



# Child Support System Modernization

It Takes a Village-Part 2

Workshop T-26

November 8, 2022



# About us

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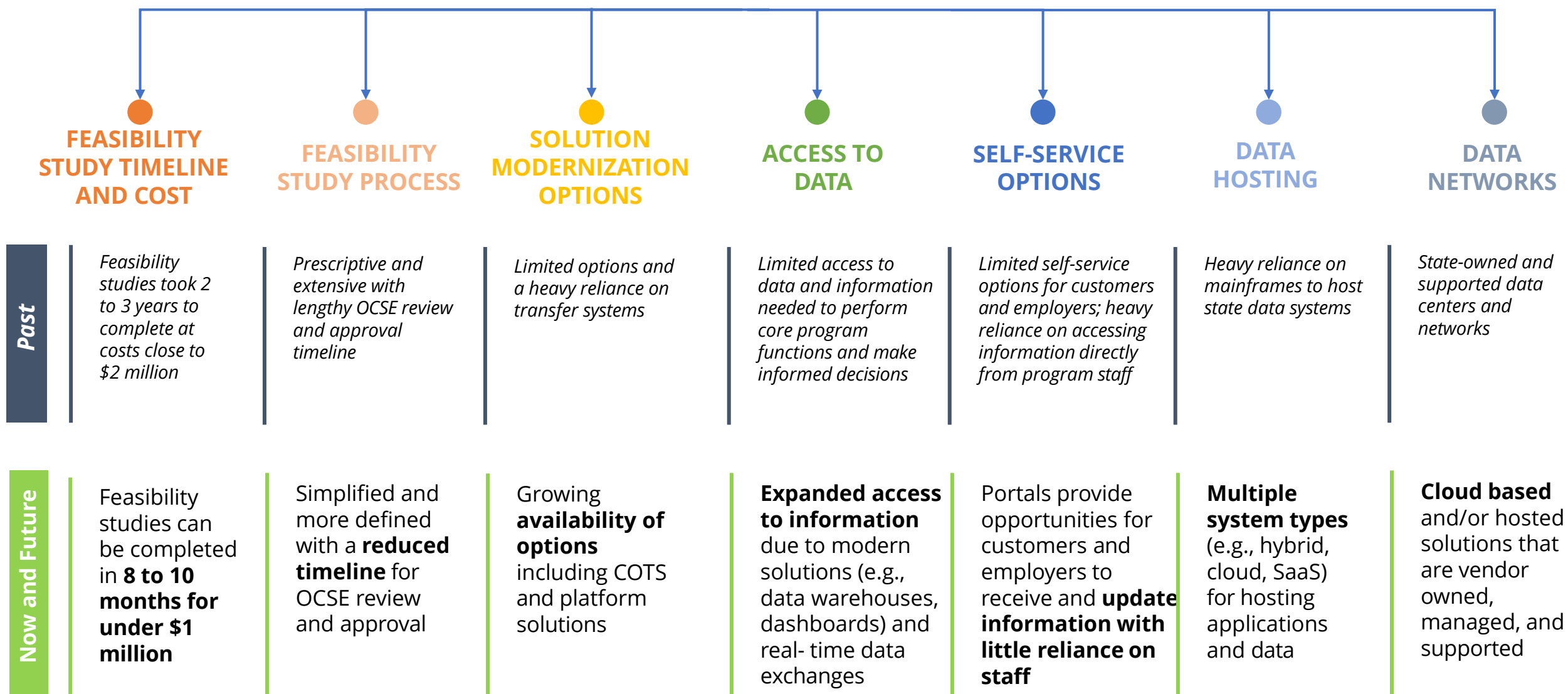
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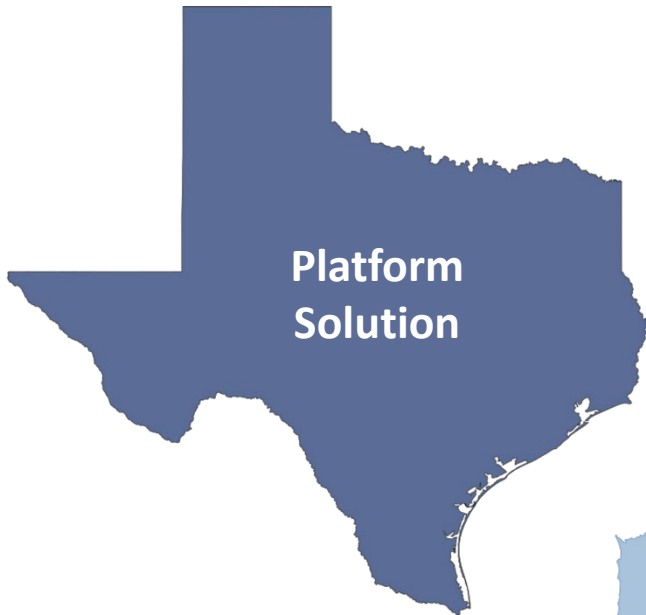
# System Modernization Options

# Looking into the Future



# Proven Modernization Approaches

The following states have implemented Child Support Modernization using various approaches. The following slides dive into deeper detail for each state's approach.



