CCWIS Data Quality Plan

Prepared for:

Arkansas Division of Children and Families (DCFS)

Prepared by:

NTT DATA

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1. Introduction

1.1 Executive Summary

On June 2, 2016, the Administration for Children and Families (ACF) published the Comprehensive Child Welfare Information System (CCWIS) final rule[1], which replaces the Statewide and Tribal Automated Child Welfare Information System (S/TACWIS) in the Code of Federal Regulations[2] that includes requirements for a Data Quality Plan (DQP). CCWIS is a case management information system that title IV-E agencies may, at their option, develop to support their child welfare program needs. If a state or tribe elects to build a CCWIS, which the Arkansas Division of Children and Family Services (DCFS) had decided, the federal government will provide a more favorable cost allocation provision than for Non-CCWIS systems. In response to ACF, DCFS recognizes that it must implement and maintain automated functions in CCWIS that regularly monitor data quality, develop and implement a CCWIS DQP, and conduct biennial data quality reviews as required by Federal regulations[3].

1.2 Background

1.2.1 Division of Children and Family Services (DCFS)

DCFS is the title IV-E agency for public child welfare in Arkansas. The division has the primary responsibility for child welfare and child protection services for Arkansas' children and their families. The division is responsible for child abuse and neglect prevention, protective services, foster care, and adoptive programs.

1.2.2 Office of Information Technology (OIT)

The Department of Human Service's (DHS's) OIT supports DCFS's technical functions, including oversight of the Child Welfare legacy system, CHRIS, and related tertiary systems. Members of OIT are assigned directly to DCFS, work closely with the DCFS business representatives, and are co-sponsors of the CCWIS project to replace CHRIS.

1.2.3 Children's Reporting Information System (CHRIS)

The Arkansas SACWIS system, called CHRIS, was originally developed by Oklahoma as the Oklahoma KIDS system. After receiving the KIDS system, Arkansas modified KIDS based on the Arkansas requirements, and the CHRIS system went live in 1997. CHRIS operates in an Oracle database on a UNIX operating system and a PowerBuilder user interface. Fifteen (15) .net or third-party applications supplement CHRIS. CHRIS also has data exchanges with more than fourteen internal and external systems.

CHRIS is a comprehensive automated case management tool that supports reporting of data to:

► Adoption and Foster Care Analysis Reporting System (AFCARS)
► National Child Abuse and Neglect Data System (NCANDS)
► National Youth in Transition Database (NYTD)

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[1] CCWIS final rule was published in the Federal Register on Thursday June 2, 2016 and is available here: http://www.gpo.gov/fdsys/pkg/FR-2016-06-02/pdf/2016-12509.pdf

[2] 45 CFR 1355.50 – 13555.59

[3] 45 CFR 1355.52 (d)(5)

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    ▶ ACF for Caseworker visits

DCFS commissioned a gap analysis between CHRIS and new CCWIS requirements to determine the most advantageous solution to comply with CCWIS requirements. The choices presented to Arkansas DCFS were whether a transition of CHRIS from SACWIS to CCWIS was more beneficial, whether to build or buy a new CCWIS, or to reclassify CHRIS as a Non-CCWIS. Results of the study and further evaluation prompted DCFS to decide to implement a new CCWIS-compliant system that replaces CHRIS. The CHRIS replacement project is in the planning phase. DCFS anticipates a vendor contract award to implement a CCWIS compliant system by June 2020.

2. Data Quality Plan (DQP) Overview

DCFS values and requires the use of data and evidence in decision-making. DCFS has at its disposal a great deal of information from a multitude of sources, and the Division is always working to improve the quality of its information.The CCWIS DQP outlines DCFS data governance and data management strategies to improve and ensure CCWIS data quality.

The DQP will encompass data quality management activities, methodologies, and techniques necessary to ensure that the data used by DCFS and its stakeholders is fit for consumption and will meet the needs specified by the business requirements. Over time, standards and requirements for data quality will become part of the data lifecycle as well as the measurements and methods to monitor and report on data quality.

2.1 Objective

DCFS's DQP promotes the completeness, accuracy, and timeliness of data within the CCWIS system to describe each child and their circumstances to meet federal and state or tribal reporting requirements[4].

At the core of the Final CCWIS Rule found in § 1355.52 data quality prominence is evident with four of the seven core subsections focusing on data. Thus, the final rule for CCWIS is more focused on the data rather than the system itself; as such, the DQP is an integral part of the CCWIS submission process. ACF will use the DQP as the basis for the foundational metrics and standards when determining DCFS compliance with data quality requirements.

DCFS's DQP includes plans to measure, access, and improve the quality of the data, focusing on the data that is determined to be most critical for the Division, and the focus will be on improving the quality of that data.

Although a guiding principle of the DQP will be on preventing data issues from occurring, the DQP will also include procedures for detection and remediation of data quality issues, including root cause analysis. The focus will be not on modifying the data in downstream processes but instead on fixing the data at the source where possible.

We expect systematic enforcement of the data quality requirements, but business owners must ensure that their processes promote data quality. Business owners must enforce data quality by objectively measuring against precise standards-driven data requirements as defined.

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[4] 45 CFR 1355.52 - CCWIS project requirements.

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As such, this plan defines DCFS's requirements for maintaining quality CCWIS data in CHRIS; lays the foundation for data quality in the new CCWIS system, lists this policy's underlying data quality standards; and authorizes DCFS staff, vendors and contractors to carry out activities that promote data quality as directed by DCFS leadership.

2.2   Goals

An essential strategic goal for DCFS is to formalize data governance. While the CCWIS regulations do not require a formal data governance program, ACF strongly encourages title IV-E agencies to do so, which DCFS and OIT support.

Establishing data goverance for DCFS has the following high-level benefits:

- ▶ Improves adherence to data quality standards
- ▶ Enhances reporting capabilities
- ▶ Creates a data governance organization with roles and responsibilities
- ▶ Designates business ownership of data

DCFS and OIT believe that trusted, high-quality data enables confident decision-making, informs policy development, promotes data reuse, and supports service delivery. Providing a broad set of minimum requirements to be applied to all critical and shared data assets provides a solid foundation for a consistent approach to measure, communicate and improve quality of data across government. Therefore, a strong data governance framework includes:

- ▶ Providing dedicated resources
- ▶ Displaying an agency-wide commitment
- ▶ Ensuring that leadership recognizes data as a critical asset
- ▶ Establishing a practice of partnering with stakeholders at all levels to manage data quality activities

The pivotal task in this effort for DCFS was the designation of a Chief Data Officer (CDO) to head the agency's data asset management.

2.3   Authorization

The DQP authorizes all activities that reinforce or improve the quality of CCWIS data under the direction of the DCFS director or the director's designee(s), the Chief Information Officer (CIO), and the CDO.

This policy also authorizes DCFS employees, vendors and contractors to carry out activities that result in compliance with the standards that appear in this document when so directed by the authorized parties.

2.4   Document Maintenance

This document will be subject to formal change control after approval by OIT, DCFS, and ACF. Changes to this document will be requested, approved, and implemented per the DCFS change management processes. All changes to this document follow a configuration management process that records modifications in the Revision History table.

The DQP is a "living" document that is updated when changes in data governance, CCWIS enhancements, biennial data quality review mandates, or new or updated federal, state or tribal laws, regulations, policies, and procedures occur.

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The CDO will review the DQP yearly and as necessary to address changing environmental conditions, technical input, data quality progress, and ACF review findings.

The CDO will determine responsibility for creating and maintaining the DQP and other data quality documents. All of them must be reviewed and updated, as needed, annually so they can be a part of the DQP in the annual Operational Advance Planning Document (OAPD).

The Arkansas State SharePoint Site will maintain the most current version of the DQP at the following location: https://dhsshare.arkansas.gov/OST/CHRIS/Shared%20Documents/Forms/AllItems.aspx .

DCFS will provide an updated plan as an attachment to every Annual OAPD submitted to ACF.[5]

3. Data Quality and Security Requirements and Standards

In this section, DCFS outlines the existing standards, assumptions, and constraints, both federally and state-specific, that influence the design and implementation of the proposed CCWIS data quality framework.

3.1 ACF CCWIS Data Quality Rule Requirements

DCFS has reviewed and recognizes the impact of ACF regulations changes from SACWIS to CCWIS that occurred August 1, 2016. The regulations for CCWIS found in 45 Code of Federal Regulations (CFR) 1355.50 – 13555.59 include requirements for data definitions, federal and agency data for reporting and other requirements, data quality, required data exchanges, and an electronic data exchange standard. These requirements include implementing and maintaining the necessary functions in CCWIS to regularly monitor data quality, developing and implementing a CCWIS DQP, and conducting biennial data quality reviews as required in 45 CFR 1355.52 (d)(5).

The CCWIS data quality standards can be found in Appendix C at the end of this document.

3.1.1 Bi-directional CCWIS/CWCA Data Exchange

The data exchange standard provided by ACF regulation creates common data definitions, data formats, data values and other guidelines that standardize the meaning of each data element in the applicable exchanges.[6]

ACF provides title IV-E agencies with two approaches for sharing data between CCWIS and Child Welfare Contributing Agencies (CWCAs), either by establishing an interface or doing a data exchange. The title IV-E agency determines which data sharing approach(es) to use and describes the approach(es) in the applicable Advance Planning Document (APD). In our case, DCFS will be using both approaches, depending on the specific CWCA, combined with alignment with the business need for sharing data with the AR CCWIS.

DCFS may require data input to CCWIS from systems, agencies or CWCAs outside of DCFS to comply with its data quality standards under the terms of contracts or memoranda of understanding (MOUs). Future agreements and contracts with agencies or CWCAs will include data quality standards.

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[5] 45 CFR 1355.52 (d)(5)

[6] 18 45 CFR 1355.52(f)(1)

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3.2 Additional Federal Standards

DCFS as the Title IV-E agency for Arkansas must adhere to federal data requirements for specific data reports. To adhere to the federal data requirement, the agency will follow the data quality requirements in this section to provide data quality on a pro-active basis. In addition to adhering to the quality standards, the reporting process for each federal report includes running customized audit reports of the data selected for the period and correcting identified errors prior to submission to ACF.

These data standards and processes apply to all data within CHRIS and the new CCWIS replacement system necessary to provide timely accurate federal reporting.

3.2.1 Federally Required Data

CCWIS will maintain data needed to support federal & agency requirements, including:

- ► IV-B/IV-E data for federal or agency reports audits, reviews, & monitoring
- ► IV-B/IV-E data to support federal or agency laws, regulations, and policy
- ► Data to support the Indian Child Welfare Act (states only)
- ► AFCARS data
- ► NCANDS data for federal audits, reviews, & reports (states only)

The reports that are specifically impacted by federal data requirements are listed in Exhibit 1 below.

Exhibit 1: Federal Reports that Contain CCWIS Data.

Report or file	Frequency	Deadline	Data quality goal; Additional Information
NYTD report	Twice annually, covering the periods of October 1- March 31 and April – September 30	By May 15 and November 14	Data elements 1-5, 14 and 36 must be error-free, and all other elements must attain an error rate of 10% or less, in compliance with 45 CFR 1356.85 of the Social Security Act.
AFCARS reports	Twice annually (October 1- March 31 and April – September 30) Must be submitted: • April 1 – May 15 (A period) • Oct. 1 – Nov. 14 (B period)	By May 15 and November 14	Noncompliance occurs when an element has 10% or more occurrences with errors. The reports must attain an error rate of 10% or less, as shown in AFCARS data compliance reports, in compliance with 45 CFR 1355.40 of the Social Security Act.
NCANDS files	Annually (October 1- September 30)	By the end of December or January following the reporting period	TBD

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Caseworker visits report	Annually	Due by December 15	Submission is an email with required statistics. 95% monthly visits to Foster Kids.
Child and Family Services Plan (CFSP)	Due every 5 years	Next due date June 30, 2019	No current goal established; This report is part of the State & Tribal CFSP required to receive federal funding under Title IV-B.
Annual Progress and Services Report (APSR)	For Federal Fiscal year period from Oct. 1 – Sept. 30	Next due date June 30, 2019	No current goal established; This report is part of the State & Tribal CFSP required to receive federal funding under Title IV-B.
Annual Budget Request, Parts I, II and III	For Federal Fiscal year period from Oct. 1 – Sept. 30; Part I and II for FY 2020 (or future FY for estimated expenditures), Part III for the most recent 2-year grant period for which data is available	Due every year, June 30	No current goal established; This report is part of the State & Tribal CFSP required to receive federal funding under Title IV-B.
Financial Status Report	For Federal Fiscal year period from Oct. 1 – Sept. 30	No later than December 29th after the end of the grant period, due every year	No current goal established; This report is part of the State & Tribal CFSP required to receive federal funding under Title IV-B.

