Identify selection criteria for cases by designated counties and/or zip codes for pilot and subsequent regions, consider scenarios where a participant is associated to multiple cases across different regions of the state, consider the transition period in which some cases will need to be maintained or created in the legacy system until all regions are converted **Testing** - We are using a Pilot Phase - SLAs in place with vendor that have enter & exit criteria as well as a zero tolerance for defects before moving to the next phase. All issues will be addressed in the Pilot Phase. This may increase /extend the timeline of this phase but will ensure we are successful in full implementation / go live phase NCCSD Systems Modernization Committee "State Systems Lessons Learned" Webinars – For State Staff Use Only 7	• Equipment was a big deal for AZ, especially with the pandemic. • Consider the constraints that pertain to all equipment you may need: security, equipment lead time, deploying equipment to the vendor. Have a backup plan. • Tools - be sure to have all tools identified up front in DDI RFP reviews, have contingency plans identified, security reviews of tools large commitment, should have started two months earlier. Recommend having vendor responsible for procurement with license transfer. • Training -- originally planned to use several different mediums. Due to the pandemic, most of the training is now through virtual means. • Staff training will be Just in Time approach. Training guides, Train the Trainer. • Data Quality -- Level 1- Caseworkers/ Level 2- one time cleanup or Ad Hoc • Data Conversion – mock conversion and testing with live data is possible with IRS pre-approval. • Testing - Pilot approach, SLAs with entry/exit criteria and zero tolerance

Pre-Planning - Resource Management Planning: How to balance operations with project work, staff augmentation, level of time commitment from stakeholders...

Project Staff Expectations

- Discussion about what to expect in each phase of the project (Design, Data Conversion, Construction, User Acceptance Testing, Training, System Rollout)
  - Not all resources are dedicated the same way or percentage of time
- Prior to procurement of the vendors, AZ met with staff / again after procurement
  - Responsibilities, timeline and time commitment, number of resources, expertise needed - 80% of time
- Met with program SMEs, Tribal Program, Courts, and AGO staff to review these expectations
- No staff augmentation yet - likely getting to that point in the project (10 months into development)
- Data Clean Up - All hands on deck
- Change Champions are being leveraged for User Acceptance Testing along with project SMEs

Planning for the unplanned - It will happen

- Major Initiatives driven by outside entities, law changes, enterprise strategies
- Identify the resources that can be dedicated to "keeping the lights on", with back-ups

Commitment from Stakeholders

- Amended Intergovernmental Agreement (IGA) with Navajo Nation to ensure contributions and commitment
- IGA already in place with all Clerks of Court and AG's Office
- 15 Counties; Non-IVD - Larger counties supporting the smaller counties (data clean up, training, design)

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Resource Management

Make sure everyone understands the resource needs
You can't under communicate!
Assume that the "unplanned" will happen
Plan for time to update any intergovernmental agreements (with tribes, Clerks, counties, AGs, etc.)
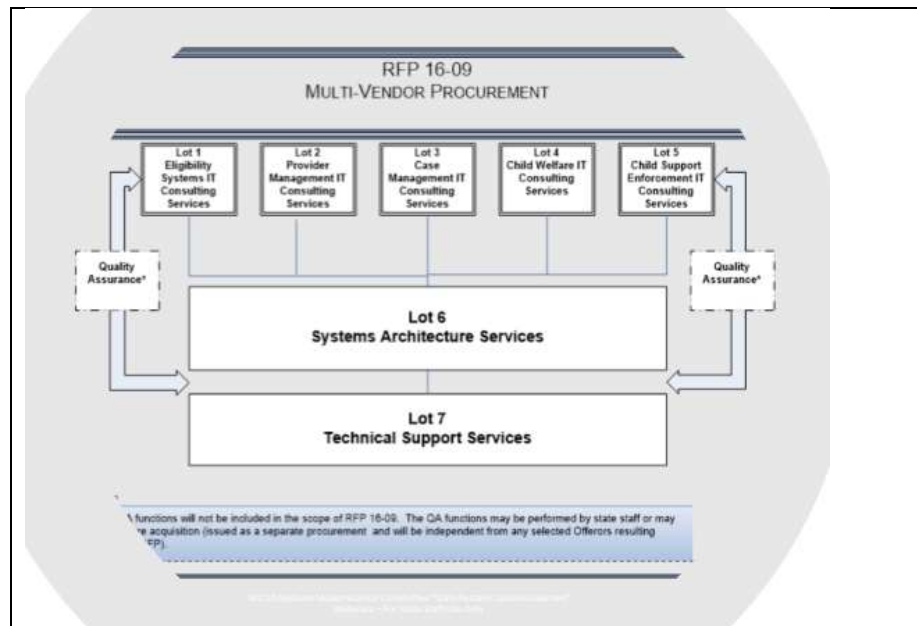
Note: In order to have time for final presenter and Q&A, time ran out for this segment. See final three slides with important details in original PowerPoint.