Re-Platforming



# Child Support IT Solutions: R E - P L A T F O R M I N G

## BENEFITS

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Costs associated with the mainframe are reduced



Reduced learning curve for staff



Opportunities to leverage system enhancement



Easier for staff qualified to maintain the system

## TRADE-OFFS

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- Maintenance and enhancements may be difficult
- Technology is limited to available platforms
- Limited ability to improve business processes
- High risk of errors at the code, configuration, and infrastructure level
- Functionality and associated pain points remain

Re-  
Platforming

# Child Support IT Solutions: P L A T F O R M   S O L U T I O N S

## BENEFITS

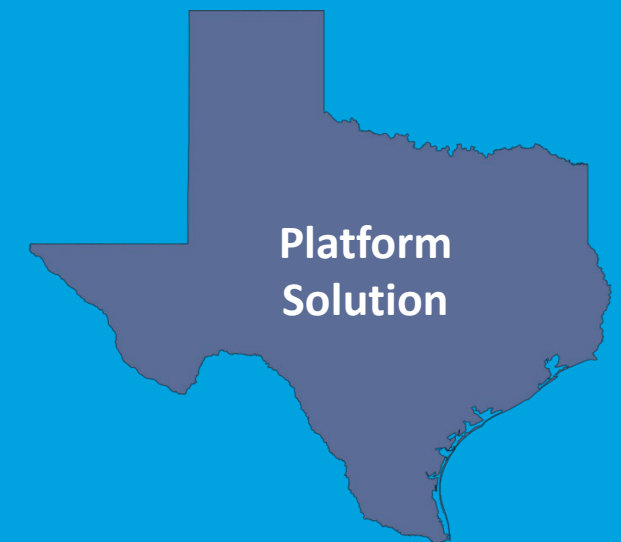
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-  Scalable and, if well architected, will be configurable and maintainable
-  Out of the box functionality reduces development costs and overall timeline from design to production
-  Total cost of ownership is reduced
-  Established foundation and supporting technologies

## TRADE-OFFS

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- Vendors control data model and functionality
- Requires technical staff with a specialized skillset to manage the technology
- May need to prioritize changes related to base functionality, terminology or risk increased costs related to changes



# Child Support IT Solutions: TRANSFER SYSTEMS

## BENEFITS

-  Provides a base foundation from which to start
-  Ability to see the system ahead of time
-  Collaboration with the transfer state
-  Leverage documentation and other resources
-  The technology stack is known

## TRADE-OFFS

- Documentation may be limited or out of date
- Older technology and architecture may not offer/support modern enhancements
- May need to prioritize changes related to inherited functionality, terminology, and other aspects of the system or risk increased costs related to changes
- Business processes may have to change



Transfer  
System



# Supporting Services



# Supporting Services

| Support Service                              | Description                                                                                                                                                                                                                         |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project Management Office (PMO)              | Provides project structures and controls related to the management of risks/issues, change control, schedule, communication, stakeholders, quality, and overall project performance.                                                |
| Quality Assurance                            | Provides a structured approach to assuring project activities and deliverables produce high quality outcomes. Includes quality control activities that assure project work products meet quality standards and acceptance criteria. |
| Independent Verification & Validation (IV&V) | Provides an independent perspective on all aspects of the project with a focus on risk identification, analysis, and mitigation. Offers insight into the overall health of the project to stakeholders including federal partners.  |



# Supporting Services

| Support Service                                      | Description                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Organizational Change Management (OCM)               | Provides strategies for addressing the people side of change including effective sponsorship, stakeholder engagement, proactive communication, targeted learning, and reinforcement of change.                                                                                                                                                      |
| Independent Testing and Privacy and Security Testing | Provides information related to the system's ability to meet state and federal requirements including those related to security and privacy (e.g., SSA, IRS). Validates that the system supports staff in their ability to efficiently and effectively complete day to day work tasks.                                                              |
| Training & Implementation                            | Provides training on the new system to child support staff in a variety of different learning environments and includes training materials. Offers support to staff during the implementation of the system – often including on-site support in state offices for a designated period of time as well as different levels of help desk assistance. |



# Project Background



# Background – Oregon Origin Project

Oregon Department of Justice Division of Child Support

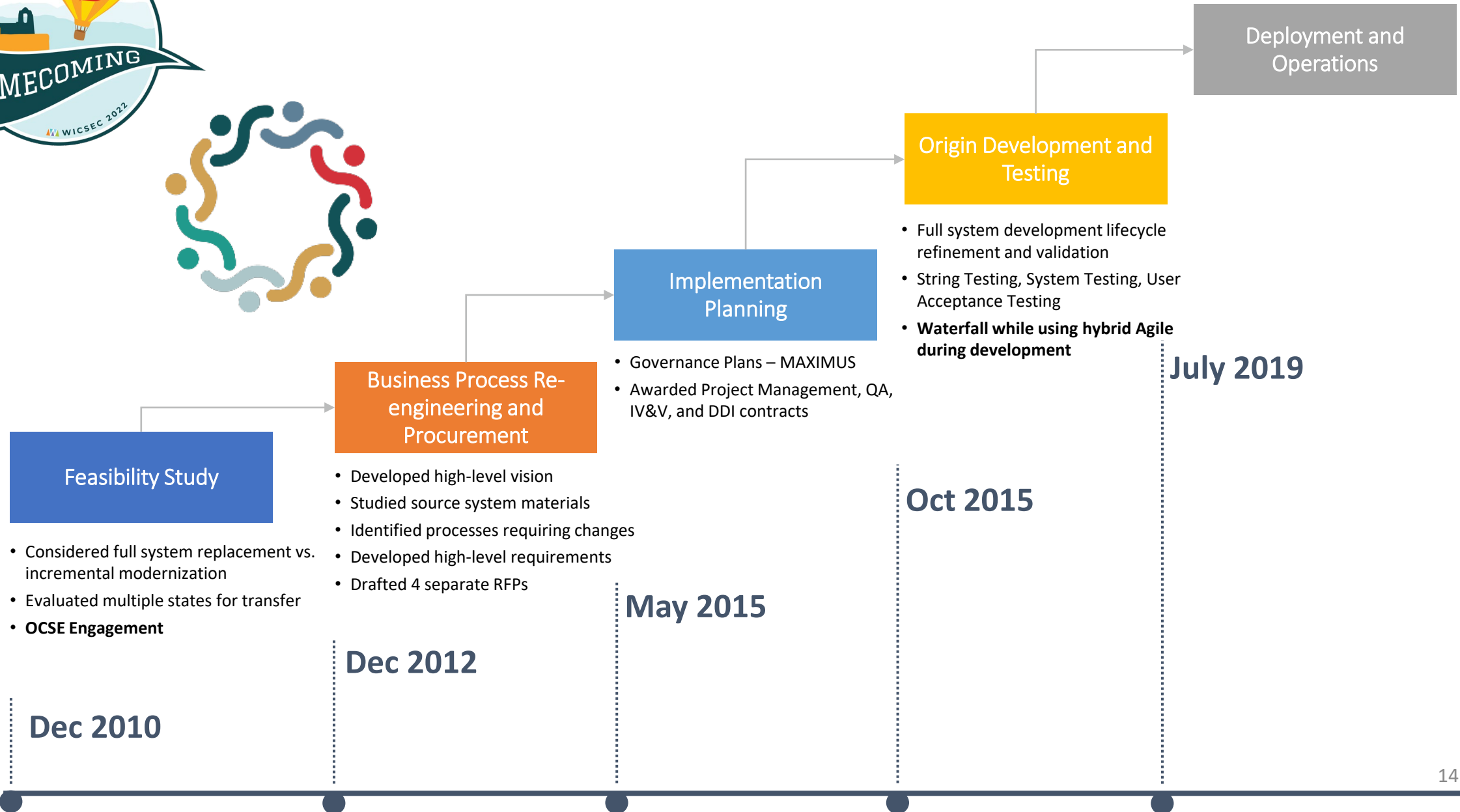
State administered and state operated program