3.3 State Standards DHS/DCFS Data Requirements

3.3.1 DHS/DCFS Data Quality Standards

DCFS has plans to develop a Data Quality Policy and Standards document. The purpose of policy is to ensure that the quality of CCWIS data maintained in the DCFS Child Welfare system supports the efficient, economic and effective administration of DCFS programs.

3.3.2 Data Security

DHS has a Data Security standard that is included as an attachment with this plan.

DCFS follows the National Institute of Standards and Technology (NIST) Special Publication 800-53, which provides a catalog of security controls for all U.S. federal information systems except those related to national security. It is published by the National Institute of Standards and Technology that is a non-regulatory agency of the United States Department of Commerce.

4. Data Quality Efforts

4.1 Overview

The next two sections outline the current and planned DCFS and OIT data quality activities. The Data Quality Efforts include two types, as represented in this section:

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▶ Foundational Activities – establishing those activities that create the structure for data governance, roles and responsibilities, and data quality policies

▶ Data Management Activities – defining and conducting those activities for establishing and maintaining continuous data quality

4.2 Roadmap

A high-level roadmap for the main activities is shown in Exhibit 2 below.

Exhibit 2: Data Quality Roadmap
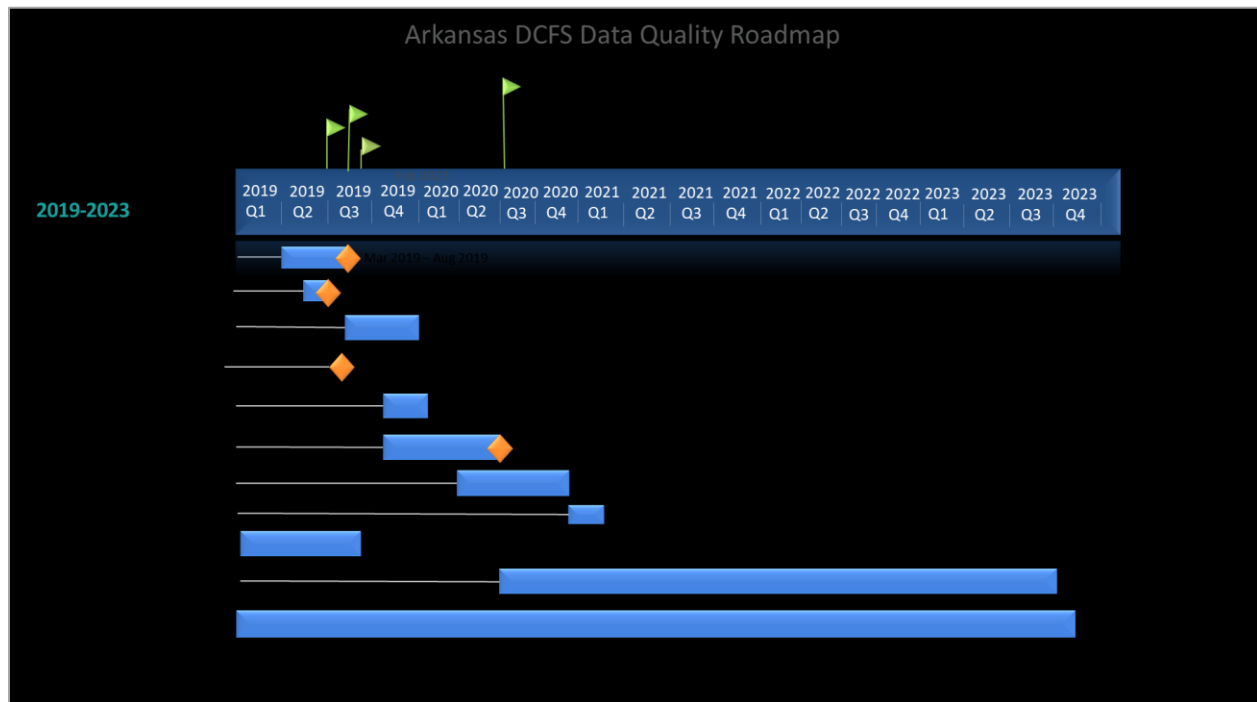
5. Foundational Data Quality Activities

This section outlines the foundational data quality activities that are either in process or planned by DCFS and OIT, including:

▶ Establishment and recruitment for a CDO position

▶ Determination of roles & responsibilities for a data quality team

▶ Establishment of a Data Governance Council (DGC)

▶ Development of data governance principles

▶ Development of the Data Quality Policy and Standards

5.1 Chief Data Officer (CDO)

DCFS recognized the importance of designating a CDO who is responsible for leading the data quality governance, establishing data quality initiatives, and ensuring data quality is considered in all of the business and technical activities for the Division. With this in mind, Kevin Grace, the Deputy CIO for DHS has been designated CDO.

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5.2 Data Quality Team

As mentioned in Section 5.1, DCFS designated a CDO who will determine roles and responsibilities for data quality. The selection of the CDO in conjunction with the current DCFS efforts to develop the Data Quality Policy and Standards provides the opportunity to design the roles and responsibilities necessary to develop the most effective organization for establishing and supporting a data quality framework.

As they develop the Data Quality Policy and Standards and establish the organization, DCFS will include cross-functional representation of the technical, program, and policy staffs. The DCFS data team will also consider available and needed resources to complete data quality review activities, scale the plan, and review activities as expected to ensure accurate work.

If resources are not available, DCFS will consider methods to leverage existing resources and build additional data quality capacity.

5.2.1 Roles and Responsibilities

Below is a list of positions and responsibilities that are under consideration by OIT and DCFS. This section is provided to address the potential dedicated resource roles and responsibilities for DCFS staff, stakeholders and any applicable CWCAs who are involved in data governance and management for CCWIS systems.

Please note this list is not exhaustive yet provides an example and types of the roles and responsibilities DCFS is reviewing.

Exhibit 3: Example Resource Needs / Roles and Responsibilities Matrix

Administration	
Role	**Quality Management Responsibilities**
Chief Data Officer	Responsible for enterprise-wide governance and utilization of information as an asset, via data processing, analysis, data mining, information trading, and other means.
Business Intelligence Specialist	Serves as the business and technical subject matter expert on data or information assets
Business Relationship Manager	The cross-functional liaison that determines which data requests will be queued and executed
Compliance Team	Ensure the evaluation of data quality during integration.
Data Custodian	Maintains ownership of the data, supports the accuracy and currency of the assigned data and determines the security classification level of the data
Data Integration Architects	Identifies objects and data elements to be managed, specifies the policies and business rules for how master data is created and maintained, describes any

	hierarchies, taxonomies, or other relationships essential to organizing or classifying objects, and explicitly assigns data-stewardship responsibility to individuals and organizations
Database Administrator	Is responsible for storage, organization, capacity planning, installation, configuration, database design, migration, performance monitoring, security, and troubleshooting as well as backup and data recovery

User	
Role	**Quality Management Responsibilities**
Data Business Analyst	Collects, manipulates, and analyzes data
Data Developer	Develops, tests, improves, and maintains new and existing databases to help users retrieve data effectively
Data Engineer	Develops, constructs, tests, and maintains architectures such as databases and large-scale data-processing systems; integrates, consolidates, and cleanses data
Data Quality Analyst (DQA)	Ensuring the implementation of data quality requirements as rules, measure the quality against the data quality requirements, and report the metrics. The DQA will schedule the profiling of key data elements to measure trends in data and react to unexpected trend changes.
Data Quality Manager	
Data Scientist	Applies knowledge and skills to conduct sophisticated and systematic analyses of data to produce insights
Data Stewards	Implements data policies, standards, procedures, and guidelines concerning data access and management.

5.2.2 Key Stakeholders

The following Exhibit 4 outlines the current DCFS Policy Stakeholders, yet as DCFS identifies additional stakeholders, and as the agency selects the implementation vendor, DCFS will update this table with additional names and stakeholders.

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Exhibit 4: Policy Stakeholders.

Name	Title	Stakeholder role or interest
Mischa Martin	Director, DCFS	Data quality system owner, reviewer, approver; Co-Sponsor of the CCWIS Child Welfare System Replacement Project
Jeff Dean	CIO, OIT	Data quality system reviewer, approver; Co-Sponsor of the CCWIS Child Welfare System Replacement Project
Kevin Grace	Deputy CIO, OIT and CDO	Responsible for leading the data quality governance and establishment of data quality initiatives
Melody Playford	Deputy CIO, OIT	Leading the establishment and ongoing activities of the Data Governance Council.
Nellena Garrison	DCFS Information Systems Manager, OIT	CHRIS owner, data quality system reviewer, approver; Co-Sponsor of the CCWIS Child Welfare Operational Steering Committee
TBD	CCWIS project manager for the Implementation Vendor (future)	Implementation Contractor Project Manager for Planning and Implementation of new CCWIS system
Debra Herrli	CCWIS PMO Project Manager	DCFS Project Manager for Planning and Implementation of new CCWIS system

5.3 Data Governance Council (DGC)

DCFS in collaboration with OIT are undertaking the activities to formalize Data Governance for the division by initially establishing a DGC, developing governance principles, and developing the Data Quality Policy and Standards.

The first DGC meeting was held in mid-August 2019 and began with a small group of executives for knowledge transfer and resource allocations. As each new project begins, the project will be brought to the DGC for review. The Council has a draft list of project requirements that are under consideration for the review, to drive governance and improved data quality:

1. Identification of systems of records
2. Data definitions
3. Privacy/Security - Data access/usage requirements/policies
4. Master data management requirements
5. Enterprise service bus (Application Programming Interface (API) Capabilities)
6. Enterprise data warehouse
7. Data requirements (Business Analytics Business Intelligence, Data Science, data lake, etc.)
8. ETL Tools (Extract Transform & Load)

It is OIT's vision that the DGC will be gradually expanded to oversee data quality for the entire DHS division in the future.

## 5.4 Data Governance Principles

Data Governance Principles represent the foundation under which DCFS will operate to mature and enhance their management, use, sharing, and analysis of data. Each principle includes a

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series of practices that agencies should begin to adopt and implement. It will be the responsibility of the DGC to research, analyze, develop, and support implementation of the agency's principals.

5.5   Data Quality Policy and Standards

DCFS has mapped the Data Quality Hierarchy, which will serve as the structure for the Data Quality Policy and Standards document. The Data Quality Policy and Standards, which address the important aspects of data management, will be developed, adopted, and leveraged as the basis for the DQP. It will provide a brief, high-level document that authorizes DCFS staff and contracted resources to carry out activities that ensure the quality of CCWIS data in CHRIS and the new CCWIS system, as directed by DCFS leadership and following the DQP provided in the OAPD. DCFS supports the Policy by carrying out the activities in the six standards illustrated in the hierarchy in Exhibit 5 below.

Exhibit 5: Data Quality Hierarchy
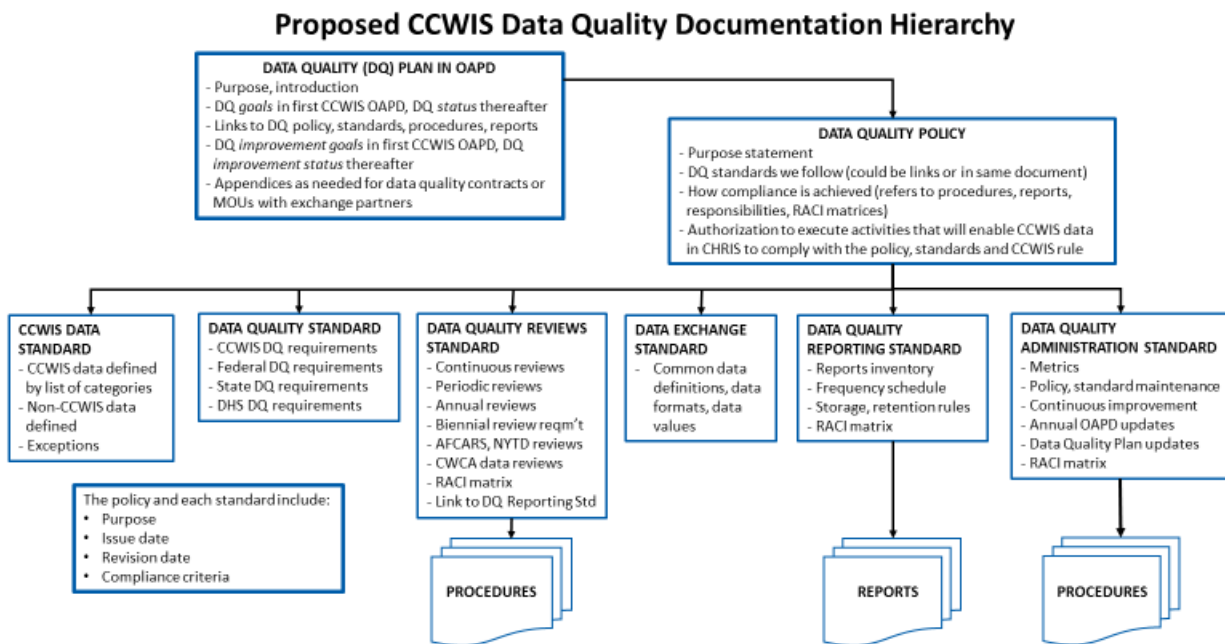
The six data quality standards of the Data Quality Policy align with five of the CCWIS requirements; the sixth describes administrative standards that support additional standards and CCWIS requirements. These standards provide the 'what' we're doing, 'who' does it and 'when' of the standard. Output, in the form of procedures and reports, stem from the activities associated with three of the standards, the 'how' documents.