Pennsylvania

The final presenter was Bob Patrick from Pennsylvania:
Robert Patrick, IV-D Director
rpatrick@pa.gov

Bob's slides and the note takers' information follow:

Pennsylvania Background • We were approved for our system replacement in 2017, have concluded 3 phases, with one remaining. • PA Child Support is state supervised and county administered by the courts of common pleas – falls under the state Dept of Human Services • We serve 1.3 million customers in roughly 400,000 cases • Human Services is served by an IT delivery center that falls under our state CIO – along with a number of other depts • Goal of that delivery center concept is to bring consistency, eliminate redundancy and improve security & project outcomes. • Within this IT management structure, we use a multi vendor system NCCSD Systems Modernization Committee's Systems Modernization States Lessons Learned Webinars– For State Staff Use Only　　2	Bob is also the Director for Medicaid, TANF, SNAP in addition to Child Support Original system is New England CSES, PACSES has over 1000 batch jobs Overriding lesson for success is that requirements need to be realistic and achievable. Delivery Center concept important for understanding their PACSES replacement project. • It serves a variety of agencies • They went to the concept in 2017 and it has helped – more of an enterprise approach, shared software, lower cost, more consistency. • Multiple vendors provide services

	• They continue to use existing multi-vendor support structure, for the modernization project and other smaller projects. • Lot 5 – Conduent – planning, research, requirements, evaluating IT options, looking at other states, quality assurance testing, UAT, front-end and back-end • Lots 6 and 7 – Deloitte – systems maintenance, technical support, etc. • This approach gives a balanced perspective. • Each vendor is involved to some extent in all areas – e.g. modernization vendor is in on requirements discussion in order to make sure they are reasonable; planning vendor is in on the build since they have to test.

Pennsylvania Technology Refresh

- Mainframe line-of-business application derived from the New England Child Support Enforcement System (NECSES) which was built and implemented in the late 1980s
- PACSES implemented statewide in 1999
- 3,500+ case worker and county/state staff users across 80 DRS offices in 67 counties distributing $1.4B in annual collections
- The combined Mainframe and Open Systems applications consist of approximately:
  - 2,800+ programs
  - 6 million Lines of Code
  - 360+ form templates
- Interfaces and integrates with over 30 state and federal systems
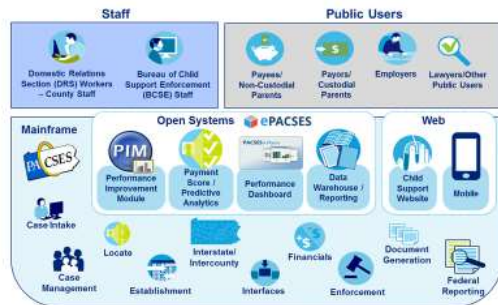
- PACSES history and stats on the slide
- 1000 batch jobs every month, 43 million transactions
- Unisys ClearPath Mainframe
- Assembler support layer
- Not aging well, but no catastrophic failures so hard to sell a full replacement
- Many pieces of the system were identified as still working well (system logic, rules, screen flow, pleased with case management and financials)
- Program performance metrics were good
- Did not want to go through re-certification
- BUT, it is important to identify risk and what will happen if you don't do any modernization…
-

Alternatives for PACSES Technology Refresh Technology Refresh

Goal: Reduce overall costs of system replacement while addressing risks of the current mainframe environment and providing the benefits of a more modern technology platform
- Must focus on a migration of technology; business features and rules must generally remain "as is" consistent with what is currently available through the PACSES mainframe to county DRS users
- Options must sustain the full rich set of current PACSES functionality and integration and avoid the need for Federal re-certification

Four additional options considered:
1. **Support Layer Replacement:** Replace or rewrite Support Layer Assembler components with functionally equivalent mainframe-based components **($$)**
2. **Incremental Renewal:** Full system replacement **($$$$$)**
3. **Refactoring:** Utilize an automated process to transition existing application codebase from mainframe to Open Systems technology **($)**
4. **PACSES Technology Refresh:** Migrate mainframe PACSES to the Open Systems ePACSES architecture by business function **($$$)**

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Slide has summary of goals and all four alternatives considered; detail slides follow.