- 19 of the 36 counties contract with DOJ to provide some services

Current caseload – approximately 160,000



# Background – Oregon Origin Project





# Goals and Assumptions – Oregon Origin Project

## Goals

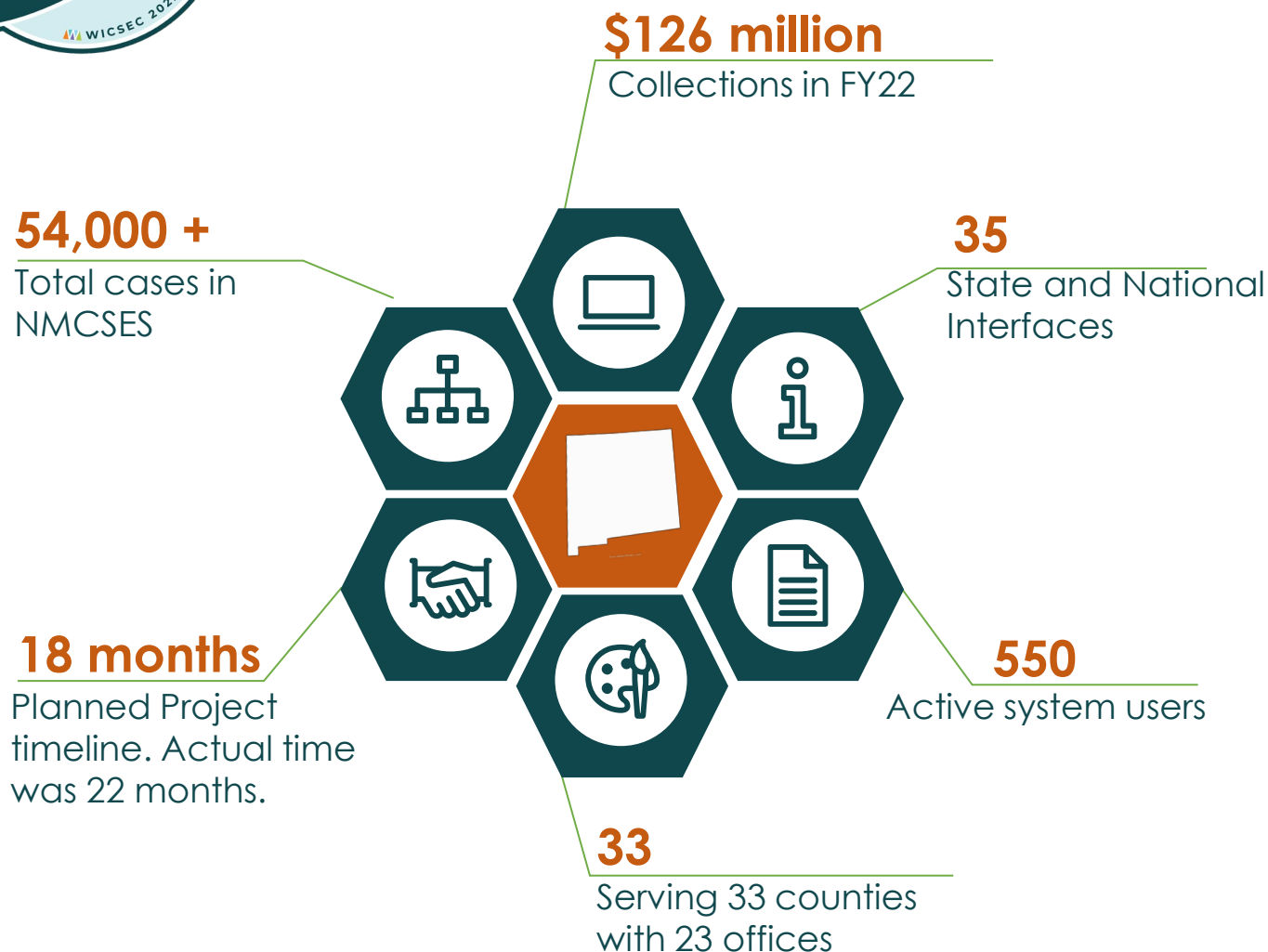
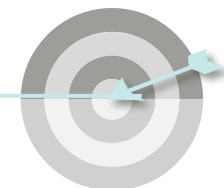
- Increase collections
- Increase program performance
- Increase automation
- Increase customer and worker satisfaction
- Reduce training timeline and time to proficiency
- Reduce manual workarounds
- Reduce system costs

## Assumptions

- Once the new system is implemented and certified, it will be business as usual – only better!
- The program will have more time for focused initiatives, community outreach, to reach under-served populations, and to concentrate on difficult to collect cases.



