CHRIS

California Historical Resources Information System

Maintenance and Operations Action Plan for Phases One and Two of the Modernization and Sustainability Plan

For the period November 1, 2013, through April 30, 2015

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Introduction

About this Plan

This Action Plan is intended to guide the activities of the California Historical Resources Information System (CHRIS) in meeting the goals and objectives of the CHRIS Modernization and Sustainability Plan over an 18-month period, beginning November 1, 2013, and ending April 30, 2015.

The vision identified in the Modernization and Sustainability Plan is as follows:

To enhance historic preservation efforts throughout California, the CHRIS will maintain a single comprehensive statewide electronic inventory of historical resources and provide information to clients and the public rapidly, consistently, and cost-effectively. This integrated database will also enable the CHRIS to enhance its education and outreach efforts.

The goal of this Action Plan, then, is to substantially move the CHRIS in the direction of realizing this vision by carrying out certain specific tasks before or by April 30, 2015. The focus of the CHRIS' efforts during this time period will be on accelerating CHRIS Inventory data conversion as part of maintenance and operations activities, thereby achieving a digitized statewide inventory by completing Phases 1 and 2 as identified in the CHRIS Modernization and Sustainability Plan, and as restated below.

PHASE ONE. The Office of Historic Preservation (OHP) and the Information Centers (ICs) are digitizing all of the resource records that are the core of the statewide inventory. The process includes:

- Scanning each resource record, converting it to electronic format (PDF).
- Entering information regarding the content and characteristics of each resource into the CHRIS Database.
- Entering the resource into GIS as a digital shape.

PHASE TWO. Research reports typically cover a larger geographic area than a resource record, and may address numerous resources within that area. Thus, it requires significantly more time to enter the information contained in a single report than that contained in a resource record. Therefore, this process will be completed as a second phase, although the two phases will overlap in time. The process includes:

- Entering the report bibliographic information into the CHRIS Database.
- Entering the report area or areas into the CHRIS GIS.

By the end of the time period for this Action Plan—April 30, 2015—users of the CHRIS can expect to see the following changes throughout the entire state and at every Information Center:

- Ability to submit records search requests electronically via the Internet;
- Ability to receive all resource records and associated data electronically;
- Ability to receive all research report data electronically and to have research reports scanned into PDF format upon request;
- Ability to purchase subscriptions to CHRIS data by area (i.e., receive data for an area of interest at periodic intervals);
- Ability to electronically submit resource and research report information for incorporation into the CHRIS;
- Consistent records search format and content from all Information Centers.

Additional changes that will be put in place during this time period include:

- Managing the CHRIS data as a single inventory;
- Implementing consistent standards for all CHRIS data;
- Analyzing the CHRIS organizational structure and determining the most effective and efficient approach to meeting the CHRIS mission.

To view the full CHRIS Modernization and Sustainability Plan, visit http://www.ohp.parks.ca.gov/pages/1054/files/chris_mandsplan_august2013.pdf.

Action Plan Tasks

Tasks Overview

This plan consists of eight separate, but related, tasks. Each task has its own timeline and deadline, and these timelines will overlap in some cases. The following pages contain more detail about each task identified below. The summaries on this page are intended to help readers understand the timeline for these tasks.

Task 1: Implement digitization standards.

Task 2: Develop and implement digital operations standards.

Task 3: Conduct a detailed inventory assessment of digitization work to be completed.

Task 4: Determine the most efficient and effective methodology for digitization.

Task 5: Analyze CHRIS organization and structure and recommend changes.

Task 6: Secure the needed funding to complete the Action Plan tasks.

Task 7: Complete Phases 1 and 2 of CHRIS inventory digitization.

Task 8: Assess achievement of CHRIS Modernization and Sustainability Plan to date, work remaining to be done, and lessons learned.