Option 1: Support Layer Replacement

- Approach
  - Replace or rewrite Support Layer Assembler components with functionally equivalent C or COBOL components
  - Design and implement a new architectural approach for mainframe batch and online processing without the Support Layer
- Pros
  - Helps remediate the most critical mainframe-related risk – Assembler code in the Support Layer tightly coupled to the Unisys mainframe architecture
- Cons
  - PACSES remains on the mainframe, subject to significant rising costs as DHS and other agency applications migrate off the Unisys mainframe platform
  - Does not address any other potential benefits to the program – e.g., no enhancements or improvements to the end user experience to address training and productivity improvements
  - Effort cannot be leveraged for future re-platforming of PACSES – any future project would need to encompass the complete migration of PACSES off the mainframe platform

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This alternative deemed most risky; see slide.

Option 2: Incremental Renewal

OFFICE OF CHILD SUPPORT ENFORCEMENT
An Office of the Administration for Children & Families

Incremental Renewal was Federally approved, letter received on September 6, 2011.

✔

- Feasibility Study Completed – May 2010
- Business and Technical Requirements gathered and used as basis for Feasibility study
- Incremental Renewal chosen as recommended alternative and approved by Federal OCSE
- Incremental renewal sequence recommended and approved by Federal OCSE
- Incremental Renewal was the only alternative that met 100% of the business objectives.
- New PACSES is to retain the intrinsic business knowledge built into legacy PACSES.
- No major changes to current business processes and practices.
- Technology upgrade with enhanced automation and expectation-based user intervention.

2010 Feasibility Study outcome was IR; IAPD submitted 2011 with federal approval, but State would not approve $140 million price tag.
FS refreshed in 2017 with same conclusion but still too expensive
Transfer not an option because PA likes and wanted to preserve their existing functionality.

Option 3: Refactoring

- **Approach**
  - Utilize an automated tool to convert mainframe program code to an Open Systems technology (.NET or Java)
  - Application is converted as is and creates a functionally equivalent version on the new platform, maintaining the current user interface and other characteristics such as batch processing

- **Cons**
  - Tool provided by Innowake, the primary vendor for this technology being used for refactoring projects in Colorado and Idaho, does not support conversion of Unisys COBOL, Assembler, or other technologies used within the Support Layer that are specific to the Unisys platform
  - Option not technically feasible for PACSES mainframe

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Refactoring great if you can do it, but they could not identify comparable examples.
This option not technically feasible for PA given their Mainframe, etc. structure.

Option 4: PACSES Technology Refresh

- **Approach**
  - Migrate mainframe PACSES functionality to the existing Open Systems ePACSES architecture by business function
  - Transition full business functionality including both online and batch programs for "in scope" processes, separated into two phases

- **Pros**
  - Aligned to the complete set of benefits associated with PACSES system replacement but 50% cost in comparison to original Feasibility Study Incremental Renewal
  - Mainframe replaced and Support Layer dependency eliminated for business functions included in completed phase
  - Proportional reduction in mainframe utilization and cost with each phase

Option 4 Proportional Reduction in Support Layer Dependency Across Phases

- **Cons**
  - User interface spread across mainframe and ePACSES until completion of both phases
  - Data synchronization required between mainframe and ePACSES until completion of both phases
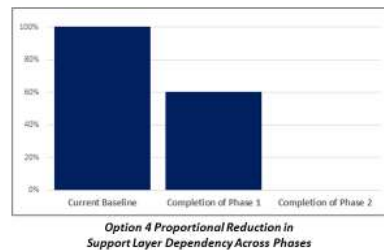
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Chosen option
Replatforming "Technology Refresh" called ePACSES
Going from custom coding to web-based
No new functionality
To complete the refresh the requirements phase was light and mapping the current screen's code is occurring.
Intake and Locate in the early phase
New functionality not done
Plan is to bring new over in phases
Guidelines off mainframe in 1.1
Establishment off mainframe in 1.2
Financials/Batch process in 2022
See subsequent slides for details on phased approach and timelines.
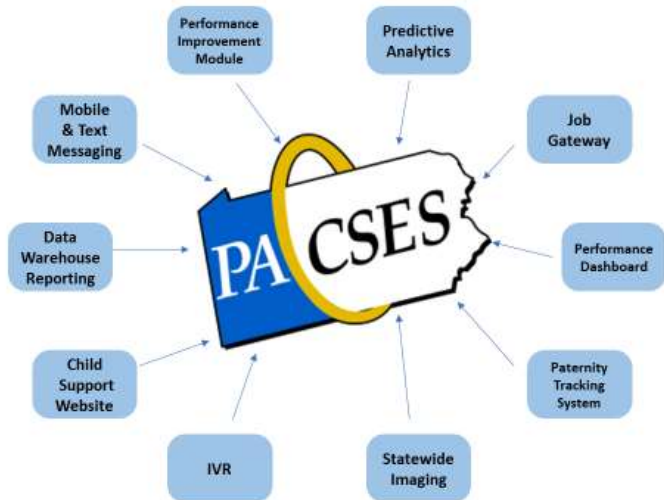
Benefits of PACSES System Refresh