# New Mexico Child Support System Background



## Project Background

**20+ year old** Child Support Enforcement System (CSES)

Absorbed **majority of operational costs** on state mainframe

**Difficulty finding staff** with expertise in legacy code

## Project Solution

Refactored legacy **CA Gen/COBOL to Java**

Migrated from mainframe **DB2 to Oracle DB** while maintaining **1-to-1 functional equivalency**

Deployed the transformed solution to **AWS Cloud**



# Background – Texas Modernization

## State structure

- Texas Office of Attorney General Child Support Division
- State Administered Quasi-Judicial Program
- Nearly 1.5 million active cases and \$4.4 billion in annual collections

## Project background

- Incremental modernization using an Agile-at-Scale approach
- Leveraging low-code / no-code cloud-based platform component technology
- Use of bi-directional replication to manage data conversion and support mid-project systems viability
- Use of Customer Journey Mapping and Design Thinking to define ideal future state
- Integrate Human-Centered Change principles to strategically manage stakeholder engagement and communication



# Background – Texas Modernization

## Project Goals

### Summary:

Texas child support staff have long used applications built on legacy (mainframe) technologies nearing end-of-life. Given their mission-critical nature, the agency has taken an iterative modernization approach to reduce disruption while rapidly providing growing value to our internal and external business users.

### Texas is modernizing its child support IT systems to:

- Ensure long-term sustainability
- Support closer alignment of program functions with its core mission
- Engage customers more effectively
- Enable more efficient use of resources
- Support the needs of a rapidly-changing workforce

### Project timeline

- Development work initiated 2020; projected completion 2025; currently nearing project midpoint



# Project Management Approach



# Oregon Project Management

Method used:

- Waterfall methodology with some components of a hybrid agile approach during development
- What made us successful?
  - One team – one facility
  - Executive commitment
  - Celebration of successes and phase completion
  - Don't forget to build in some fun



# Texas Project Management

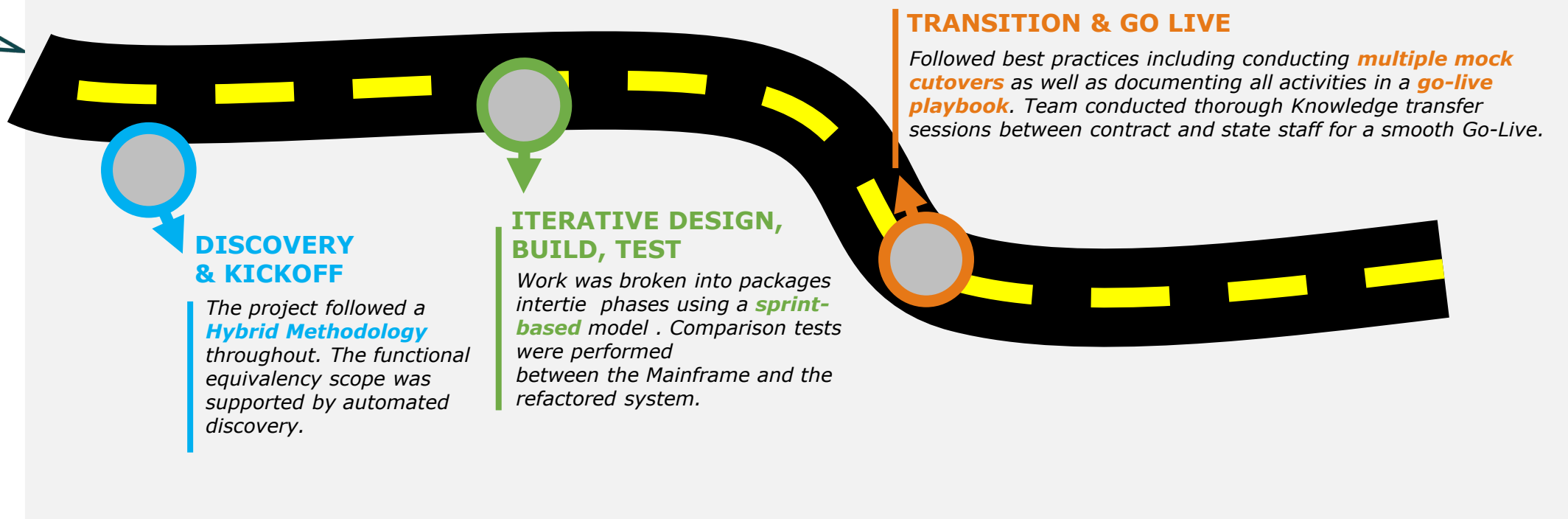
## Method used

- Agile-at-Scale (*true Agile*)
- Benefits of the approach
  - Start small and build momentum
  - Engagement of business users
  - Concurrent and iterative/incremental development and deployment of project components
  - Development of requirements just in time
  - Testing early and often
  - Capacity for change and flexibility with discipline
  - Mindset of moving forward within the plan: “plan, iterate, learn”
- Challenges
  - Requires strong clarity of purpose
  - Requires support, involvement, and integrated collaboration across leadership and all aspects of business
  - May challenge stakeholder project assumptions and processes
  - Requires robust governance structures and practices, business guides, and risk management
  - Requires elevated discipline within the opportunity for flexibility



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# New Mexico Project Management



## Benefits



Package based testing enabled the team to quickly shift focus and remain productive.



Configured and standardized the use of Automated DevOps process for continuous integration and continuous deployment

## Challenges



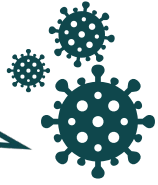
Aligning staff with the project management tool of choice (Jira) proved to be difficult at first.



Short on key staff members with many roles that didn't have a backup.



# Impact of the Pandemic



# Pandemic Impacts - New Mexico Refactor Project



## Kickoff

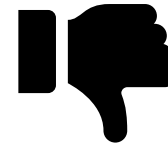
Initial kickoff sessions were pivotal in creating comradery amongst the team members.

Put a face to a name



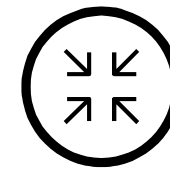
## PROS

- Telework never an option for state
- Work Flexibility
- No Commuting/Travel
- Collaboration tools allowed for more efficient troubleshooting sessions
- Decrease in unplanned leave



## CONS

- Adjustment to telework tools & reliance
- Escalation of issues
- Onboarding Process
- Uncertainty about the future



## Overall

Good work/life balance.