6.   Data Management Activities

The Data Quality Policy and Standards document defines the Data Quality Hierarchy in the following categories, as shown in Exhibit 5. These categories will be used in the next sections of the plan to align and establish the ongoing data management activities:

► CCWIS and Non-CCWIS data

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- ▶ Data Quality Initiatives
- ▶ Data Quality Reviews
- ▶ Data Exchange Standards
- ▶ Data Quality and Reports
- ▶ Data Quality Administration

DCFS and OIT are currently conducting activities in some of these categories, but additional work remains to be done. The following sections discuss the necessary initiatives and define what is currently conducted vs. what remains to be put in place.

6.1 CCWIS Data Standard

DCFS Child Welfare systems store and manage CCWIS data and monitor its quality. CCWIS data is considered critical, therefore the focus of data quality will be on identifying and managing quality of this data.

6.1.1 CCWIS Data

The Data Quality Policy and Standards document will define the data maintained in CHRIS that DCFS treats as CCWIS data and differentiates it from non-CCWIS data. Regardless of origin, data that DCFS classifies as CCWIS data is subject to the DCFS Data Quality Policy and Standards supported by the DCFS DQP.

To align with the CCWIS rule, DCFS will define CCWIS data by categories as part of development of the Data Quality Policy and Standards according to the CCWIS categories listed in Appendix D of this document. CCWIS data supports:

- ▶ Ongoing federal reports such as AFCARS and NYTD, monthly caseworker visits, the CB-496 financial report and case management data.
- ▶ Federal expenditures, such as title IV-E eligibility determinations and title IV-B and IV-E service authorizations and expenditures. Examples include data from:
  - Court findings
  - Placements, licensing information and background checks
  - Title IV-E financial eligibility and rules
  - Service authorizations, approvals, and delivery
  - Payment status and allocation
- ▶ Federal laws, regulations, and policies, such as information on:
  - Sex trafficking victims
  - Missing or abducted children
- ▶ Case management, such as data needed for federal audits, reviews and monitoring, Child and Family Services Reviews (CFSRs) and title IV-E reviews.
- ▶ The Indian Child Welfare Act (ICWA) and NCANDS.
- ▶ State child welfare laws, regulations, policies, practices, reporting, audits, program evaluations and reviews, such as data required for:
  - Substance abuse or parent training programs

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- Reports to the governor or legislature
- Child welfare tools such as assessments, home studies, licensing and health passports
- Court monitors, such as child outcomes, time in case, number of placements and appropriateness of services
- State auditors, including services to non-title IV-E clients and non-IV-E placements
- CWCAs, including service utilization, home visits, case plans and foster care and pre-adoptive placements

6.1.2 Non-CCWIS data

Secondary data in CHRIS or the new CCWIS replacement system may be necessary, but if it doesn't fall into a category in the above list, DCFS classifies it as Non-CCWIS data as it is not subject to the DCFS Data Quality Policy and standards.

While elements of Non-CCWIS data may become obsolete or outdated over time, and removing these obsolete or unused data elements from the active DCFS CCWIS system may achieve operational efficiencies or improve data quality, there is no ACF or DCFS requirement to purge previously-collected non-CCWIS data.

Audit, review and monitoring data that is not normally part of DCFS's ongoing case management practice, such as periodic surveys, is not considered to be CCWIS data.

6.1.3 Data Categories and Next Steps

Because ACF defines CCWIS data by categories rather than prescribing specific data elements, DCFS will proceed to determine which data meets its needs. As part of its data quality effort, DCFS will review the categories of data defined by ACF (see Appendix D) to identify the categories and elements critical to the division.

These efforts will include the CFSR, AFCARS or NYTD Performance Improvement Plans (PIPs), CFSP/APSR, IV-E, CCWIS and other federal, state or tribal efforts, as required.

6.2 Data Quality Initiatives

DCFS will undertake multiple quality initiatives, discussed in further detail in this section.

6.2.1 Dashboards

During State Fiscal Year (SFY) 2019 DCFS began its implementation of SafeMeasures, a state-of-the-art reporting service that will provide dashboards to help the Division's field staff transform data into actionable information. The reporting service will provide users with task lists and reminders on upcoming work that has not yet been completed, while also allowing them to compile descriptive and performance data. Data for the SafeMeasures dashboards are pulled directly from CHRIS to avoid data duplication and ensure quality. Quality of the data in the dashboards is checked regularly. The agency is currently piloting the service in select counties and intends to roll the service out statewide during SFY 2020.

In addition, Deloitte, who is the Operations and Maintenance (O&M) contractor, has multiple dashboards that are utilized to monitor aspects of DCFS business and data quality, including dashboards for public consumption. As part of the dashboard development process, metrics are also under development.

The dashboards include Investigations Overview, Differential Response (DR) Overview, Initiations: Timeliness of Investigations, and Initiations: Timeliness of DRs, as shown in Exhibit 6 and described below.

Exhibit 6: Dashboard Menu

Investigations Overview

The Investigations Overview dashboard provides information over a one-year period regarding investigations by allegation and by priority. It also has filtering capability by date and judicial district. Exhibit 7 provides a snapshot of the dashboard.

Exhibit 7: Investigations Overview Dashboard

DRs Overview

The DRs Overview dashboard provides information over a one-year period regarding DRs by allegation types for open cases and for all DRs, open and closed. It shows total DRs and Open DRs. It also has filtering capability by date and judicial district. Exhibit 8 provides a snapshot of the dashboard.

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Exhibit 8: Differential Responses Overview Dashboard
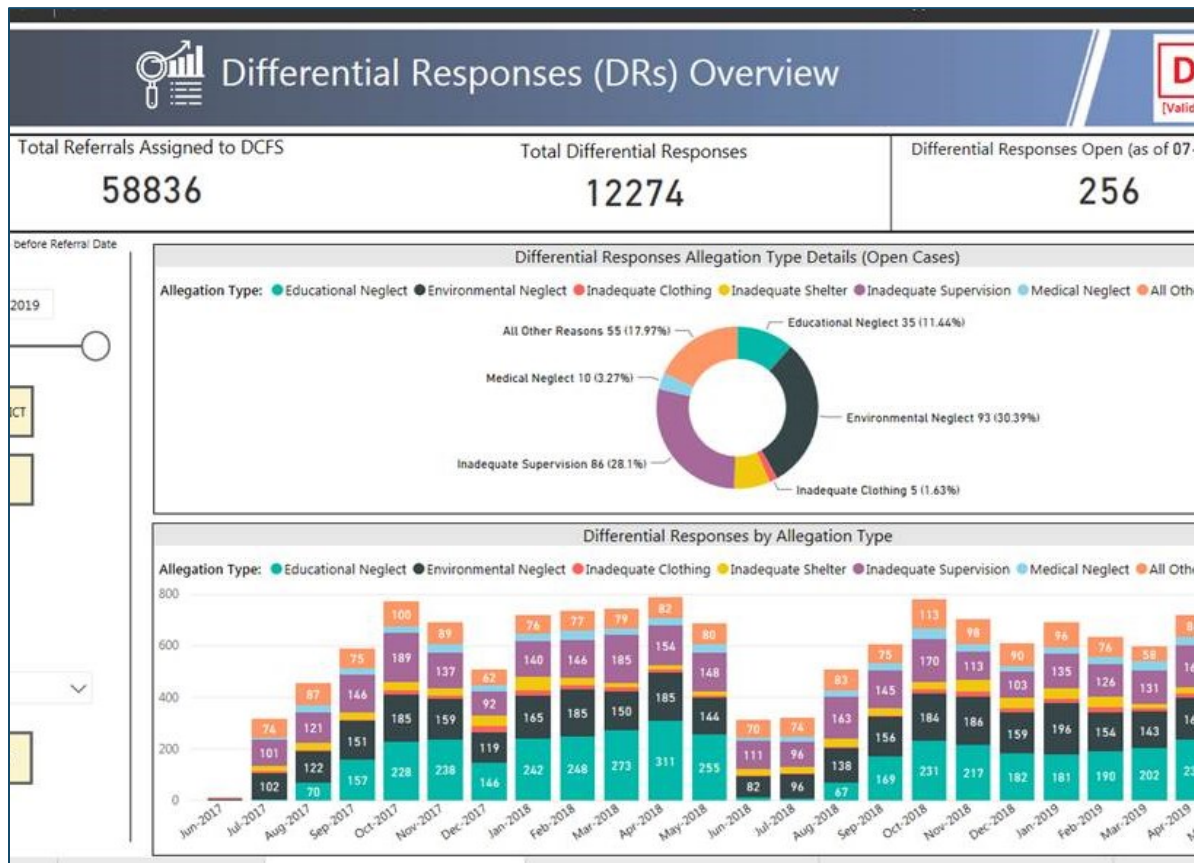
Initiations: Timeliness of Investigations

A new dashboard has been developed to monitor the timeliness of investigations to ensure that investigations are conducted in a timely manner and the related data is accurately and timely recorded (see Exhibit 9 for related business rules).

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Exhibit 9: Timeliness Dashboard Business Rules