Timeline for Task Completion

Mo/Yr	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8
11/13	▓	▓	▓	▓	▓			
12/13	▓	▓	▓	▓	▓			
01/14	▓	▓	▓	▓	▓			
02/14	▓	▓	▓	▓	▓	▓	▓	
03/14			▓	▓	▓	▓	▓	
04/14					▓	▓	▓	
05/14					▓	▓	▓	
06/14					▓	▓	▓	
07/14					▓	▓	▓	
08/14					▓	▓	▓	
09/14					▓	▓	▓	
10/14					▓	▓	▓	
11/14						▓	▓	
12/14						▓	▓	
01/15							▓	
02/15							▓	▓
03/15							▓	▓
04/15							▓	▓

Task 1: Digitization Standards

The CHRIS Inventory consists of historical resource records and research report information that has been copied or derived from information submitted to the CHRIS. In order to *digitize* the CHRIS Inventory in a manner that results in consistent, complete, and high-quality digital information, standards for the data format, data content, and digitization process must be applied consistently throughout the system.

Prior to release of this plan, four sets of digital standards were developed by the OHP and the ICs. These standards are contained in Appendix A of this plan. The standards address the following types of information or processes:

1. GIS Feature Class definitions: Definitions of the basic resource and report spatial data categories that are to be used to organize GIS portion of the CHRIS Database.

2. Database and GIS attribute format and content (both for resources and research report data): The database structure and content standards that will be applied to the detailed information about historical resources and study reports.

3. Metadata: Information the nature and content of the CHRIS Database, to facilitate informed, appropriate, and efficient searches and uses of the data.

4. Data creation and verification process: Procedures and protocols to be applied during digitization, to assure the quality and completeness of the resulting data.

Now that these standards have been developed, they need to be implemented at all the ICs and the OHP. This will require development of a standards-based IC inventory management application, which is being produced by the Northwest IC. Our goal is to have the standards-based application finalized by the task completion date.

Task Completion Date: February 28, 2014

Task 2: Digital Operations Standards

In addition to the digitization standards addressed in Task 1, this plan also requires development and implementation of certain digital operations standards, based on current IC operations and on systems used by other agencies, organizations, and states. The following standards will be developed by the CHRIS, in conformance with State policy and guidelines, by the task completion date:

1. CHRIS data submittal format and content: A set of standards to be used by any entity submitting digital data to the ICs and the OHP, to facilitate efficient and consistent processing.

2. CHRIS data products: A set of digital and hard copy options from which CHRIS users can choose to meet their needs, regardless of where in the CHRIS they are getting the products.

3. Application of CHRIS fees: A clear set of standards for a how user fees will be applied for CHRIS data products and related services.

4. Processing and assignment of IDs, application of rules: A set of rules and protocols to be applied consistently across the CHRIS when processing resource and research report information, to assure consistent outcomes and database content across the ICs and at the OHP.

5. Networking/security standards: A set of rules and protocols for how the ICs and OHP structure, maintain, and protect their networks, including how they maintain, store and transmit CHRIS Database information in a manner that is reliable and secure.

Task Completion Date: February 28, 2014

Task 3: Inventory Assessment

The purpose of conducting an Inventory Assessment is to develop an accurate understanding of how much work remains for the CHRIS Inventory to be completely and accurately digitized—in essence, verifying the information contained in Appendix B of this plan, which is based on a general assessment conducted by each Information Center (IC) and the OHP. All data types identified in Appendix A will be reviewed for completeness with regards to representation of all resources and reports, presence of minimum data or other elements as parts of individual inventory items, and inventory data compliance with CHRIS format and content standards.

The contractor conducting this assessment will travel to the OHP and each of the 10 ICs, applying a standardized set of data collection forms/tools to sample and characterize the CHRIS Inventory holdings at each facility.

The contractor will be required to review documentation (where available) of how existing CHRIS Digital Data were created and verified, to compare the process used at a particular IC against existing CHRIS standards for data creation and verification, and assess whether the processes used were inferior, superior, or roughly equivalent at ensuring quality and completeness of data. The contractor will recommend that data under assessment be used as-is, used with conditions for completeness or accuracy improvements, or discarded and replaced.

A goal of the overall CHRIS digitization effort is to reconcile the inventory data held at the OHP with the data at each of the ICs. To a lesser degree, where the same resources and reports might be on file at multiple ICs, reconciliation of data between ICs is also needed. As part of this project, database information held at the OHP and the ICs will be compared to determine the amount of work needed to complete this reconciliation. Depending on available funding, the OHP/IC inventory reconciliation will be completed during this plan's timeframe, or at a later date.