Most negative impacts were initial roadblocks that were overcome

Staff able to effectively telework when needed to eliminate extended work absences



# Texas

## Pandemic impact

- Project initiation coincided closely with beginning of the pandemic; both the pandemic and the winter storm of February 2021 occurred during early project development and Agile sprint activity
- The pandemic challenged the ability of Agile teams to work in a virtual environment during adoption of a new-to-the-program project approach, planning, initial services procurement, and beginning of DDI work
- Responding to the challenge, program business, IT, and project team members developed ability to collaborate cohesively across organizational disciplines and across in-person, virtual, and hybrid work environments
- Ultimately, the experience has produced an uncommonly high degree of Agile maturity in a short period of time
- The project has continued to remain on schedule, on budget, and in scope



# Oregon

## Pandemic impact

- Extremely effective with in person collaboration; move to full remote created some communication challenges
- Pandemic hit three months after certification creating a stall in planned enhancements



# Data Conversion Approach



# Texas Data Conversion

- Description

- The Texas child support program's IT system's mainframe is nearly three decades old but considered current; scaled to maintain data for nearly 1.5 million active plus closed cases
- However, applications are nearing end-of-life, maintenance expertise is being lost, and use of data is limited
- Solution: maintain mainframe during project; enable coordination of data entered into mainframe and cloud-based future-state platforms throughout project; retire mainframe at end of project
- Conversion of data from mainframe to cloud-based future-state ongoing concurrent with project build
- Employment of bi-directional replication to ensure continuity of operations during project DDI

- Benefits of the approach

- Enabled prioritization of user-facing system modernization incremental build and deployment
- Enables incremental data conversion and continuity of business operations during DDI
- Enables real-time bi-directional updates to mainframe or new platform during project
- Enables use of existing data on new platform, without altering code, in system future state

- Challenges

- Unconventional approach required stakeholder support
- Solution selected is technically challenging and required identification, testing, and deployment of correct tools
- Requires prioritization of data conversion concurrent with project components DDI



# Oregon Data Conversion

Oregon used a phased approach to data conversion based on rollout phase of the system.

Multiple mock conversions were conducted several months prior to the planned implementation phase.

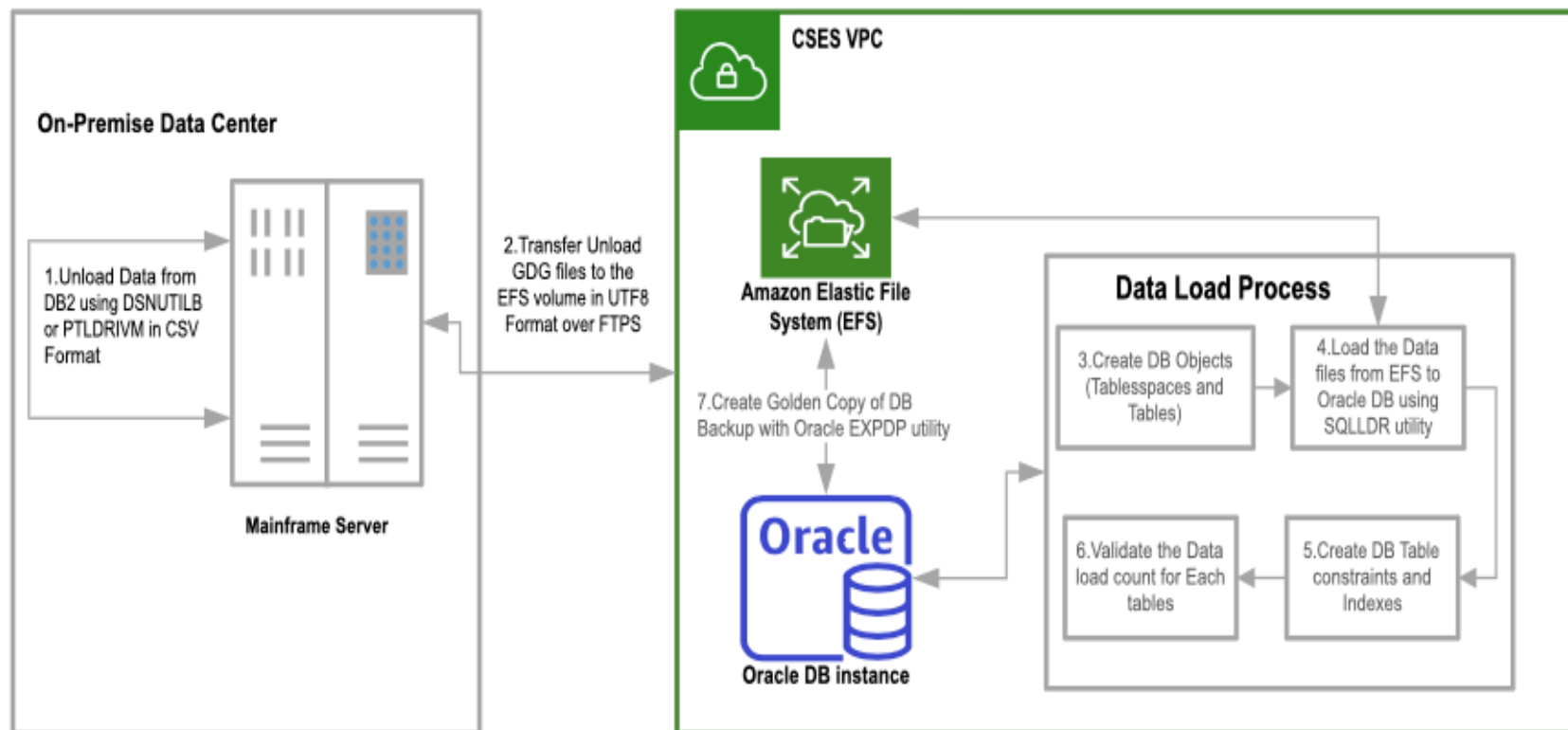
Because we were moving from a case-based system to a participant-based system, cases and participants outside of the planned geographic rollout had to be considered for conversion.