Timeliness - Business Rules

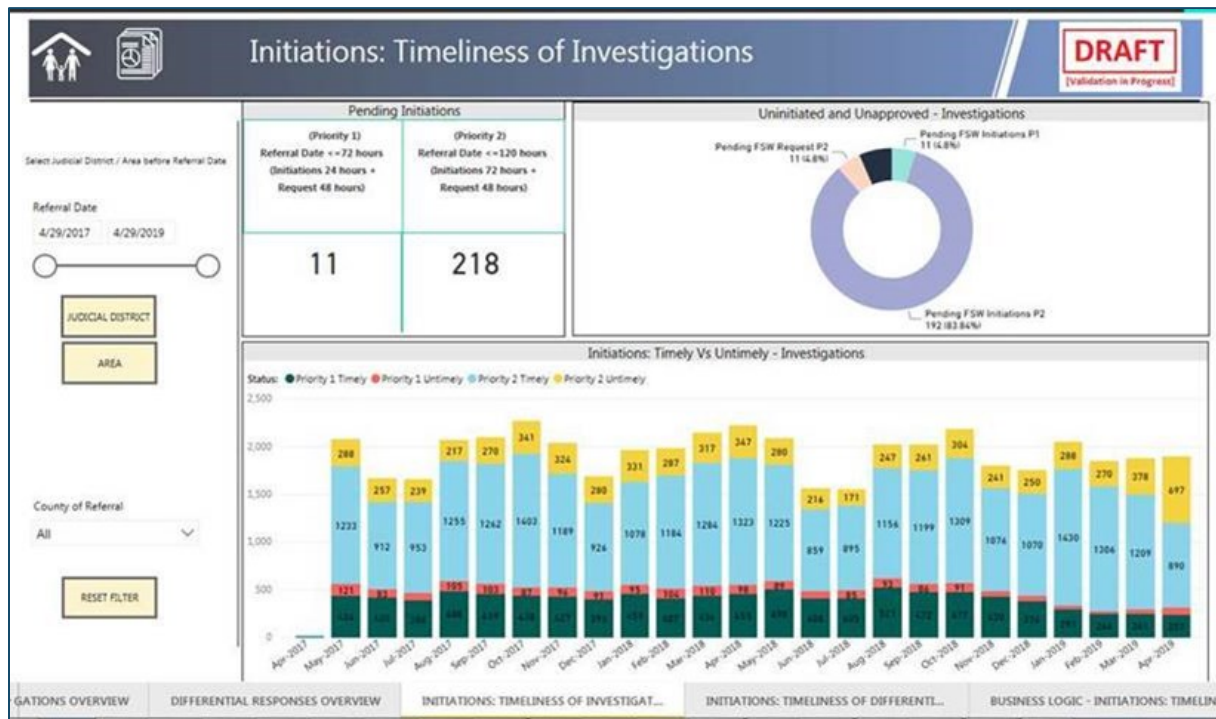| #	Type	Metric	Business Definition	Business Logic
1	Trend	Timely vs Untimely – Investigation	Trend of the timeliness of initiating investigations. This shows how many are initiated timely or untimely.	The total number of timely and untimely Investigations initiated by month. The following are the criteria for Timely Priority 1 and Priority 2 Investigation Initiations: A Face to Face Interview must be conducted with each alleged victim within the Priority 1 or Priority 2 timeframe from the receipt of the initial Hotline Referral. For Priority 1 investigations, all Alleged Victims must be interviewed within 24 Hours from the Referral Date. For Priority 2 investigations, all Alleged Victims must be interviewed within 72 Hours from the Referral Date. One Face to Face Interview with each client with the Role in Referral of Alleged Victim is required for the Investigation Initiation to be counted as Timely ○ The Date Interviewed/Contacted entered on the Alleged Victim's Interview Screen must fall within the Investigation Initiation timeframe. ○ One of the following 'Face to Face' Types of Contact must be selected: Face to Face (Child Advocacy Center), Face to Face (Court), Face to Face (Day Care), Face to Face (DHS Office), Face to Face (Home), Face to Face (Hospital/Medical Facility), Face to Face (Jail/Prison), Face to Face (Law Enforcement Office), Face to Face (Mental Health Facility), Face to Face (Observed, too young/intv), Face to Face (Other ICPC), Face to Face (Other), Face to Face (Placement Provider ICPC), Face to Face (Placement Provider), Face to Face (School). • Three interview attempts documented for each Alleged Victim with the Contact Type of 'Contact Attempted/Unable to Locate' or 'Face to Face (Failed Attempt)' will be counted as Timely when the Date Interviewed/Contacted falls within the Priority I or Priority II Initiation timeframes. • The Interview Status for a DCFS Referral must be 'Approved'. Example of an Untimely Priority 1 Initiation: A Referral was opened on 08/01/2018 at 04:30 PM. All the victims were interviewed by 08/02/2018 at 05:30 PM. The example would be counted as initiated Untimely as it did NOT meet the 24 Hours criteria. Example for Priority 2: A Referral was opened on 08/01/2018 at 04:45 PM. All the victims were interviewed by 8/04/2018 at 04:45 PM. The above example will be counted as Untimely as it did NOT meet the 72 Hours criteria. • A new metric 'Pending Initiations' has been added for Referrals based on the time difference between the Dashboard data refresh date and the Referral Date of less than or equal to 24 hours for Priority 1 Investigation and 72 hours for Priority 2 Investigations. The Workers are given an extra 48 hours to document the Interviews. Therefore, for a Priority 1 Investigation the Worker has 24 hours to interview the Alleged Victim and 48 hours to document the results for a total of 72 hours. And for a Priority 2 Investigation the Worker has 72 hours to interview the Alleged Victim and 48 hours to document the results for a total of 120 hours. ○ An investigation is either in Pending status (when the Interview has not been documented) or Timely status (when the Interview has been entered) during the Initiation and documentation 72 hour Priority 1 or 120 hour Priority II timeframes. ○ An Untimely investigation becomes Timely when the worker has documented the interview within the specified time frames and requested approval of the Interview, and the Supervisor approves the Interview at a later time. ○ A new metric 'Uninitiated and Unapproved –Investigations' has been added to visualize the statuses 'Pending Initiations'. There are three categories for both Priority 1 and Priority 2 Investigations: Pending FSW Initiations, Pending FSW Request and Pending Supervisor Approval. ○ Pending FSW Initiations: These are Investigations that do not have an applicable Alleged Victim Interview documented for all the alleged victims in the Referral. ○ Pending FSW Request: These are Investigations with an applicable Alleged Victim Interview documented for all alleged victims, and Supervisor approval of the Interviews has not been requested. ○ Pending Supervisor Approval: These are Investigations with an applicable Alleged Victim Interview documented for all the Alleged Victims, approval of the Interviews has been requested, and the Supervisor's approval is pending. The 'Pending Initiations' and 'Uninitiated and Unapproved –Investigations' metrics can be filtered for only five days prior to the report date.

The dashboard includes a metric 'Pending Initiations' that has been added for Referrals based on the time difference between the Dashboard data refresh date and the Referral Date of less than or equal to 24 hours for Priority 1 Investigations and 72 hours for Priority 2 Investigations. The Workers are given an extra 48 hours to document the Interviews. For a Priority 1 Investigation the Worker has 24 hours to interview the Alleged Victim and 48 hours to document the results for a total of 72 hours. And for a Priority 2 Investigation the Worker has 72 hours to interview the Alleged Victim and 48 hours to document for a total of 120 hours.

An investigation is either in Pending status (when the Interview has not been documented) or Timely status (when the Interview has been entered and approved) during the Initiation and documentation 72 hour Priority 1 or 120 hour Priority II timeframes. Exhibit 10 below provides a snapshot of the Timeliness Dashboard.

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Exhibit 10: Timeliness of Investigations Dashboard

A metric to show unititiated and unapproved investigations has been added to the Timeliness of Investigations dashboard (See Exhibit 10). This metric was added to visualize the status of the Pending Initiations.

There are three categories for both Priority 1 and Priority 2 Investigations: Pending Family Service Worker (FSW) Initiations, Pending FSW Request and Pending Supervisor Approval.

► Pending FSW Initiations: These are Investigations that do not have an applicable Alleged Victim Interview documented for all Alleged Victims In the Referral

► Pending FSW Request: These are Investigations with an applicable Alleged Victim Interview documented for all Alleged Victims, and Supervisor approval of the Interviews has not been requested

► Pending Supervisor Approval: These are Investigations with an applicable Alleged Victim Interview documented for all the Alleged Victims, approval of the Interviews has been requested, and the Supervisor's approval is pending

► The 'Pending Initiations' and 'Uninitiated and Unapproved –Investigations' metrics can be filtered for only five days prior to the Referral Date.

► The number of Investigations Pending Initiation is not included in the Initiations: Timely Vs Untimely counts.

Initiations: Timeliness of DRs

A second new dashboard has been developed to monitor timeliness of DR to ensure that DRs are conducted in a timely manner and the related data is accurately and timely recorded, see example in Exhibit 11 below.

A DR is either in Pending Initiation (when the Contact has not been documented) or Timely status during the 120 hour timeframe. This dashboard also includes a metric displaying the

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number of 'Pending Initiations' that have been added for DRs opened within the DR Initiation timeframe based on the time difference between the Dashboard data refresh date and the Referral Date of less than or equal to 72 hours. An extra 48 hours is added to the Initiation timeframe for DR Staff to enter the DR Initiation Contacts for a total of 120 hours. The number of DRs Pending Initiation is not included in the Initiations: Timely vs Untimely counts.

Exhibit 11: Timeliness of Differential Responses Dashboard Example
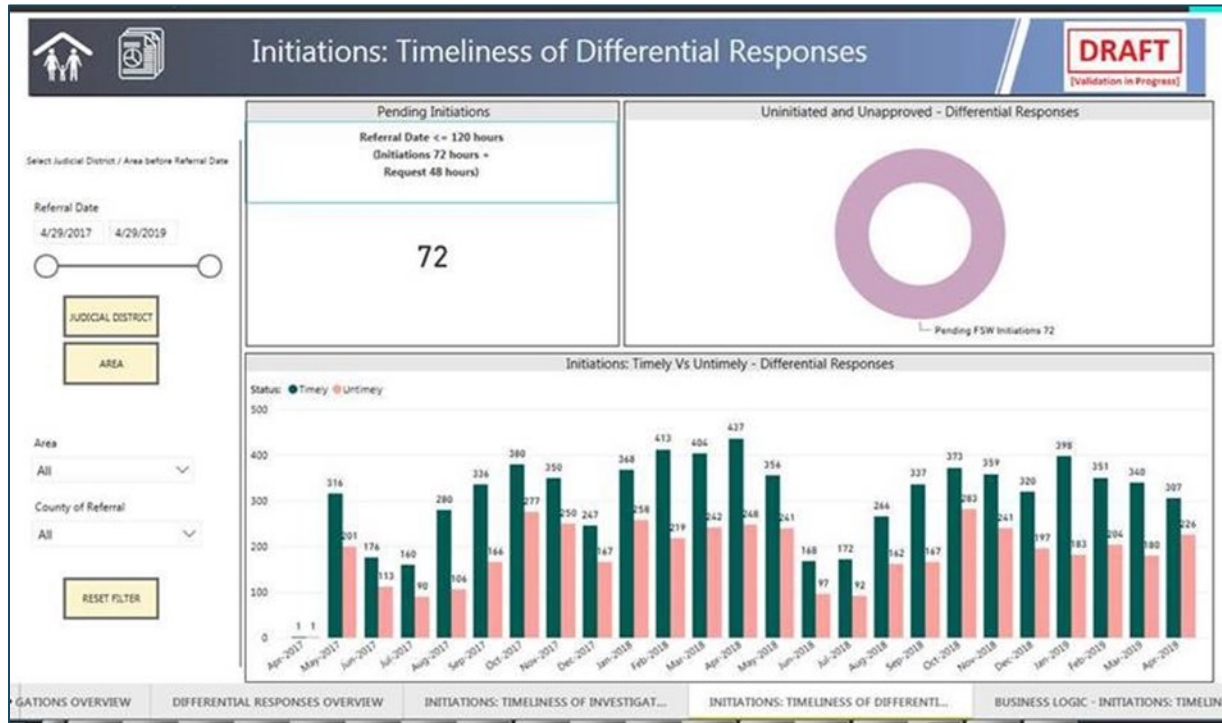
A metric to show unititiated and unapproved DRs has been added to the Timeliness of DRs dashboard (see Exhibit 11) This metric was added to visualize the status of the Pending DRs.

There are two categories: Pending FSW Initiations and Pending Supervisor Approval.

► Pending FSW Initiations: These are DRs without an Initiation Contact entered with all the Alleged Victims and at least one person responsible for the child's health, safety, or welfare (PRFC)

► Pending Supervisor Approval: These are DRs with an Initiation Contact entered that is pending Supervisor Review

The 'Pending Initiations' and 'Uninitiated and Unapproved – Differential Responses' metrics can be filtered for only five days prior to the Referral Date.

6.2.2 DCFS Staff and Data Quality

DCFS achieves compliance through activities that are carried out by DCFS employees and contract resources according to the data quality standards. Those activities, which often result in records that show compliance, include:

► Consitently and uniformly collecting data and entering it into the CCWIS system according to defined business processes

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- ► Adhering to cross-edits alerts to email users, online help and other functions to reinforce the importance of complete, accurate and timely data entry.
- ► Conducting data quality reviews and running reports, analyzing results, documenting findings and reporting the results to DCFS leadership.

DCFS holds monthly meetings between its executive staff and the CHRIS team to discuss challenges experienced by end-users and jointly plan and prioritize CHRIS changes/updates. The CHRIS support staff have provided an opportunity for users to enter suggestions and/or comments related to data issues, user-friendliness, etc. Both CHRIS staff and DCFS program staff participate in monthly SACWIS conference calls to discuss SACWIS requirements and enhancements completed each quarter. The CHRIS staff also provide updates on enhancements and changes via email to all DCFS staff who, in turn, provide feedback on the functionality of the changes and any other issues they're experiencing.

In addition, the majority of staff use the CHRIS net reports and the Compliance Outcome Reports (COR) (see Section 6.5 for more information regarding COR) to conduct data quality activities. COR is available monthly but the overdue investigation and 120-day reports are monitored daily in many counties.

Some staff members across the state track key indicators using manual spreadsheets. Some manual approaches include tracking provisional foster homes and where they are in the compliance process on a spreadsheet, utilization of an investigation checklist that the supervisor completes on paper at the closure of a report and files it the hard file, and use of multiple spreadsheets by the Eligibility Unit and other internal DCFS units.

Additional specific, ongoing data quality activities will be identified during development of the Data Quality Policy and Standards. Once identified, training for DCFS staff will be developed and rolled out according to the policy approved by the DGC.

Data Quality Training

Currently, there is not a specific training on Data Quality or Policy for CHRIS, but there is training throughout all of the mandatory new worker training that address both of these issues. The classroom and the CHRIS Trainers stress the importance of documenting accurate information in the required time period. Starting with New FSW online training, workers are taught policy, documentation, timelines and capturing relevant information into case records. Copies of New Worker FSW training can be provided to ACF if needed.

In CHRIS training the workers are trained on screens and are taught about proper documentation on the correct CHRIS screen/fields. In online training workers read, complete activities and answer questions on policy, timelines and accurate documentation. Throughout all of classroom training workers are required to read, are lectured to, have class discussions and perform homework assignments. In CHRIS Training workers bring information gathered in the classroom, discuss additional items that need documentation and then practice documenting in all areas of an investigation and a case. Both the classroom and CHRIS trainers provide ongoing feedback to participants concerning their narrative documentation. They stress the importance of not only documenting correct information in the required time period but also stress the importance of the quality of information that is documented.

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DCFS anticipates further development of their comprehensive training policy and program necessary to reinforce effective data quality efforts once the CCWIS DGC approves the Data Quality Policy and Standards.