o **Preserve program performance** of Pennsylvania DHS BCSE and continue to maximize Federal incentive payments

o **Eliminate the risk of disruption** to the Pennsylvania CSE program associated with outdated mainframe technology
  - PACSES Support Layer underlying all online and batch processing is largely built using assembler and other technologies closely tied to the Unisys hardware platform
  - Assembler components represent the most complex and/or most difficult to support elements of the Support Layer due to the lack of available resources with assembler knowledge and/or experience with the Support Layer architecture

o **Reduce technology-related support costs** for the mainframe platform
  - Potential impact of the end of the current PACS (outsourced IT infrastructure) contract on mainframe costs overall
  - Expected 10-30% mainframe cost increase

o **Cost avoidance**
  - Technology Refresh 50% of the cost of Incremental Renewal
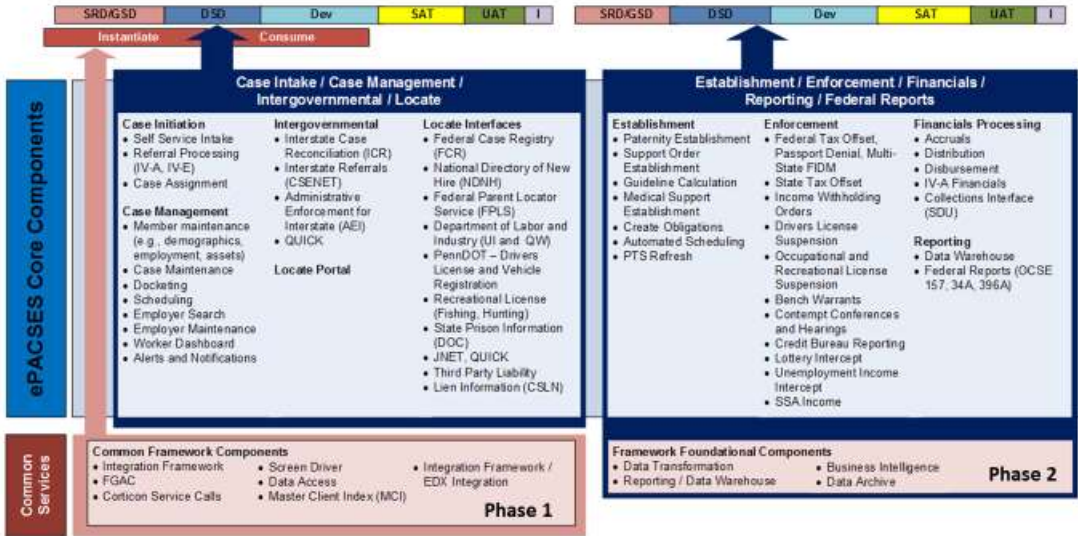
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Benefits slide – see details

Go to a modern footing
50% of projected IR cost
Preserves functionality
No re-certification
O & M is easier, eliminating a lot of risk.
Less risk for state performance indicators
Less training/lower time investment for end users as they are already used to the flow and how things look.
Workers can ease into system and ease off mainframe.

Ancillary/Open System Components

Performance Improvement Module
Predictive Analytics
Mobile & Text Messaging
Job Gateway
Data Warehouse Reporting
Performance Dashboard
Child Support Website
Paternity Tracking System
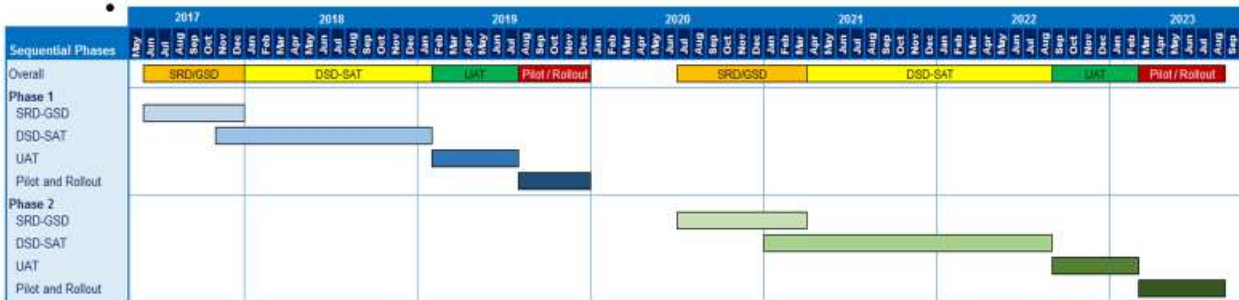IVR
Statewide Imaging