Lesson learned – don't underestimate the level of effort for clean up and conversion activities. Oregon's conversion efforts took nearly three years to complete.

Additional post-implementation clean up activities were also identified and delivered to field staff for corrections.



# New Mexico Data Conversion



Straightforward approach as we did not redesign our data structure

Smooth Transition due to similar DB/Query structure

Accommodating all special characters from DB2 to Oracle



# Change Management Approach



# Oregon Change Management

Oregon started informal change management during the Business Process Re-engineering phase

Formal change management practices started in February 2015 with the development of the Organizational Change Management Plan

Oregon used the approach developed by Prosci Inc. The Prosci methodology is based on several fundamental components

- We only change for a reason
- Organizational change requires individual change
- Organizational outcomes are the collective results of individual change



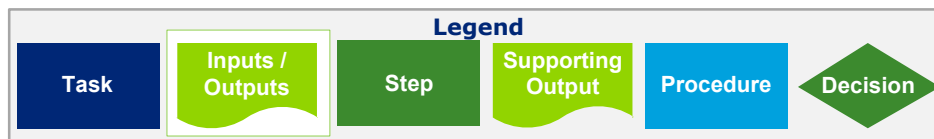
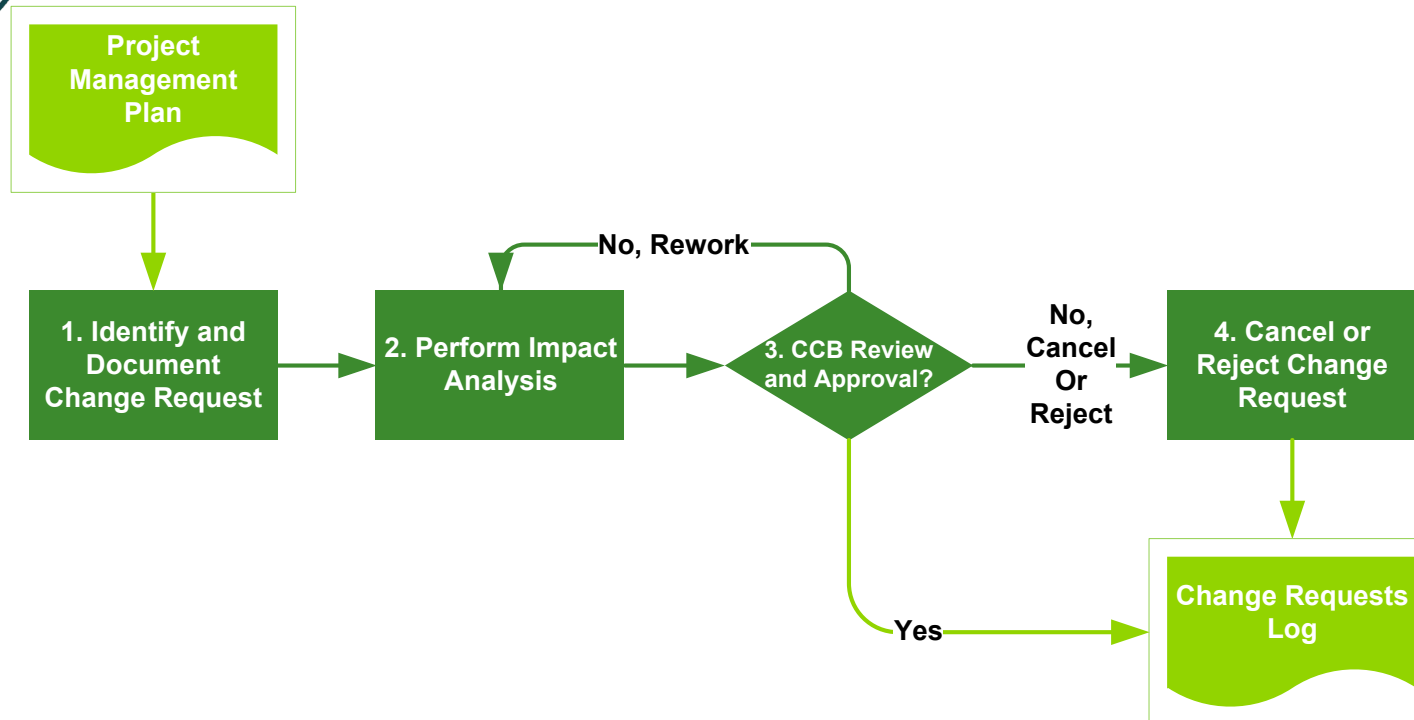
# Oregon Change Management

## Challenges:

- Perceived lack of vision, communication, and right people not involved
- Lack of trust in the Director's Office
- Program training – central vs. branch office
- Proactive decision making and timely follow-through
- Staff do not understand how change will affect them
- Front line workers are more concerned about the immediate future (what's happening this year)
- Managers don't always know how to introduce changes to staff and support staff through change



# New Mexico Change Management



## Minimal Changes

NMCSES was a sister project to the refactoring Child Support project in Tennessee. This allowed our project to leverage the lessons learned and plan around known issues leaving our project with minimal changes outside of regular bug & defect remediations.