Existing IC and OHP digital datasets are the combined products of various data conversions efforts or projects and the day-to-day processing of information at each facility. These datasets have been produced under varying conditions and by various CHRIS personnel or contractors. These different conditions and circumstances can result in data of varying quality and consistency. Therefore, inventory data will be analyzed by logical groupings within each CHRIS office, based on the process and circumstances under which the data were converted from a different hard copy or digital format.

Task Completion Date: March 31, 2014

Task 4: Digitization Methodology

While the inventory assessment addressed in Task 3 is being undertaken, the OHP will be analyzing the most efficient and effective approach to take for future digitization efforts, that minimizes service disruptions for CHRIS users as much as possible. As part of this analysis, the OHP will seek input from the contractor conducting the inventory assessment as to their recommendations based on their experiences at each IC and the OHP.

The questions to be answered as part of this analysis include:

- Should the digitization work be conducted by CHRIS employees or by contractors? Analysis of work done to date under both models will be useful in addressing the efficiency and effectiveness of each approach, as some of the digitization work thus far has been performed by CHRIS staff and some by contractors. Additionally, this analysis will assess if any of the six identified data types would be better handled by one approach versus the other.

- Should there be one team that handles all the data statewide, or multiple teams working in/on different locations? This analysis will look at the effectiveness of using one team versus multiple teams while also assessing the efficiency of both approaches. Although multiple teams may be more efficient in terms of completing digitization more quickly, that efficiency needs to be balanced against the quality of the work that the teams would produce versus a single-team model.

- Should the records be digitized at the locations of each IC and the OHP, or should the records be brought to a central location for digitization? Like with the above issues, efficiency and effectiveness will be analyzed for each option to assess the best approach to use from the standpoint of timelines for completion, security of the records, and quality of digitized data.

- What is the best way to make use of digital data and documents that CHRIS stakeholders may already have developed? Many of the larger CHRIS users, such as State and Federal agencies, as well as tribal governments and local agencies, have digitized data and documents. Rather than repeat efforts they have already undertaken, the CHRIS will seek to incorporate this digital information whenever possible. Issues such as data and systems compatibility will need to be addressed, as well as willingness of these agencies to share information.

Task Completion Date: March 31, 2014

Task 5: CHRIS Organization and Structure

An important component of this plan is the analysis of various business models for the CHRIS that could be implemented after full digitization has been achieved. Because the delivery of digital products to CHRIS customers is entirely different from how the CHRIS operated in a paper-based model, it is necessary to understand how the CHRIS could be reorganized to carry out its mission in the most efficient and effective manner.

This task, then, involves analyzing two to four different operating models for the CHRIS—assessing the number of Information Centers needed, their locations and responsibilities, the role and responsibilities of the OHP, and the costs and benefits associated with each model. This analysis will necessarily include researching how other states manage and provide access to their historic resources inventories. The accessing and/or delivery of CHRIS data products via the Web will be an important component of this analysis, as will be the delivery of services other than those related to records search requests.

Ideally this task will be conducted under a contract, so the analysis is carried out by an objective and independent entity. However, this decision is dependent on funding available for such a contract, the depth of analysis needed, and the in-house resources available at the OHP to do the work. The decision of how best to conduct this analysis shall be made early in the Action Plan timeline.

Task Completion Date: October 31, 2014

Task 6: Secure Funding

Funding to carry out the tasks identified in this plan, primarily Task 7, will need to be garnered from a variety of sources since it is apparent that neither existing State funding for the CHRIS nor fees charged for records searches at the Information Centers will be sufficient to cover the cost of these digitization efforts. Appendix C of this plan is a preliminary assessment of these costs based on the analysis of work that needs to be done to complete the digitization of the CHRIS Inventory and the past experiences of the ICs that have gone through digitization, primarily the South Coastal Information Center in San Diego and the Northwest Information Center in Rohnert Park. This cost estimate will be revised after the completion of Task 3, as the initial inventory assessment that was the basis of the cost estimate may change as a result of the assessment completed in Task 3.