6.2.3 Automation Methods and Tools

DCFS plans to leverage automation of data quality monitoring by implementing automated processes that monitor data quality or run ad-hoc as needed to monitor data quality.

DCFS plans to review potential methods and tools, develop an automated testing policy, and work with the CCWIS implementation vendor to utilize automation where appropriate during and after system implementation. This will provide DCFS with the benefits of automated data quality testing, which can expand testing capacity, provide faster feedback, increase coverage, and improve data quality in some instances, freeing staff up to other types of reviews that take more staff time.

6.2.4 Data Profiling/Sampling Methods

Data profiling involves looking at the information in the CCWIS database to determine if it has quality, using the measures defined in Section 6.6.1.

DCFS started the process of data profiling back in October 2018 with the Arkansas Department of Information System outreach program to assess all data assets. The purpose of this program was to provide a standard method for all agencies of the state to achieve Level 2 of the Arkansas Data Catalog, which is an inventory of the data assets of each state agency. Act 912 of 2017 requires every state agency to provide and maintain a data catalog of data housed by each state agency. The purpose of amassing Level 2 information will help identify the utility, value, accountability and governance requirements of each agency's data so that it can be leveraged further for improved business decisions and outcomes for the State of Arkansas.

DCFS and OIT developed an initial Data Asset Inventory (see Attachment to this plan: AR Data Asset Inventory_DCFS_082918.xlsx) for DCFS as part of the data profiling effort.

Next steps for the data profiling effort include identifying DCFS data needs according to the CCWIS data categories and assessing the quality of the identified data. Results of the data profiling exercise will be documented and serve as the baseline data assessment.

6.2.5 Data Security, Archiving, & Purging

As discussed in Section 3.3.2 of this document, DCFS has implemented the most recent update to Minimum Acceptable Risk Standards for Exchanges (MARS-E) 2.0, which includes the NIST 800-53 standard, that Centers for Medicaid and Medicare Services (CMS) modified to reflect the environment in which Affordable Care Act (ACA) systems operate. CMS accordingly provided documentation to demonstrate how the Security Control Selection of MARS-E Version 2.0 controls differ from those described in MARS-E Version 1.0 and the NIST 800-53 Rev 4 Moderate Baseline set.

A new set of policies to revamp the Agency's security documentation and processes, which will be implemented soon, is in progress. Also, the Agency needs to confirm that DCFS meets all of the new standards. To ensure that the new standards are met, they plan to assess existing data exchanges and perform a gap analysis. First, however, is documentation of the policy, then the Agency will perform the gap analysis.

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The Arkansas General Records Retention Schedule and policy, which outlines the Department's Archiving and Purging policies, is included as an attachment to this plan.

6.2.6   New CCWIS System Data Quality

DCFS expects the implementation of the new CCWIS requirements on the agency's data will:

- ▶ Facilitate defining the types of data in the DCFS Child Welfare System, with precise definitions with specific formats and values
- ▶ Ensure required data is available as needed
- ▶ Confirm that data is relevant to child welfare policies, programs and goals
- ▶ Provide flexibility in allowing multiple data exchanges that are efficient, economical, and effective
- ▶ Establish and/or update data quality administration, automation, and review activities

Data Conversion and Extraction

The quality of the data after conversion is directly proportional to the amount of time spent to analyze, profile, and assess it before conversion. In an ideal data conversion project, 80 percent of the time goes to data analysis and 20 percent to coding transformation algorithms. (Data Migration Pro, 2019) To address these concerns, DCFS has identified specific requirements for the implementation vendor to reduce the significant risk and mitigate these possible areas of risk. Additionally, DCFS has undertaken the first step in a pre-assessment of the current CHRIS system data. The results will provide the implementation vendor the necessary starting criteria to develop the conversion and extraction once onboard.

Automation

Requirements for the use of automated methods to monitor and ensure data quality have been included in the RFP requirements for the new system. These requirements will be tested during implementation to ensure their effectiveness.

6.3   Data Quality Reviews

DCFS knows that it is imperative to identify and plan preventative actions to ensure that quality issues do not enter or persist in the CCWIS system. Data quality reviews provide the information that can be used to determine corrective actions.

These reviews assess the status of the data against federal policies and the DCFS Data Quality Policy, and results will be used to identify opportunities for improvement or confirm that DCFS met previous improvement goals.

Review Approach

DCFS plans to employ multiple methods for data quality reviews. Reviews will be conducted every two years to correspond with and satisfy the CCWIS biennial data quality review requirement; additional specific reviews or types of analyses may occur at various other times. The approach and periodicity of the reviews for both biennial reviews and additional reviews will be determined by the CDO with approval of the DGC and will be detailed in future DQPs.

DCFS, in collaboration with OIT, will work with the DGC to create quality review policies that include types of reviews to be conducted and establish review schedules. Roles and

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responsibilities for data quality reviews will be established and documented in a Responsible, Accountable, Consulted, Informed (RACI) matrix similar to the one shown in Exhibit 12.

Exhibit 12: Data Quality Reviews RACI Matrix.

Task	Function/role	Function/role	Function/role	Function/role
TBD	TBD	TBD	TBD	TBD

Key: **R**esponsible, **A**ccountable, **C**onsulted, **I**nformed

These reviews will:

▶ Coordinate with ongoing reviews, CFSR PIP, and the APSR.
▶ Determine if DCFS and any applicable CWCAs meet the CCWIS data quality and automated data requirements.
▶ Ensure that contracts or agreements with CWCA's include data quality standards.
▶ Confirm that CHRIS's bi-directional data exchanges meet requirements in sections 1355.52(e) and (f) of the rule, including:
▶ Check for efficient, economical and effective bi-directional exchange of relevant data with the court, Medicaid Management Information System (MMIS), education and other systems, such as child abuse and neglect systems or systems that determine title IV-E eligibility.
▶ Ensure the use of a single data exchange standard that describes data, definitions formats, and other specifications is used with bi-directional exchanges between CHRIS and each CWCA along with any applicable systems outside of CHRIS that DHS uses to collect CCWIS data.
▶ Generate reports of continuing or unresolved data quality problems.
▶ Provide the catalyst for processes to address data quality findings

 DCFS will include CCWIS data from CWCA systems in its biennial data quality reviews, understanding that complete high-quality data collected and exchanged by all partners is critical to supporting the communication and collaboration necessary for coordinating services to children and families, assisting with monitoring activities, and producing accurate federal reports.

DCFS data quality reviews will determine:

▶ The quality of data produced and maintained in CHRIS
▶ The quality of data CHRIS receives via exchanges with CWCAs
▶ The current status of data maintained in CHRIS against the Data Quality Standard, including verification that:
  ▪ Data collection for all CCWIS critical data occur
  ▪ Identification of Non-CCWIS data
▶ Whether all CCWIS data retained in CHRIS:
  ▪ Is complete, timely and accurate
  ▪ Is consistently and uniformly collected
  ▪ Meets all applicable confidentiality requirements

- - Supports child welfare policies, goals and practices
  - Is not defaulted or inappropriately assigned
- ► Whether automated data quality processes satisfy the CCWIS requirements, including:
  - Regular monitoring of CCWIS data quality
  - Alerting staff to collect, update, correct and enter CCWIS data
  - Sending electronic requests to CWCAs to submit current and historical CCWIS data
  - Preventing duplicate data entry
  - Generating data quality reports
- ► Whether data exchanges in CHRIS satisfy the Data Exchange Standard by verifying that:
  - Exchange of relevant data occurs
  - CWCAs and external title IV-E systems follow the Data Exchange Standard when they exchange data with CHRIS

Biennial Reviews

Federal regulations in 45 CFR 1355.52(d)(3) require title IV-E agencies to conduct biennial data quality reviews.

DCFS will conduct biennial reviews per regulation. The purpose of the reviews is to ensure that the system maintains high quality data for the efficient, economical, and effective administration of the state's title IV-B and IV-E programs.

The reviews are critical to ensure that DCFS:

- ► Monitors and improves data,
- ► Uncovers the factors that negatively affect data quality
- ► Implements corrective measures as needed.

Data Quality Review Requirements

DCFS will ensure that data within CHRIS and the new CCWIS system:

- ► Meet the data quality requirements set in ACF's CCWIS rule.
- ► Is monitored regularly through automated reports according to the Data Quality Reporting Standard.
- ► Is reviewed according to the Data Quality Review Standard to assess its quality and current state against the Data Quality Standard.
- ► Is continuously improved, along with this policy and its underlying standards and supporting documents, according to the Data Quality Administration Standard.
- ► Is exchanged with other systems and defined with definitions and formats understood by all users under the Data Exchange Standard.

Addressing Findings

The approach to addressing findings will be developed in conjunction with the work that occurs to plan for Data Quality Reviews. Future DQPs will note how findings will be documented and addressed.

Results of data quality reviews will be evaluated for future improvements in the processes to ensure data quality, as well as for remediation of data quality issues.

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When data sets fall outside the tolerable limits as a result of quality reviews, DCFS plans to document them following an issue tracking process. As part of the tracking process, the evaluation and prioritization of data quality issues will occur as soon as discovered. Business impact analysis will take place and corrective actions identified to address the overall scope of work that DCFS faces.

The evaluation process, which includes an assessment of business impact, provides multiple options for addressing the finding, as follows:

► Accept the Error – If it falls within an acceptable standard (i.e. Main Street instead of Main St) DCFS can decide to accept it and move on to the next entry.

► Reject the Error – Sometimes, particularly with data imports, the information is so severely damaged or incorrect that it would be better to simply delete the entry altogether than try to correct it.

► Correct the Error – Misspellings of customer names are a common error that can easily be corrected. If there are variations on a name, one can be set as the "Master" and keep the data consolidated and correct across all the databases.

► Create a Default Value – If the value is unknown, it can be better to have something there (unknown or n/a) than nothing at all

Once the appropriate option has been determined, actions will be taken according to the option selected. Reporting of the findings and remediation efforts will take place.

6.4 Data Exchange Standards

DCFS and OIT are in the process of determining the Data Exchange Standard for CCWIS. The forthcoming data exchange standard will create common data definitions, data formats, data values and other guidelines that standardize the meaning of each data element in the applicable exchanges. DCFS supports the effort and continues to develop the standard as CCWIS moves forward.

Currently, CHRIS obtains data from external systems so that it can store and manage a copy, and it is the source for meeting all requirements for federal reports as well as other agency reports related to Child Welfare. DCFS staff uses CHRIS to collect CCWIS data; the Data Exchange Standard will provide the foundation to ensure data to populate CHRIS is collected from the source system, does not need to be re-entered, and is not duplicated.

Methods to monitor and ensure data quality for data exchanges

DCFS and OIT will conduct data quality reviews to determine if data exchanges, including those with the CWCAs, meet the CCWIS data quality requirements[7] and address CWCA-related review findings[8]. ACF may also include any CWCAs in CCWIS reviews[9].

CWCA data reviews
DCFS uses these techniques to review CCWIS data received from CWCAs:

[7] 45 CFR 1355.52(d)(3)(i). Title IV-E agencies are to design efficient, economical, and effective processes to review CWCA data, such as establishing a schedule of on-site reviews for a subset of CWCAs during each biennial review cycle. See 81 FR 35450 at 35460 for other suggested methods to consider for CWCA reviews.
[8] 45 CFR 1355.52(d)(4)
[9] 45 CFR 1355.52(d)(4)

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▶ Samples of records
▶ Automated reports
▶ Onsite reviews

6.5 Data Quality and Reports

DCFS and OIT are undertaking the development of the Data Quality Reporting Standards as part of the Data Quality Policy & Standards document. The reporting standards that DCFS will doccument address report runs to monitor the quality of CCWIS data in CHRIS. Future efforts will address standards for the new CCWIS system. In upcoming submissions, DCFS will provide both the Reporting standard and a quality reporting RACI Matrix for the Data Quality Reporting Standard.

Currently, however, DCFS and OIT have an extensive data quality reporting approach, as discussed in the following sections.

6.5.1 AFCARS Reports

The CHRIS staff team has regular communication with ACF related to AFCARS and NYTD.

DCFS Staff utilize the AFCARS Software Utilities found at https://www.acf.hhs.gov/cb/resource/afcars-software to assist in preparing and submitting AFCARS data files. When submitting the federal SACWIS reports, CHRIS staff and the program staff meet and discuss the accuracy of the data prior to submission.

DCFS Staff and OIT staff monitor the following CHRIS Net AFCARS Reports as well. These can be monitored throughout the period so they correct any issues early. A designated OIT team member also sends emails to the Area Directors at the beginning of the month with the AFCARS Adoption Error Counts and details for them to send to staff. The goal is to correct ALL AFCARS Adoption errors prior to submission and the team is working on accomplishing that sooner rather than later.