PACSES

While approvals were stalled, PA had started building all ancillary new functions in open systems platform and not in legacy, but drawing on mainframe data
These ancillary functions will plug in when modernized

Phased Approach detail slide

Timeline/hours slide

Discussion of Evolution of PA's Project Analysis and Approval Timeline (No Slide)
2010 – 2011, Feasibility Study and IAPD with OCSE approval but state would not approve $140m
2011-2017 Project stalled, but left in the OCSE APD documents just in case
2017, revisited FS, decided still too expensive, looked at alternatives, decided on Tech Refresh/Replatform
Had call with OCSE Commissioner, presented PowerPoint on change in plans
Put new approach using IT Delivery Center into APDU, quick rewrite (20 days) and then OCSE approval
In general, OCSE approval of final approach less time consuming
Evaluating the best approach very labor intensive, took two years
Overall state approval process took six years

Discussion of Lessons Learned – Not Obvious Risks (No Slide)
- If your state has procurement rules that require the award to the lowest bidder, it is dangerous. A lot of times they can't do it and/or change control order you to death. Try to use a "best value" approach.
- You need to select a vendor who knows child support. Trying to explain financials is not easy.
- Also, a vendor who knows the AS IS platform and the To Be Platform.
- Has the vendor already built the system in the specific technology and did it come in on budget? Be wary of those who want to bring in a 3rd party for system related work.
- State project managers are critical. PA has 20 CS staff certified in Project Management
- It's important for the Director to be active in every step of the way.
- Program performance will never magically go up even if you spend $150 million. Never promise that it will if you get funds for a new system. Performance generally takes 18-20 months to bounce back after implementation.
- State funding and approvals are always conditional – even if you have it, you may not and support can evaporate. (Changes in administration, pandemics, etc.)
- You could get stalled so have a fallback plan for funding or lock in a budget appropriation and be careful of cost overruns.

Question & Answer segment

Q: IN – How many Agile teams did you have for DDI?

A: Deloitte has 4 sprint teams going and they all have 5-7 people. We provide the product owner and UAT that comes in at the end.

Q: IN & AZ – did you see any cost savings for launching virtually vs. on site?

A: IN – Didn't have copiers running so supply costs were nil. But still had to pay for buildings so likely not a lot of savings.

AZ – they were just having that discussion this week. All the travel costs were done pre-pandemic. They are trying to figure out what next steps are in the procurement process due to the vendor cost savings. They are starting to be in-person currently.

Q: IN – Regarding use of Incentive funds due to no match, were there any changes how OCSE approved contracts for IV&V, etc.?

A: There was no change in the way OCSE approves any of the documents. Incentive funds were banked for quite some time, so the budget team pulls in funds as they go along.

Q: Site support teams arrived to assist with office readiness activities, can you share what some of these were?

A: AZ - Business Rules Engineering was not extensive, from 2019 – 2021 there was a lot of procurement, so it was a lot of back-office planning. There was a lot of data conversion activities, but AZ did not go through BRE processes. In person meetings were held to go through what was expected with SME's, BA, Product Owners. Deloitte did come in and prep the team.

OR – Site support teams for local offices – During implementation the team was there to meet the staff, assist managers to ensure each staff member could log into the new system so when rollout happened there was direct connectivity. We had a number of web-based training to provide foundational knowledge, basic navigations, and making sure teams had completed web-based training and if there were questions.

Last comments from presenters:

AZ – chicken & egg is going to take place. There is a lot of back and forth on timelines for your project. Post FS if there are any challenges that arise where the state's position is not aligned with what the FS stated, you don't have to start over. AZ found a way through this. Even with the FS – if you run into challenges later OCSE will work with you to navigate to the next step. Communicating the change of plan with your state stakeholders is important.

OR – Plan early and communicate the entire length of project/funding needs with your Legislative body. They need to know these projects are not "one and done". Tools and software, etc. will change throughout the project. Another company may buy software that you are using and decide not to support it you must migrate to something different. These can be large financial asks. Educate them -- you have implemented a modern system but that doesn't mean no additional investments are needed!