The plan for securing the needed funding will address:

- What amount of funding is needed by when and for what? The timing of funding will largely be based on the digitization timeline identified in Task 7 below. In addition to funds to pay for the actual digitization, there are costs associated with such things as IC and OHP staff training, the implementation of digital operations standards and the analysis of the CHRIS' structure and organization.

- What are the possible sources of funding and how much might be available from each? These possible sources of funding include individual Federal, State, and local agencies; private companies such as utilities and telecommunications companies; Native American tribes; federal and state grant programs, and, of course, funding provided directly to the OHP by the State of California.

- Who will be responsible for managing, distributing, and spending the funds? The various options available for who will accept, distribute, spend, and provide oversight for the funding needed to carry out this Action Plan need to be analyzed and compared. The entities that make up the CHRIS and its partners all have different parameters placed on how they can take in and then spend funds, and those parameters need to be assessed from a standpoint of what will provide the greatest level of accountability while also allowing for this plan to be achieved within its designated timeframe.

Task Completion Date: December 31, 2014

Task 7: Inventory Digitization

The bulk of the work to carry out this plan will involve digitizing the CHRIS Inventory. The OHP and the Information Centers have completed a rough assessment of how much work remains to be done to complete this digitization. All of the digitization at the ICs will be done to populate the database of the standardized IC inventory management application being developed by the Northwest IC. Digitization at the OHP will populate that office's existing system.

Reconciling the CHRIS Data maintained at the OHP with the CHRIS Data maintained at each of the Information Centers is a significant task and will be completed during this plan's time period if funding permits and after all the ICs' data has been digitized (i.e., digitizing of the data that CHRIS users currently have access to, the information managed by the ICs, is the higher priority).

Below is a timeline for completing digitization, including inventory reconciliation, for the entire state by the task completion date. This timeline may be revised based on the results of Task 3: Inventory Assessment, and on the funding available to do this work.

Mo/Yr	South Coastal (San Diego)	Central Coast (Santa Barbara)	So. San Joaquin Valley (Bakersfield)	Northwest (Rohnert Park)	So. Central Coastal (Fullerton)	Northeast (Chico)	Central California (Turlock)	San Bernardino Archaeological	Eastern (Riverside)	North Central (Sacramento)	Office of Historic Preservation
02/14	■	■									■
03/14	■	■									■
04/14	■	■	■	■	■						■
05/14	■	■	■	■	■	■	■	■			■
06/14	■	■	■	■	■	■	■	■			■
07/14			■	■	■	■	■	■			■
08/14			■	■	■	■	■	■			■
09/14			■	■	■	■	■	■	■	■	■
10/14			■	■	■		■	■	■	■	■
11/14			■	■	■		■	■	■	■	■
12/14				■	■			■	■	■	■
01/15				■	■				■	■	■
02/15				■	■				■	■	■
03/15				■	■						■
04/15											■

Readers may notice a difference between this timeline and that contained in the CHRIS Modernization and Sustainability Plan—this plan's timeframe for completing digitization is more ambitious than that envisioned in the Modernization and Sustainability Plan but is predicated on securing the required funding to complete this work.

Task Completion Date: April 30, 2015

Task 8: Assessment and Next Steps

All planning efforts should include a task that involves reflecting upon whether and how the plan's goals were achieved. In this case, the CHRIS will, towards the end of the time period for this plan, analyze each of the former seven identified tasks in terms of the timing and quality of their completion.

We will assess what lessons can be learned from the work completed under this plan that can then inform next steps that will be taken in further carrying out the goals and objectives of the CHRIS Modernization and Sustainability Plan.

This analysis will be used in crafting a subsequent action plan.