Exhibit 13: AFCARS Error Report Sample

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Exhibit 14: AFCARS Compliance Example
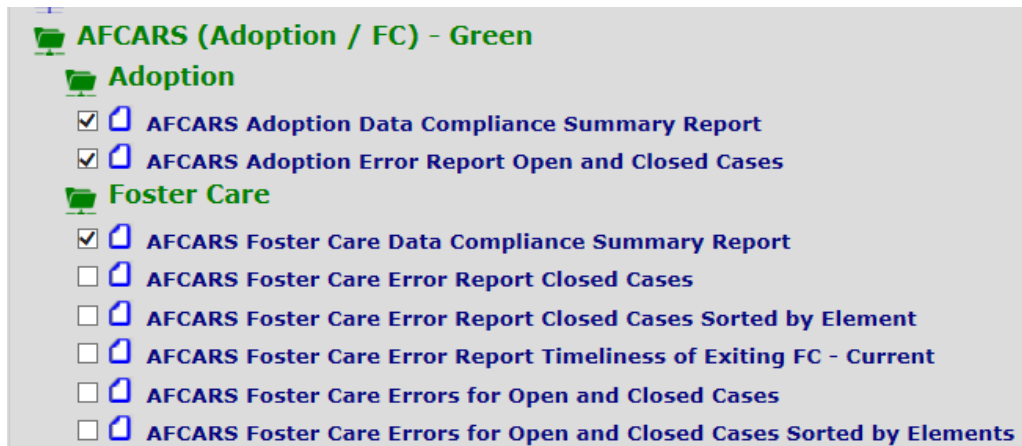
6.5.2 NYTD Reports

Before DCFS submits NYTD information to the ACF, they use the NYTD Data Review Utility called NDRU to check for errors and compliance and they work with field staff to correct any errors that can be corrected prior to submission. NDRU is a desktop application available to States for checking data file compliance and quality prior to transmitting files to the federal NYTD system,

DCFS Staff and OIT staff monitor the following CHRIS Net NYTD Reports to ensure services are documented for youth to be part of the NYTD 'Served' Population.

Exhibit 15: NYTD Reports

The first page of this report shows a summary of the Foster Care Children NYTD Services Received Counts including the Area, Transitional Services Received Count, Foster Care Count and Percentage. Starting on the second page, this report lists all foster care children age 14 through 21 in care 30 days or more during the NYTD reporting period and whether they have Received or Not Received a NYTD service. To show 'Received' for a Client, at least one of the following must be captured within the NYTD Reporting period selected in the drop down box above:

1. Completed Services that show on the Client's Independent Living (IL) Services Screen (Workload/Case/Services/IL/IL Services) based off the Case Contacts entered (must have one of the three Purposes: Transitional Service, Transitional Skills Class or Transitional Team Meeting).
2. The Client has an 'Independent Living Placement (ILP) (Sponsor)' or 'ILP (Residential)' placement.
3. The Client has a completed 'Life Skills Assessment Date' on the Independent Living Checklist screen (Workload/Case/Services/IL/IL Checklist).

The report is sorted by Area, Primary Assigned Worker County, Primary Worker, Case ID, and Client ID.

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DCFS also has the NYTD screen in CHRIS that staff can monitor and document Element #34-Outcome Reporting Status when 'Baseline' or 'Follow-up' Populations do not have the applicable NYTD Survey submitted.

6.5.3 NCANDS Reports

For NCANDS, DCFS and OIT use the NCANDS Website for the online validation process. This is a very secure process in that users must have a user name and password to access the site. Users with access are asked to provide the phone number to which they would like to receive a multifactor authentication (MFA) code. This is a federal security requirement for NCANDS. Each time they sign in, they will receive a code via text message that grants them access to the Website. If they would prefer, they can receive a phone call instead of a text message. The phone number they enter will not be used for any other purpose than to provide to the MFA code.

We correct any errors that can be corrected prior to submission.

6.5.4 Caseworker Visits

For Caseworker Visits, DCFS Staff and OIT staff monitor the following two "CHRIS Net Caseworker Visits with Foster Care Children" Reports.

<div align="center">Exhibit 16: Caseworkers Visits Reports</div>

Caseworker Visits With Foster Care Children Reports
☐ Caseworker Visits With Foster Care Children-Details By Month FFY 2019 Oct. 2018- …

The first report captures the requirements needed for the Federal Caseworker Visits Report. It gives an overview of the Caseworker Visits with Foster Care Children information by selected month. The report provides totals and percentages by Area, County and Primary Staff Name. This report can be used as a good monitoring tool for Staff to determine what foster care clients should receive a visit and have/have not been visited as per the Case Contact documentation. It is refreshed daily.

The report includes all children under age 18 who are considered to be in foster care for the full calendar month. The Area(s) and Month should be selected and then the 'View Report' button for the results to appear. To be considered as a Completed 'Regular Visit', the following criteria must be met in a Case Contact:

- ► Contact Date should be in the actual Calendar Month (1st-end) to determine if Visit was made.
- ► Type/Location: must be Any 'Face to Face' type.
- ► Status: 'Completed' must be selected.
- ► Participants pick list : The foster care child must be selected.

Only the Staff Positions (Contact Attempted/Completed By field) such as FSW, Supervisors, Area Manager are considered as a Caseworker Visit. DHS Program Assistant visits do not count.

- ► Reg. Visits Count (Regular Visits): The number of 'Face to Face' Visits that were completed as there is a Case Contact that meets the report criteria; Y will appear if met, N will appear if not met.

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- ► Home Visits Count: The number of Visits that were completed in the home as there is a Case Contact that meets the report criteria; Y will appear if met, N will appear if not met. If Home Visits is a Y, then Reg. Visits should be a Y
- ► Percentage of Completed Reg. Visits: The Percentage of Regular 'Face to Face' Visits that were completed. Percentages that are under 95% show in red because 95% is the performance standard for regular visits that is required by the feds or there could be a reduction in Federal Financial Participation

The second report captures the requirements needed for the Federal Caseworker Visits Report. It gives an overview of the Caseworker Visits with Foster Care Children information for the Federal Fiscal Year (FFY). Each Month (October-September) is listed with 'In Care'-Y means the Client was considered in care during the calendar month and could be visited; Reg. Visit-Y means a regular Face to Face Visit was completed during the month; Home Visit-Y means a Face to Face Home/Placement Provider visit was completed during the month. Total Months, Reg. Visits and Home Visits show in the last 3 columns. This gives a good overview of how many months the client was in care (visits could have taken place) and how many were completed (Reg. Visits) or how many were in the home (Home Visits). The report provides totals by Area, County and Primary Staff Name. The report includes all children under age 18 who are considered to be in foster care during the FFY. To be considered as a Completed 'Regular Visit', the following criteria must be met in a Case Contact:

- ► Contact Date should be in the actual Calendar Month (1st-end) to determine if Visit was made.
- ► Type/Location: must be Any 'Face to Face' type for Regular.
- ► Status: 'Completed' must be selected.
- ► Participants pick list : The foster care child must be selected.

Only the Staff Positions (Contact Attempted/Completed By field) such as FSW, Supervisors, Area Manager are considered as a Caseworker Visit. DHS Program Assistant visits do not count.

6.5.5 CCWIS Quality Audit Reports

Reporting and monitoring are the crux of data quality management Return on Investment (ROI), as they provide visibility into the state of data at any moment in real time.

Within CHRIS three areas of reporting that impact data quality take place using worksheets, .net reports, and COR. The report types both address policy or data quality by representing monthly charts down to county level detail.

Evaluation and Technical Assistance Reports and Projects

The Division's data and evaluation reports are largely built around the three core goals of child welfare—child safety, permanency, and well-being—while also considering and accounting for other factors that might support or even impede these goals, such as data quality. Reports generally track performance over time, as well as compare performance to the agency's goals, federally established standards, and/or national averages when applicable.

DCFS utilizes its data in its efforts to report on performance and best practice. The following list of reports and projects (and accompanying descriptions) account for the major quality assurance activities undertaken in Arkansas during SFY 2019:

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► Monthly Progress Charts/Profiles – Each month DCFS reviews various performance data indicators over a rolling 12-month period on a statewide, Area-wide, and county-specific basis. These indicators range from the percentage of children in care who are placed in relative placements to the percentage of required visits made to see children in care and in-home families. These charts are made available and disseminated to all agency staff.

► Compliance Outcome Report (COR) – The COR represents a monthly report that assesses the performance of DCFS caseworkers in divisional and regional areas. Specifically, the COR measures 35 indicators that represent standard casework or case-related activities, many of which must comply with state regulatory requirements.

► SafeMeasures® – During SFY 2019 DCFS began its implementation of SafeMeasures. See Section 6.2.1 for more information regarding this service.

► Quarterly Performance Report (QPR) – The QPR is a statistical report created for legislative committees who provide oversight over the services DCFS offers and delivers to youth and their families. The report is completed quarterly for the state fiscal year.

► Annual Report Card (ARC) – The ARC is a statistical report that is also created for legislative committees providing oversight over the services that DCFS offers and delivers to youth and their families. The ARC is reported for each state fiscal year and is structured similar to the QPR. The report details the Division's performance on several key performance indicators, displays the demographics of the population served by the agency, and documents any observable trends over time.

► Workload Reports – DCFS tracks the responsibilities of its workforce on a monthly basis. The workload reports allow the agency to track both the number and types (e.g., foster care, in-home protective services, investigation, DR) of cases assigned to each worker, county, or Area.

► Differential Response (DR) Reports – On a monthly basis, DCFS closely examines data regarding its DR program. The agency relies on these reports both on a micro level (i.e., ensuring quality practice and decision-making within individual cases) as well as on a macro level (i.e., steering programmatic decisions).

► Adoption Reports – On a monthly basis, DCFS closely examines the children whose adoptions have been finalized. This report offered detailed information on all finalized adoptions for the reporting month, which the agency utilizes to help improve its processes regarding this permanency option.

► Juvenile Offender Reports – On a monthly basis, DCFS closely examines any true report of child maltreatment that identifies an offender between 14 and 17 years of age. These reports display detailed information on these underage offenders, and the agency utilizes this information to examine whether there are ways that these investigations can be improved or better managed.

► Foster Home Approval Report – On a monthly basis, DCFS closely examines the foster family homes who were approved during the month. Aside from identifying those foster family homes, the report details additional information, including which homes were initially assigned to or approved by central office, average days from central office assignment to first field assignment, average days from first field assignment to final approval, and average days form earliest assignment to approval. The agency utilizes this information to improve its processes so that it can expedite the approval of and improve service to new foster homes.

► Child Welfare Data Report – Three times per week, DCFS emails an updated data report which displays (1) the number of children currently in foster care, (2) the placement settings of those children, (3) whether the children are placed in or outside of their home county, and (4) the number of foster homes that are currently approved. This report was developed to improve transparency and access to continuously updated data for DHS administration, DCFS leadership, and DCFS field staff.

► Child and Adolescent Needs and Strengths (CANS)/Family Advocacy and Support Tool (FAST) Unit Reviews – DCFS' Quality Assurance Unit works closely with the CANS/FAST Unit to develop a process that assists the CANS/FAST Unit in its efforts to conduct qualitative reviews of recently completed CANS/FAST functional assessments. This process includes producing a monthly report which helps the CANS/FAST Unit in identifying a sample of appropriate cases for potential review. Enhancements to this process are made on an as needed basis.

► Family Preservation Services Evaluation – DCFS conducts this evaluation on an annual basis. This report focuses on the agency's performance with respect to the children and families it serves as well as the impact that services have on these clients. In part, it does this by closely replicating many of the currently recognized federal measures. Additionally, it measures DCFS' progress and overall transition over the three most recently completed calendar years (2016, 2017, 2018) at both the state, area, and county levels. Because this report places a strong emphasis on performance at the area and county level, DCFS leadership is able to better identify where performance is strong and where improvement might be needed.

► Summary of Garrett's Law Referrals – On an annual basis, DCFS completes an analysis of Garrett's Law referrals received during the most recently completed state fiscal year. Garrett's Law refers to a bill enacted in 2005 that addresses situations in which a mother gives birth to a child, and either the mother or the newborn is found to have an illegal substance in his or her system. According to the law, the presence of an illegal substance in either the mother or newborn is sufficient to substantiate an allegation of neglect. The most recently completed Garrett's Law Summary presented information on the Garrett's Law referrals received from SFY 2015 through SFY 2018. This report displays information regarding the number of Garrett's Law referrals received annually; the types of drugs cited in these referrals; how DCFS responds to Garrett's Law referrals; and whether the parents involved in these referrals receive any type of treatment.

► Ad Hoc Reports – On an ad hoc basis, DCFS examines data related to its various programs and policies to assess its own performance and understand the population of children and families served by its programs and policies. The Division also shares information to external stakeholders in an effort to improve communication and transparency. Approximately 300 ad hoc reports are completed in a given year.