## Examples

- Change from On Prem Infrastructure to Cloud
- Architecture: Change from a distributed architecture (Batch & DB server separate servers vs one) to a Co-Located model



# Texas Change Management

- Description

- Use of Human-Centered Change Management and Design principles across all of Transformation initiative
- Approach focuses on people -- families, staff, customers, vendors, other external partners -- involved in the child support process
- Conducted via a coordinated and cohesive plan across organizational functional disciplines
- Priorities:
  - Communication
  - Training
  - End-user engagement
- Involves:
  - Identifying needs and creating strategies to support them
  - Pervasive communication and engagement
  - Assessment of change readiness and measurement of adoption rates
  - Continual iteration, feedback, reassessment, and next steps forward
- IT systems modernization project includes:
  - Leadership “101” and “201” sessions to identify and affirm requirements and development plans
  - Engaged prioritization of project features and plans
  - Pre-deployment demos leading to user story solution acceptance
  - Pre-deployment User Acceptance Testing and Release Readiness activities
  - Post-deployment assessments via Command Centers



# Texas Change Management

- Benefits of the approach
  - Ensures focus remains on those who benefit
  - Ensures consistent application across organizational landscape, helping prevent confusion or gaps
  - Strengthens three primary areas of potential organization weakness: stakeholder engagement, communication, and training/preparation
  - Provides for continual assessment of success and opportunity for modification/improvement
- Challenges
  - Requires intentional prioritization and ongoing commitment of resources
  - Requires acceptance of value and participation by engaged internal and external parties
  - Requires willingness and discipline to assess outcomes
  - Requires organizational capacity for change



# Texas OAG-CSD's Transformation Lifecycle

CSD's Transformation Strategy uses an approach to transformation that focuses on humans—the families, staff, customers, and vendors involved in the child support process. To achieve this, human-centered principles must be embedded into all aspects of the change.

## NEXT #1 TRANSFORMATION STRATEGY

- Define the Next #1 Strategy and case for transformation (System Modernization "manifesto")
- Engage all staff and leaders with the Strategy and launch new transformation activities

## HUMAN-CENTERED CHANGE (HCC)

- Identify user adoption needs & create strategies and plans to support them
- Develop & deliver communications, training, and end user engagement strategies
- Assess user change readiness & measure adoption rates
- Iterate and improve change interventions based on user feedback and success metrics during Command Center and post-deployment



## HUMAN-CENTERED DESIGN (HCD)

- Conduct Journey Mapping sprints to identify current challenges & identify opportunities for improvement
- Explore the "art of the possible" and design future experiences for users
- Prioritize key pieces of functionality and draft plans for development

## SYSTEM MODERNIZATION DESIGN & DEVELOPMENT

- Conduct leadership "101" and "201" sessions to confirm prioritized features & rationalize plans for development
- Develop technology based on prioritized backlogs & sprint plans
- Demo new technology developed during each sprint
- Conduct User Acceptance Testing & Release Readiness activities



# Project outcomes



# Texas Project Outcomes

- Description of Project Outcomes

- Created project strategy based on defined purposes, needs, and priorities
- Received support and approvals from external stakeholders
- Have engaged internal and external stakeholders throughout project process via general awareness and active project roles
- 810 User Stories developed and accepted
- 140 sprints completed
- 7 major deployments to full production (2 more coming in 2022) in:
  - ✓ Vendor contracts core/monitoring/analytics
  - ✓ Customer self-service portal identity management and use
  - ✓ Contact center application
  - ✓ Enterprise document management
  - ✓ Employer Portal
  - ✓ Initial Financials
  - ✓ Initial Case Initiation
  - ✓ Data conversion and replication
- Approximately 6.2 Billion total records converted from mainframe to cloud-based future state (to date)
- Project is near mid-point and remains on schedule, on budget, and in scope
- Many lessons learned; continuous learning ongoing



# Oregon Project Outcomes

## Increase collections

- Total collections increase of 7.6%

## Increase program performance

- Increased collections towards arrears by 8.20%
- Increased collections to current support by 3.96%
- Increased cases with orders by 2.99%

## Reduce system costs

- We have not yet achieved this goal
- Use of a third-party hosting provider increased costs
- Plans are underway to explore additional options to reduce costs

## Reduce manual workarounds

- Manual workarounds entirely eliminated although adoption continues to be problematic



# Oregon Project Outcomes

## Reduce training timeline and time to proficiency

- Training time reduced from one year to two months
- Time to proficiency reduced from two years to six months

## Increase customer and worker satisfaction

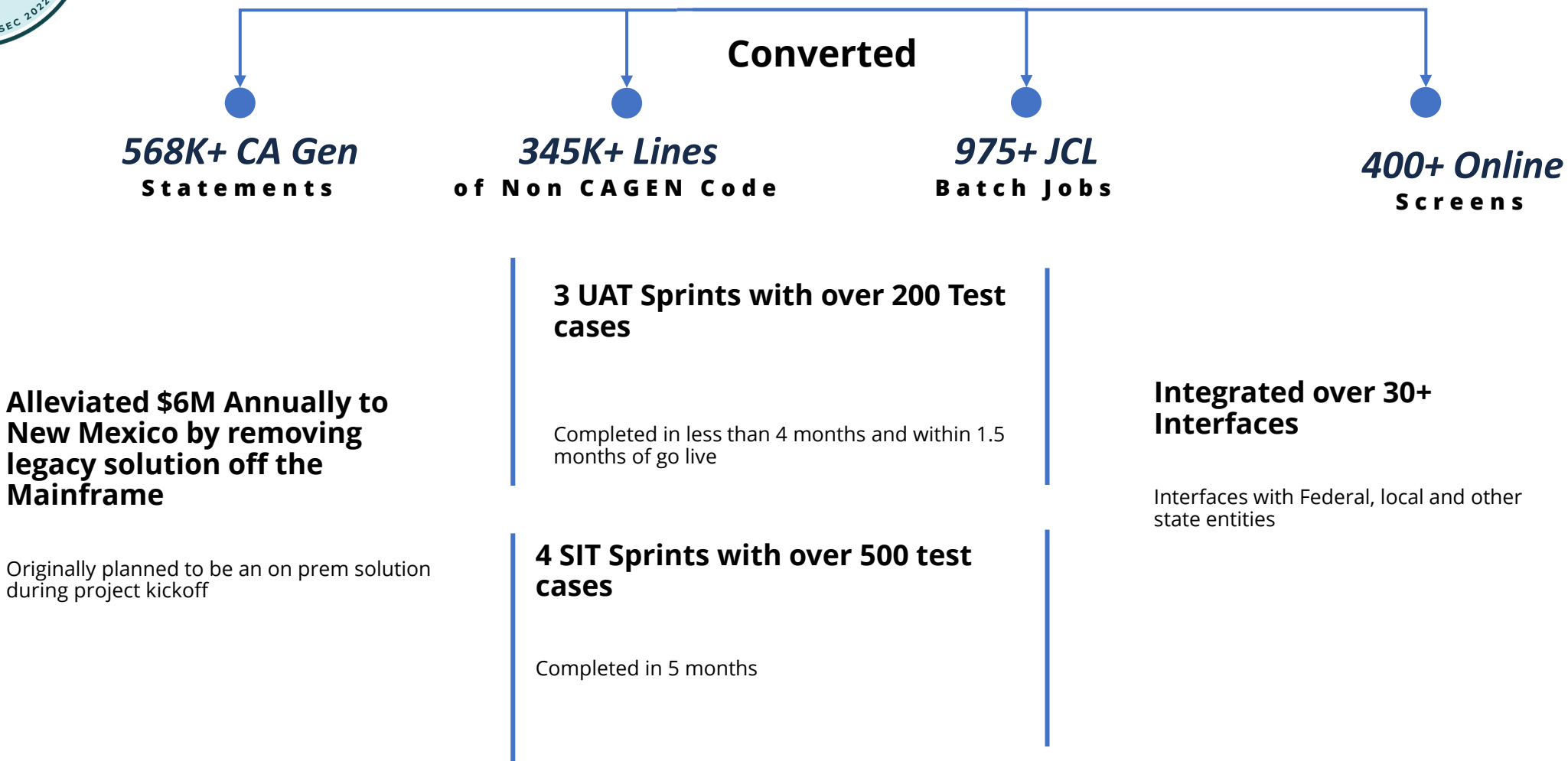
- Implemented a customer portal with a 56% adoption rate
- Reduced tracked customer complaints by 20%
- Worker satisfaction is split between staff who loved and worked with the legacy system and those that prefer a more modern application