Task Completion Date: April 30, 2015

Appendix A: Digitization Standards

The following standards have been established and are included in this Appendix:

1. Definitions of CHRIS Inventory Geodatabase Feature Classes
2. CHRIS Database and GIS Attribute Definitions (for Resources and Research Reports)
3. CHRIS Metadata Standards
4. CHRIS Data Creation and Verification Standards

Definitions of CHRIS Inventory Geodatabase Feature Classes
(Adopted by the CHRIS 9-27-13)

RESOURCES

- resource_points: Used to represent locations of resources or portions of resources less than 12 m (40 ft.) in diameter.
- resource_lines: Used to represent the locations of resources or portions of resources less than 12 m (40 ft.) wide, but 12m (40 ft.) or more long.
- resource_polys: Used to represent the locations of resources or portions of resources 12 m (40 ft.) or greater in both length and width.
- resource_districts: Polygon feature class. Used for mapping the district boundary for resources that have been recorded using DPR523D District Record (locations of contributors will be mapped in whichever appropriate feature class).
- resource_aprxloc: Polygon feature class. Used to map resources that have been incorporated in the CHRIS, have a general location, but lack specific locational information or map(s).
- resource_restricted: Polygon feature class. Used to map resources or portions of resources that have been incorporated into the CHRIS, but have access restricted through CHRIS policy or through a written agreement between an IC and/or the OHP and another party. Level of precision/generalization of resource location mapping is dependent on the terms of the policy or agreement, and may vary from one restricted area to another within this feature class.

REPORTS

- report_points: Used to represent the locations of report study areas or portions of study areas less than 12 m (40 ft.) in diameter.
- report_lines: Used to represent the locations of report study areas or portions of study areas less than 12 m (40 ft.) wide, but 12 m (40ft.) or more long.
- report_polys: Used to represent the locations of report study areas or portions of study areas 12 m (40 ft.) or greater in both length and width.

- report_other: Polygon feature class. Used to document report study areas for which the report content is almost entirely non-fieldwork related and/or for which the presentation of the study area boundary doesn't add value to a records search.
- report_aprxloc: Polygon feature class. Used to map study areas of reports that have been incorporated in the CHRIS, that have a general location, but lack specific locational information or map(s).
- report_restricted: Polygon feature class. Used to map report study areas or portions of study areas that have been incorporated into the CHRIS, but have special access restrictions through CHRIS policy or through a written agreement between an IC and/or OHP and another party. The level of precision/generalization of study area location mapping is dependent on the terms of the policy or agreement, and may vary from one restricted area to another within this feature class.
- report_CFMOU: Polygon feature class. Used to map study areas of CAL FIRE project-generated reports that have been produced by *archaeologically trained resource professionals* and incorporated into the CHRIS under the terms of the CAL FIRE/OHP/CHRIS MOU (amended 2006) or its replacement. This layer is only for reports that have been produced by an individual that has been through the CAL FIRE archaeological site recognition training course, not for CAL FIRE project-generated reports produced by professional archaeologists.

INFORMAL_RESOURCES – USED TO REPRESENT RESOURCES NOT RECORDED ON DPR 523A PRIMARY RECORD FORMS AND NOT SUBMITTED IN CHRIS STANDARD FORMAT TO AN IC BY THE OHP

- informal_resource_points: Used to represent locations of resources or portions of resources less than 12 m (40 ft.) in diameter.
- informal_resource_lines: Used to represent the locations of resources or portions of resources less than 12 m (40 ft.) wide, but 12 m (40 ft.) or more long.
- informal_resource_polys: Used to represent the locations of resources or portions of resources 12 m (40 ft.) or greater in both length and width.