In addition to the above, OIT and DCFS utilize the reports shown in Exhibit 17 to supplement data quality audits. A comprehensive list of all of these reports can be found in Appendix F.

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Exhibit 17: Additional DCFS Data Quality Reports

Name	Brief Description	Audience	Frequency
Foster Home Bed-to-Foster Child Ratio & Arkansas Creating Connections for Children (ARCCC) Ad Hoc Reports	Series of data reports detailing demographic data of children in foster care, demographic data on foster families, and foster home bed-to-foster child ratio.	ARCCC Program Manager, DCFS Executive Staff	Monthly
"Lean Six Sigma" Report	Monitors the length of time it takes from inquiry until a foster family receives approval.	ARCCC Program Manager	Monthly
Private Agency Foster Family Homes Tracking	Displays the number of foster family homes recruited by each private agency as of the 1st day of each month.	DCFS Foster Care Manager, DCFS Executive Staff	Monthly
Overturned Investigations Report	Legislatively mandated report that details information on the number of true reports that were appealed and ultimately overturned.	Legislature, DCFS Policy Manager, DCFS Executive Staff	Semi-Annual

6.6 Data Quality Administration

DCFS defines the types of administrative activities DCFS staff, vendors or contractors carry out to support the quality of CCWIS data in CHRIS.

DCFS will perform the following administrative activities:

- ► Maintaining the DCFS DQP and updating the Data Quality Policy and Standards as needed
- ► Updating procedures and other documentation that support the policy
- ► Creating, maintaining and retaining records of data quality activities so they're available when needed by users, DCFS leadership, state officials or external reviewers or auditors
- ► Reporting the status of data quality in relation to DCFS standards in annual OAPB sent to ACF's Children's Bureau (CB)
- ► Setting data quality improvement goals and reporting progress toward them in OAPDs
- ► Reporting status of data quality-related activities to DCFS leadership, providing input for data quality metrics and setting data quality improvement goals
- ► Creating, storing, and organizing all CCWIS data quality-related documents and recording and retaining them according to the details in the standard.

The annual OAPD provides regulatory compliance with this standard; DCFS will deliver the OAPD to ACF that contains:

- ► A current DQP

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- ► The status of CCWIS data in CHRIS in terms of the DCFS Data Quality Standard, as reflected in metrics reports
- ► A report of progress toward continuous improvement goals and any updates to those goals or metrics
- ► The latest versions of the DCFS Data Quality Policy and data quality standards
- ► The status of CCWIS development, maintenance, and operations: including completed activities, plans for the next reporting period, and any scope or schedule changes

6.6.1 Data Quality Metrics

Although it is not possible to obtain perfect data, DCFS understands that the quality of data can be improved by measuring certain characteristics, including accuracy, timeliness, uniqueness, validity, consistency, and completeness. A description of these characteristics can be found in Appendix E.

As discussed in Section 6.2.1, Deloitte has developed dashboards for public consumption, and continues to develop additional public dashboards. As part of the dashboard development process, metrics are also under development.

Currently, the following data quality standards have been developed for three of the characteristics, completeness, timeliness, and accuracy. Many of these metrics will be monitored utilizing the O&M and SafeMeasures dashboards currently under development (see Section 6.2.1):

- ► Completeness:
  - ■ Unitnitiated and unapproved investigations: Metrics to show uninitated and unapproved investigations. (O&M Dashboards)
    - ◆ There are three categories for both Priority 1 and Priority 2 Investigations: Pending Family Service Worker (FSW) Initiations, Pending FSW Request and Pending Supervisor Approval.
      - • Pending FSW Initiations: These are Investigations that do not have an applicable Alleged Victim Interview documented for all Alleged Victims In the Referral
      - • Pending FSW Request: These are Investigations with an applicable Alleged Victim Interview documented for all Alleged Victims, and Supervisor approval of the Interviews has not been requested
      - • Pending Supervisor Approval: These are Investigations with an applicable Alleged Victim Interview documented for all the Alleged Victims, approval of the Interviews has been requested, and the Supervisor's approval is pending
  - ■ Status of DRs: Metrics to show unititiated and unapproved DRs is monitored to visualize the status of the Pending DRs. (O&M Dashboards)
    - ◆ There are two categories: Pending FSW Initiations and Pending Supervisor Approval.
    - ◆ Pending FSW Initiations: These are DRs without an Initiation Contact entered with all the Alleged Victims and at least one person responsible for the child's health, safety, or welfare (PRFC)
    - ◆ Pending Supervisor Approval: These are DRs with an Initiation Contact entered that is pending Supervisor Review

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- Legacy data conversion: The implementation vendor will be required to ensure that all legacy data has been converted in the new system completely and accurately. (This requirement has been included in the RFP.)

- ► Timeliness:
  - Pending Initiations metric: Caseworkers have less than or equal to 24 hours for Priority 1 Investigations and 72 hours for Priority 2 Investigations for documenting referrals based on the time difference between the Dashboard data refresh date and the Referral Date. (SafeMeasures)
  - Interviews: For a Priority 1 Investigation the Worker has 24 hours to interview the Alleged Victim and 48 hours to document the results for a total of 72 hours. And for a Priority 2 Investigation the Worker has 72 hours to interview the Alleged Victim and 48 hours to document for a total of 120 hours. (SafeMeasures)
  - Audit tracking in the new system: Records in the new system are time-stamped for audit purposes. (This requirement has been included and expanded upon in the RFP.)

- ► Accuracy:
  - Automation in the new system: Ensure data is not inappropriately defaulted with common values (included in the RFP)
  - Data conversion: Confirm that data is mapped correctly for data exchanges and data conversion (included in the RFP)
  - CWCA: Ensure that data quality requirements are included in CWCA contracts

Additional Data Quality Metrics will be developed and included in the Data Quality Policy & Standards document. As the DCFS DGC matures, they will review the Data Quality Metrics and work with DCFS to set tolerance levels for each, creating the data quality measures important to the plan. Tolerance levels within characteristics may vary depending on the specific data element being measured.

6.6.2 Continuous Quality Improvement (CQI)

DCFS is committed to building and maintaining data quality through development of a CQI initiative. We understand that CQI is the process of identifying, describing, and analyzing the data, and then testing, implementing, learning from, and revising our approach to data quality management. We believe the foundational components of CQI include leadership, policy, practice, and training that must align to a communicated vision that is clearly understood by all staff. The following sections outline our preferred approach to CQI, which will be developed as part of the Data Quality Policy & Standards and subsequently reviewed, updated, and implemented by the CDO.

Approach to CQI

A continuous data quality improvement process facilitates the ability of DCFS to achieve statistically valid and reliable data. It sets expectations for both the CWCAs and the end users to capture reliable and valid data in the Child Welfare system.

The DCFS approach to CQI follows the general areas of best practices.

- ► Identify and ensure that the system collects the required structured CCWIS data to support DCFS business practices and required state and federal reporting
- ► Determine the critical data elements and establish the current data quality baseline

▶ Ensure that contracts and agreements with CWCAs include data quality standards

Establish targets and benchmarks

▶ Determine the methods to assess data quality (See Section 6.6.1 Data Quality Metrics)
▶ Conduct data quality activities
▶ Measure and report the results
▶ Determine whether corrective action is needed
▶ Execute corrective action
▶ Report results to Leadership
▶ Update the baseline, targets, and methods as needed for improvement; return to conducting data quality activities according to the updates

The CQI process is illustrated in Exhibit 18 below.

Exhibit 18: CCWIS Data Quality (DQ) Continuous Improvement Cycle.
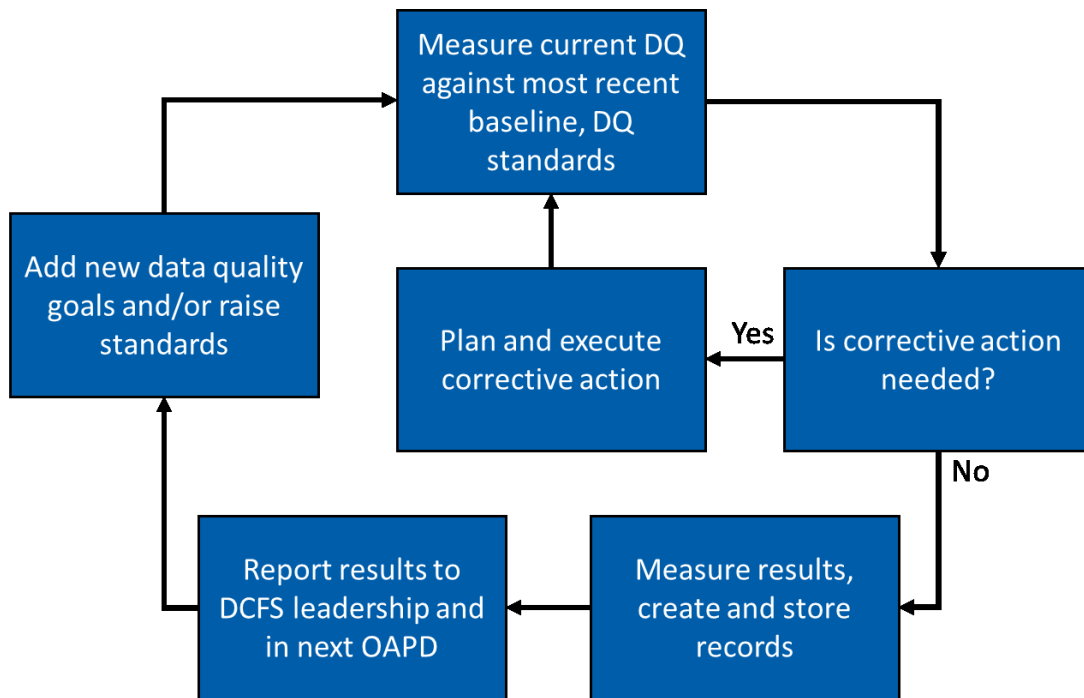
7. Attachments

The following documents are attachments to this plan.

▶ Arkansas General Records Retention Schedule issued August 2006.pdf
▶ DHS Data Security Standard
▶ AR Data Asset Inventory_DCFS_082918.xlsx

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Appendix A. **Acronyms**

Acronym	Definition
ACA	**Affordable Care Act** is the comprehensive health care reform law enacted in March 2010 (sometimes known as ACA, PPACA, or "Obamacare"). ACA has three primary goals: Make affordable health insurance available to more people.
ACF	**Administration for Children and Family** is the federal agency that's part of Health and Human Services, which in turn is responsible for the Children's Bureau. ACF is responsible for the CCWIS rule and is the recipient of annual operational advance planning documents about the CHRIS project from DCFS.
AFCARS	**Adoption and Foster Care Analysis and Reporting System**. A federal system that collects standardized data from DHS called an AFCARS report, twice annually.
APD	**Advance Planning Document**. A document or record submitted annually to ACF to report project status and other information, request funding or continuation of funding and describe changes to projects. It is used to notify ACF of the options agencies to choose considering the CCWIS rule and includes a DQP in the first CCWIS operational APD (OAPD).
API	**Application Programming Interface**
APSR	The **Annual Progress and Services Reports** are required by federal law to be filed annually with the Federal Administration for Children and Families.
ARC	**Annual Report Card**
ARCCC	**Arkansas Creating Connections for Children**
CANS	The **Child and Adolescent Needs and Strengths** is a multi-purpose tool developed for children's services to support decision making, including the level of care and service planning, to facilitate quality improvement initiatives, and to allow for the monitoring of outcomes of services.
CB	**Children's Bureau**
CCWIS	**Comprehensive Child Welfare Information System**. Used to describe child welfare systems operated by IV-E agencies such as DHS and a federal rule that defines requirements for such systems.
CDO	A **Chief Data Officer** is a corporate officer responsible for enterprise-wide governance and utilization of information as an asset, via data processing, analysis, data mining, information trading, and other means.
CFR	The **Code of Federal Regulations** is the codification of the general and permanent rules and regulations (sometimes called administrative law) published in the Federal Register by the executive departments and agencies of the federal government of the United States.
CFSP	The **Child and Family Services Plan** is a strategic plan that sets forth a state's or tribe's vision and goals to strengthen its child welfare system.
CFSR	Children's Bureau conducts the **Child & Family Services Reviews**, which are periodic reviews of state child welfare systems
CHRIS	Children's Reporting Information System. Arkansas's child welfare information system operated by DHS.
CIO	**Chief Information Officer**, chief digital information officer or information technology director, is a job title commonly given to the most senior executive in an enterprise who works for the traditional information technology and computer systems that support enterprise goals.