## Increase automation

- Automation increases of approximately 41% over manual processes in the legacy system



# New Mexico Refactoring Project Outcomes





# Lessons Learned



# Oregon Lessons Learned

- Clear understanding of the technology
  - Cost
  - Ongoing maintenance
  - Knowledge/skill level
- Strategy to become a competitive employer
- Embed state staff throughout system development lifecycle
  - Lead by example
- Educating state leaders
  - It's not "a one and done"
  - Ongoing investment
- Training approach and planning
- Organizational change management activities continue long after statewide implementation
- Ongoing policy coordination and consideration



# Texas Lessons Learned

## Essential elements:

- Clarity of Purpose
- Leadership Support and Collaboration
- Engaged Stakeholder Partnership
- Team Engagement, Empowerment, and Collaboration across all functions
- Robust Business Guides, Governance Processes, and Risk Management
- Contracting and Project Delivery Approach that support successful outcomes
- Capacity for Change
- Discipline with Flexibility
- Move Forward within Plan

## Key ingredients:

- Purpose
- People
- Collaboration



# New Mexico Lessons Learned

## What went well

### Collaboration

- In-person kickoff
- Leveraged knowledge from other projects

### Cloud

- Adaptation from on-prem to AWS with flexibility and hands-on coaching

### Risk/Issue Remediation

- Transparent reporting allowed teams/leadership to make quick & decisive decisions

### DevOps/Data Migration

- Addressed data migration duration issues early on
- Streamlined DevOps

## What to improve

### Infrastructure/ Architecture

- Plan for infrastructure well before due date
- Enforce environment consistency to PROD

### Resource / Onboarding

- Avoid dependency on single point of failure ex: Performance tester, OpCon Admin, Batch Operators
- Establish a flexible Onboarding process early on

### Security/ Licensing

- Establish security scanning/remediation cadence early on
- Escalate all licensing issues immediately (ex: OpCon)

### PMO Tools & Timeline

- Train end users on use of PMO tool (JIRA) early on
- Assess timeline for overall project duration based on state support capacity



# What's Next?



# What's next?

- Oregon – Continuous process improvement and system enhancement
- Oregon – Exploring options for hosting service



# Road Ahead for New Mexico



## 0. Start of M&O

- Work deferred bugs
- Improve batch handling based on on-call issues
- Develop weekly reporting processes



## 1. Complete High Priority Change Requests

- Distribution Rule changes to align with the latest legislative changes
- Cyberfusion Mainframe migration to TIBCO MFT / Linux on AWS
- Develop first Realtime API with partner agencies



## 2. Discuss opportunities for Modernization

- Review opportunities of reducing licensing cost of Oracle by exploring a migration to an AWS Native platform (PostgreSQL)
- Evaluate enhancements in related systems (UT, TN)



## 4. Staff up & Prepare

- Bring in PMO & IV&V to prep RFQ for replacement system
- Fill vacancies and back-fill for key positions
- Issue RFP for a new solution that meets business needs and aligns with the department's enterprise architecture



## 5. Replacement/Modernization

- Salesforce based solution to align with other enterprise projects (Unified Portal)
- Proposed solution tentative go live in summer of 2026.



## 3. Reengineer business processes & define the future state of Child Support in NM

- CSED goals of moving to a more modern way of doing business; less punitive

We are here!

## What we've done so far...

- Completed customer journey mapping and defined target state vision for citizen facing applications
- Stood up a contract monitoring application using AWS Lakehouse architecture
- Modernized **Employer Portal** and **Customer Self-Service** application used by Texans to engage with the OAG

## Implementation of remaining Child Support modules

- Conduct series of system rationalization and customer journey mapping workshops.
- Incrementally implement Case Initiation, Locate, Scheduling, Financials, Establishment, Enforcement modules and Reports
- Retire legacy applications

## Site Visits

- Hosting on site, in-person interviews and visits to obtain field inputs around the current state processes and how the end user navigates through existing channels today
- Periodic reviews of the new functionality for the various modernized sites and portals

## System Readiness Reviews

- Preparation for production releases utilizing field staff to assist with system readiness activities

[illegible]

**Child Support  
End State**

- Streamlined customer and workforce experience enabling enhanced self-service
- Workflow driven case management with increased automation



Questions?