CHRIS Database Diagram
(Adopted by the CHRIS 10-18-13)
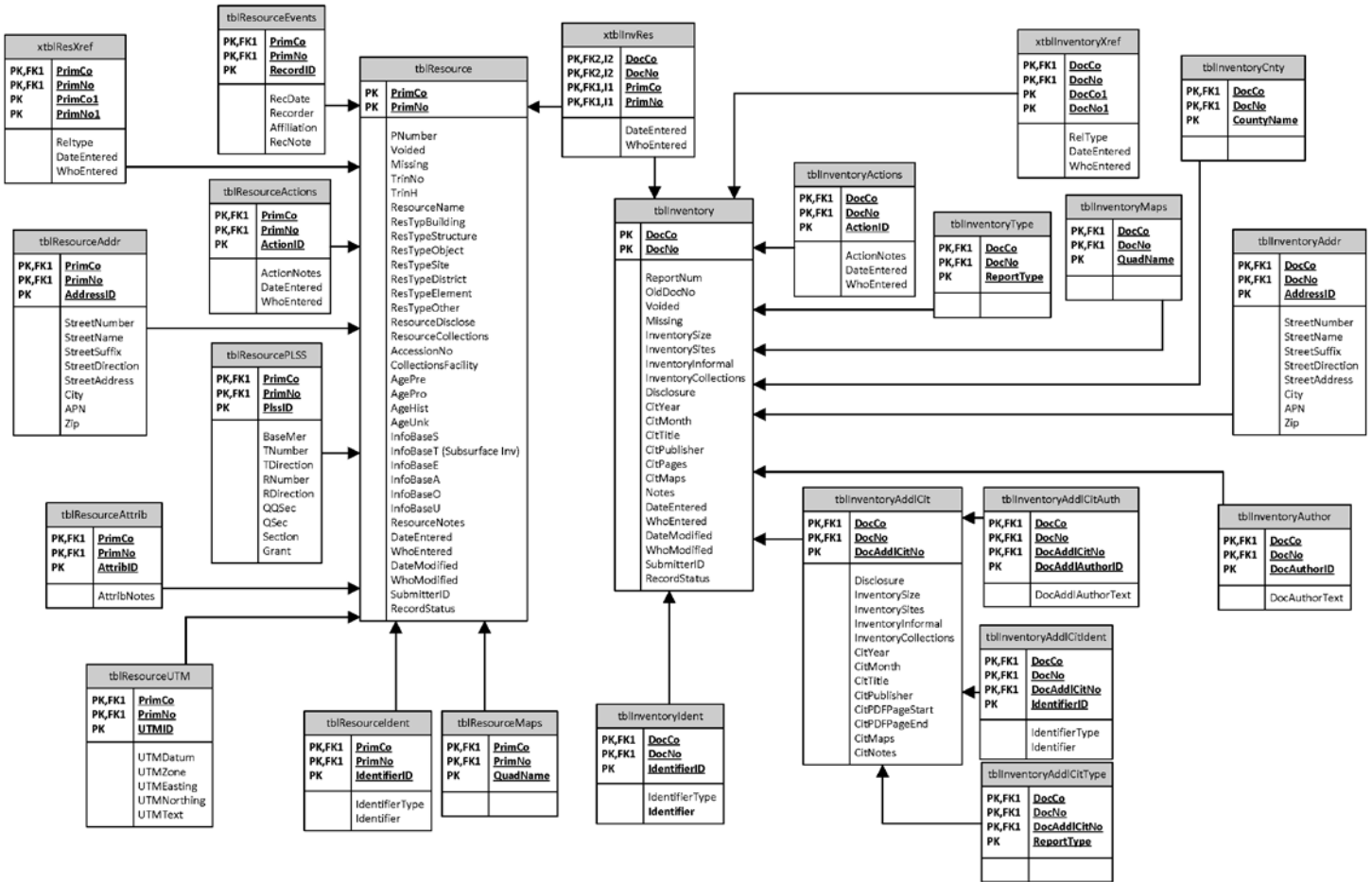
CHRIS GIS Attribute Definitions
(Adopted by the CHRIS 10-4-13)

RESOURCES

Field	Data Type	Example(s)	Description
PrimCo	Long Integer (precision=2)	17	Assigned County Primary Number Code (2 digits)
PrimNo	Long Integer (precision=6)	2387	Assigned Primary Number (1-6 digits), with NO leading zeros
TrinNo	Long Integer (precision=6)	2063	Assigned Trinomial Number (1-6 digits), with NO leading zeros
Label	Text (length=11)	P-41-002387	AUTO-GENERATED**: "P-"& "PrimCo"*&"PrimNo" with leading zeros to reach digit length (6 digits).
Other ID	Text (length=255)	Cache Creek P-39 Crash Site	Resource Name(s) or Number(s). Can contain multiple values, use ";" ONLY as value separator
DocSource	Text (length=25), Coded value domain	code=meaning a=address or UTM b=basemap c=content m=maps o=other s=submitted p=parcel	Drop-down choice, source from which the feature was acquired. -Street address or UTM coordinate location -visual feature on NWIC paper USGS basemap -written description of location from resource record -visual feature on map from resource record -administrative use only -Assessor's parcel map
DigSource	Text (length=25), Coded value domain	code=meaning a=aerial g=geocoded o=other p=parcel u=USGS quad	Drop-down choice, source to which the location has been digitized against. -Aerial imagery -Auto-generated location from geocoding process -administrative use only -Assessor's parcel map -USGS quad layer
DigBy	Text (length=25)	username	Network username or outside agencies digitizer's last name and first letter of first name
DigDate	Date (mm/dd/yyyy)	10/22/2010	Month, day, year of **ORIGINAL** digitization
DigOrg	Text (length=25)	NWIC	Organization that digitizer works within
EditDate	Date (mm/dd/yyyy)	10/26/2010	Month, day, year the feature was last modified
PNumber	Text (length=9)	01-007477	AUTO-GENERATED: "PrimCo" & "PrimNo" with leading zeros to reach digit length (6 digits).