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CMS	The **Centers for Medicare & Medicaid Services**, previously known as the Health Care Financing Administration (HCFA), is a federal agency within the United States Department of Health and Human Services (HHS) that administers the Medicare program and works in partnership with state governments to administer Medicaid, the Children's Health Insurance Program (CHIP), and health insurance portability standards.
COR	**Compliance Outcome Reports**
CQI	**Continuous Quality Improvement** is an approach to quality management that builds upon traditional quality assurance methods. It focuses on "process" rather than the individual, recognizes both internal and external "clients" and promotes the need for objective data to analyze and improve processes.
CWCA	**Child welfare contributing agency** means a public or private entity that, by contract or agreement with the title IV-E agency, provides child abuse and neglect investigations, placement, or child welfare case management (or any combination of these) to children and families. 45 CFR § 1355.51(a)
DCFS	**Division of Children and Family Services**. A division of Arkansas DHS with direct responsibility for CHRIS.
DGC	**Data Governance Council**
DHS	The Arkansas **Department of Human Services** is an Arkansas state agency is in charge of maintaining social services for Arkansas by assisting families and monitoring/inspecting health facilities.
DQA	**Data Quality Analyst**
DQP	A D**ata Quality Plan** is a community-level document that assists in achieving statistically valid and reliable data. The plan sets expectations for both the community and the end users to capture accurate and dependable data on persons accessing the homeless assistance system.
DR	**Differential Response**
ETL	**Extract Transform & Load**
FAST	**Family Advocacy and Support Tool**
FFY	**Federal Fiscal Year**
FSW	**Family Service Worker**
ICWA	**Indian Child Welfare Act**
IL	**Independent Living**
ILP	**Independent Living Placement**
MARS-E	**Minimum Acceptable Risk Standards for Exchanges**, guidance suite, addresses the mandates of the Patient Protection and Affordable Care Act of 2010 and applies to all ACA Administering Entities, Children's Health Insurance Program (CHIP) agencies, or state agencies administering the Basic Health Program.
MFA	**Multifactor Authentication**
MMIS	The **Medicaid Management Information System i**s an integrated group of procedures and computer processing operations (subsystems) developed at the general design level to meet principal objectives.
MOU	A **Memorandum of Understanding** is a formal agreement between two or more parties. Companies and organizations can use MOUs to establish these partnership understandings.
NCANDS	**National Child Abuse and Neglect Data System i**s a voluntary data collection system that gathers reports of child abuse, neglect and sex trafficking in a standardized NCANDS report. DHS produces an annual NCANDS report.

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NIST	The **National Institute of Standards and Technology** is a physical sciences laboratory and a non-regulatory agency of the United States Department of Commerce.
NYTD	**National Youth in Transition Database** is a federal system that collects standardized data from DHS, called NYTD reports, twice annually.
OAPD	**Operational Advance Planning Document** is a version of an annual APD submitted for systems that are operating and not in development.
OIT	Arkansas **Office of Health Information Technology** is responsible for establishing the State Health Alliance for Records Exchange (SHARE), the statewide interoperable health information exchange, and for coordinating health information technology activities throughout the state.
PIP	**Performance Improvement Plan**
PRFC	**Person responsible for the child's health, safety, or welfare**
QPR	**Quarterly Performance Report**
RACI	**Responsible, Accountable, Consulted, and Informed**.is an acronym derived for the four critical responsibilities in a responsibility assignment matrix.
ROI	**Return on Investment**
SACWIS	**Statewide Automated Child Welfare Information System** is a federally funded, voluntary, comprehensive, and automated case management tool that supported child welfare practice in states.
TACWIS	**Tribal Automated Child Welfare Information System** is a federally funded, voluntary, comprehensive, and automated case management tool that supported child welfare practice in tribes.
SFY	**State Fiscal Year**

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Appendix B.   Definitions

Data Consumer – an employee or agent of the university who accesses university data in the performance of their assigned duties. A data consumer is expected to be familiar with and abide by all data governance and data security policies and procedures.

Data Dictionary – is a set of information describing and defining the contents, format, and structure of a database and the relationship among its elements.

Data Element – any defined unit of data.

Data Governance – encompasses the people, processes, and technology required to create consistent and proper handling of data and understanding of information across the organization, ignoring the boundaries established by organizational structures.

Data Governance Program – is the framework to manage university data effectively, efficiently, and ethically in support of the university's mission.

Data Steward – an individual responsible for planning, implementing, and managing the sourcing, use, documentation, and maintenance of data assets in an organization.

Data Stewardship – the management and protection of an organization's data assets that results in high-quality data that are easily accessible and reportable.

Functional Area – a department that represents and serves a particular sub-set of university data.

Metadata – describes how and when a set of data was collected and how the data are formatted, necessary for understanding how data are stored in data warehouses.

Stakeholder – an employee who affects, or would be affected by, data policy or procedural change. A stakeholder requests data and initiates a request for modifications to CCWIS data and identifies problems with university data that are impeding normal daily operations. He or she provides input or feedback that assists with the process of satisfying any change request.

Subject Matter Expert – any employee with extensive knowledge of given functional, technical, reporting, or security-related data issues.

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Appendix C.   CCWIS Data Quality Standards

To satisfy the CCWIS Data Quality Standards, CCWIS data must:

- ► Meet the most rigorous of the applicable federal or state standards for completeness, timeliness and accuracy. For example, if DCFS were set a completion rate standard for AFCARS data that is higher than the federal 90% rate, CCWIS AFCARS data must meet the higher standard.
- ► Be complete, which means:
  - ▪ All required data has been captured
  - ▪ All data needed to make a decision or take an action is available
  - ▪ A complete picture of a person or event is provided
  - ▪ All data needed for critical business needs is available

NOTE: The standard for completeness doesn't necessarily mean that every field on every screen must contain data. For example, only ICWA data may be required for Native American children, or certain data may not yet be required due to a deadline that hasn't yet occurred.

- ► Be timely, which means data has been entered and/or time-stamped within expected timeframes, such as:
  - ▪ Data entered within 24 hours of a child's placement
  - ▪ Case plan goals documented within 60 days of a child's removal
  - ▪ Child abuse and neglect reports provided to investigators within a set number of hours
- ► Accurately describe an event or observation in an objective, clear and unambiguous way, in terms understood by all stakeholders.
- ► Be collected consistently and uniformly, which means:
  - ▪ All staff must understand the data definitions and have a common understanding of clients and cases based on the data
  - ▪ Different data collection procedures must not result in differing or duplicate data
- ► Exchanged and maintained according to confidentiality agreements, employing techniques such as:
  - ▪ Signed confidentiality agreements
  - ▪ Encrypting techniques
  - ▪ Controlled access to data
  - ▪ Specified sharing with other systems or partners
  - ▪ Scheduled archiving and purging of data
- ► Be relevant to the program and support child welfare policies, goals and practices
- ► Not be defaulted or inappropriately assigned. For example, CHRIS should not prefill fields with common values or automatically choose an entry in a pick list if a staff member does not.
- ► In compliance with federal data compliance guidelines for each required federal report.

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Appendix D.   CCWIS Data Categories

The Bureau defines CCWIS data by categories rather than prescribing specific data elements, so each agency can determine which data meets its particular needs. Data in the following categories are defined, with likely overlaps:

- ▶ Title IV–B and title IV–E data that supports the efficient, effective, and economical administration of the programs
- ▶ Data to support state child welfare laws, regulations, policies, practices, reporting requirements, audits, program evaluations, and reviews
- ▶ Data to support specific measures taken to comply with the requirements in section 422(b)(9) of the Act regarding the state's compliance with the Indian Child Welfare Act
- ▶ Data for the NCANDS report
- ▶ Ongoing federal reports such as AFCARS and NYTD, monthly caseworker visits, the CB-496 financial report and case management data.
- ▶ Federal expenditures, such as title IV-E eligibility determinations and title IV-B and IV-E service authorizations and expenditures. Examples include data from:
  - ▪ Court findings
  - ▪ Placements, licensing information and background checks
  - ▪ Title IV-E financial eligibility and rules
  - ▪ Service authorizations, approvals and delivery
  - ▪ Payment status and allocation
- ▶ Federal laws, regulations and policies, such as information on:
  - ▪ Sex trafficking victims
  - ▪ Missing or abducted children
- ▶ Case management, such as data needed for federal audits, reviews and monitoring, Child and Family Services Reviews (CFSRs) and title IV-E reviews.

Examples of this required data include:

- ▶ Court data, such as dates of decisions, court-ordered or voluntary removal and "contrary to welfare" determinations
- ▶ Placement data, such as placement dates and types, criminal record checks and placement license status
- ▶ Date used to determine eligibility according to AFDC 1996 rules, such as removal from specified relative, financial need or deprivation of parental support
- ▶ Financial data, such as history of provider statements, payment dates and placement dates

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Appendix E.   Characteristics of Data Quality Metrics

Accuracy

Accuracy determines whether the information held is correct or not, and isn't to be confused with validity, a measure of whether the data is actually the type that was wanted.

Timeliness

How recent is the data? Did the data enter the system as quickly as possible, preferably at the client site? This essential criteria assesses how useful or relevant the data may be based on its age.

Uniqueness

This metric assesses how unique a data entry is, and whether it is duplicated anywhere else within your database. Uniqueness is ensured when the piece of data has only been recorded once. If there is no single view, it may need to be deduped.

Validity

Does the data reflect what the type of data that was meant to be recorded? So if you ask for somebody to enter their phone number into a form, and they type 'sjdhsjdshsj', that data isn't valid, because it isn't a phone number - the data doesn't match the description of the type of data it should be.

Consistency

Consistency is a fundamental consideration that ensures that data can be compared across data sets and media - is it all recorded in the same way, allowing comparisons by treating it as a whole?

Completeness

Completeness is defined as how much of a data set is populated, as opposed to being left blank. For instance, a survey would be 70% complete if it is completed by 70% of people. To ensure completeness, all data sets and data items must be recorded.

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Appendix F.   SFY 2019 DCFS Data Quality Audit Report List

Name	Brief Description	Audience	Frequency
QPR (Quarterly Performance Report)	Comprehensive report with descriptive, compliance, and performance-related measures.	Legislature, DCFS Executive Staff	Quarterly
ARC (Annual Report Card)	Comprehensive report with descriptive, compliance, and performance-related measures.	Legislature, DCFS Executive Staff	Annually
COR (Compliance Outcome Reports)	Monthly report that measures performance and compliance on 34 data indicators on a statewide, Area-wide, and county-specific basis.	All DCFS	Monthly
Workload Report	Monthly report that monitors caseload of all staff as well as averages on a statewide, Area-wide, and county-specific basis.	All DCFS	Monthly
Garrett's Law Report	Consists of (1) a spreadsheet that contains legislatively mandated information for all Garrett's Law referrals received during the SFY as well as (2) a summary of that information, comparing data to that of previous years.	Legislature, DCFS Executive Staff	Annually
DR Monthly Data Report	Monthly report that provides both descriptive and compliance information for all DR reports that closed during the month.	DR Program Manager, DCFS Executive Staff	Monthly
Finalized Adoptions Report	Monthly report that provides basic descriptive information on all children whose adoptions were finalized during the prior month.	DCFS Adoptions Program Manager, DCFS Executive Staff	Monthly
Juvenile Offender Report	Monthly report that provides basic descriptive information on all juvenile offenders ages 14 to 17 who were involved in a true report of child	DCFS Program Administrator, DCFS Executive Staff	Monthly

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	maltreatment during the prior month.		
Child Welfare Data Report	Three times per week (Monday, Wednesday, Friday) a report is emailed out that contains the most up-to-date counts of children in foster care, placement breakdown of those children, whether those children are placed within or outside of their home county, and the number of foster homes.	DCFS Executive Staff, DHS Director's Office, DCFS Program Managers, DCFS Area Directors	3x / week
Foster Home Bed-to-Foster Child Ratio & ARCCC Ad Hoc Reports	Series of data reports detailing demographic data of children in foster care, demographic data on foster families, and foster home bed-to-foster child ratio.	ARCCC Program Manager, DCFS Executive Staff	Monthly
"Lean Six Sigma" Report	Monitors the length of time it takes from inquiry until a foster family receives approval.	ARCCC Program Manager	Monthly
CANS Unit Review Samples	Provides the CANS/FAST Unit with list of case plans completed during the month for possible qualitative review.	CANS/FAST Program Manager	Weekly
Private Agency Foster Family Homes Tracking	Displays the number of foster family homes recruited by each private agency as of the 1st day of each month.	DCFS Foster Care Manager, DCFS Executive Staff	Monthly
State, Area, and County Profiles ("DCFS Monthly Charts")	Displays descriptive and performance data at the statewide, Area-wide, and county-specific levels.	DCFS All, DHS Director's Office, Media (occasionally)	Monthly
Overturned Investigations Report	Legislatively mandated report that details information on the number of true reports that	Legislature, DCFS Policy Manager, DCFS Executive Staff	Semi-Annual

Name	Brief Description	Audience	Frequency
	were appealed and ultimately overturned.		
Family Preservation Services (FPS)	Legislatively mandated report that highlights trends over the past three years.	Legislature, DCFS Executive Staff	Annual