Field	Data Type	Example(s)	Description
Trinomial	Text (length=10)	ALA-000495	*AUTO-GENERATED: Assigned County Trinomial Code (see Appendix-2) & "TrinNo" with leading zeros to reach digit length (6 digits).*
Notes	Text (length=255)	Whatever	*Used to capture pertinent information not contained in other fields*
SubmitterID	Text (length=50)	P-39	*Submitter's unique ID, generated but data submitter, could/should link to any associated docs/non-GIS data also submitted*
Confidential	Binary (Yes/No)	Y	*Used to indicate whether the resource information/location is confidential per CHRIS policy*

RESEARCH REPORTS

Field	Data Type	Example(s)	Description
DocCo	Long Integer (precision=2)	43	*Assigned County Report Number Code*
DocNo	Long Integer (precision=6)	14752	*Assigned Study Report Number (1-6 digits)), with NO leading zeros*
Label	Text (length=8)	SC-014752	*AUTO-GENERATED: Two-letter county code &"DocNo" with leading zeros to reach digit length (6 digits).*
Other ID	Text (length=255)	Boone Project Located on Llagas Road, Morgan Hill	*Report Name(s). Possible to contain multiple values, use ";" ONLY as separator*
DocSource	Text (length=25), Coded value domain	*code=meaning* a=address or UTM b=basemap c=content m=maps o=other s=submitted p=parcel	*Drop-down choice, source from which the feature was acquired.* -Street address or UTM coordinate location -visual feature on paper USGS basemap -written description of location from study report -visual feature on map from study report -administrative use only -Assessor's parcel map

Field	Data Type	Example(s)	Description
DigSource	Text (length=25), Coded value domain	*code=meaning* a=aerial g=geocoded o=other p=parcel u=USGS quad	*Drop-down choice, source to which the location has been digitized against.* *-Aerial imagery* *-Auto-generated location from geocoding process* *-administrative use only* *-Assessor's parcel map* *-USGS quad layer*
DigBy	Text (length=25)	username	*Network username or outside agencies digitizer's last name and first letter of first name*
DigDate	Date (mm/dd/yyyy)	10/22/2010	*Month, day, year of **ORIGINAL** digitization*
EditDate	Date (mm/dd/yyyy)	10/26/2010	*Month, day, year the feature was last modified*
DigOrg	Text (length=50)	NWIC	*Organization that digitizer works within*
ReportNum	Text (length=9)	SC-014572	*AUTO-GENERATED: Two-letter county code &"DocNo" with leading zeros to reach digit length (6 digits).*
Notes	Text (length=255)	Whatever	*Used to capture pertinent information not contained in other fields*
SubmitterID	Text (length=100)	0F450HPSR	*Submitter's unique ID, generated but data submitter, could/should link to any associated docs/non-GIS data also submitted*

CHRIS GIS Metadata Definitions

(Adopted by the CHRIS 11-26-13)

Note: this standard complies with the Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata, Version 2 (FGDC-STD-001-1998) as implemented using ESRI ArcGIS software. Only those metadata elements to be edited / maintained manually by the CHRIS offices are listed here, as other elements are automatically maintained via the software.

CHRIS INVENTORY GEODATABASE

- **Tags**: archaeology, cultural resources, historical resources, built environment
- **Summary**: This geodatabase is a portion of the statewide CHRIS Inventory of data related to historical resources in California. The __IC maintains the CHRIS Inventory data for _____ counties.

- **Description**: The California Historical Resources Information System (CHRIS) operates as a repository of contributed information regarding historical resources in California. Historical resources include buildings, structures, objects, sites, landscapes, districts, and all manner of properties associated with past human activities. Historical resources in the CHRIS inventory include those that have and those that have not undergone formal evaluation by federal, state, or local government agencies with respect to their historical significance. The inventory maintained at the ___IC consists of information derived from resource records, reports, maps, and other documents and materials; this geodatabase serves as the spatial component and includes feature datasets for resources, reports, and informal resources.
- **Credits**: California Historical Resources Information System (CHRIS), _____ Information Center (___IC)
- **Use Limitations**: The locations of the cultural resources and reports in these datasets may or may not match the exact locations as witnessed in the field. These locations, as depicted, are meant to provide the viewer with a general understanding of the distribution of the cultural resources and survey reports within their area of interest. Please refer to the associated documents for more detailed spatial information. The recipient of this data, either the individual or organization, acquiring CHRIS data for use does so pursuant to an active CHRIS Information Access and Use Agreement and/or other agreement pertaining to access to and use of CHRIS information. CHRIS data acquired under an agreement shall only be used for scholarly research, Native American tribal use, land use planning, cultural resource management, education, emergency management, and/or similar purposes. Other than as allowed pursuant to the relevant agreement or required by law, CHRIS data acquired pursuant to this agreement shall not be sold, erased, marketed, loaned, transferred, published, or otherwise redistributed without written permission from the IC providing such CHRIS data via a CHRIS Information Conditional Use Agreement. All CHRIS data shall be used in full compliance with applicable federal, state, local, and other governmental laws and regulations related to historical resources information and properties. All products based in part or entirely on the use of CHRIS data acquired under this agreement shall clearly identify the IC(s) that provided such data and the date of acquisition.

FEATURE DATASETS

Resources
- **Tags:** (same as geodatabase tags)
- **Summary:** This feature dataset is a portion of the statewide CHRIS Inventory of data related to historical resources in California. The ___IC maintains the CHRIS Inventory data for _____ counties.
- **Description:** The California Historical Resources Information System (CHRIS) operates as a repository of contributed information regarding historical resources in California. Historical resources include buildings, structures, objects, sites, landscapes, districts, and all manner of properties associated with past human activities. Historical resources in the CHRIS inventory include those that have and those that have not undergone formal evaluation by federal, state, or local government agencies with respect to their historical significance. The inventory maintained at the ___IC consists of information derived from resource records, reports, maps, and other documents and materials; this feature dataset serves as the spatial component and

includes feature classes for resource points, resource lines, resource polygons, districts, resources with approximate locations, and resources with restricted access.

- **Credits:** (same as geodatabase credits)
- **Use Limitations:** (same as geodatabase use limitations)

Reports
- **Tags:** (same as geodatabase tags)
- **Summary:** (same as Resources feature dataset summary)
- **Description:** The California Historical Resources Information System (CHRIS) operates as a repository of contributed information regarding historical resources in California. Historical resources include buildings, structures, objects, sites, landscapes, districts, and all manner of properties associated with past human activities. Historical resources in the CHRIS inventory include those that have and those that have not undergone formal evaluation by federal, state, or local government agencies with respect to their historical significance. The inventory maintained at the __IC consists of information derived from resource records, reports, maps, and other documents and materials; this feature dataset serves as the spatial component and includes feature classes for report points, report lines, report polygons, reports with non-fieldwork related content and/or where the boundary does not add value to a records search, reports with approximate locations, reports with restricted access, and CAL FIRE project-generated reports.
- **Credits:** (same as geodatabase credits)
- **Use Limitations:** (same as geodatabase use limitations)

Informal Resources
- **Tags:** (same as geodatabase tags)
- **Summary:** (same as Resources feature dataset summary)
- **Description:** The California Historical Resources Information System (CHRIS) operates as a repository of contributed information regarding historical resources in California. Historical resources include buildings, structures, objects, sites, landscapes, districts, and all manner of properties associated with past human activities. Historical resources in the CHRIS inventory include those that have and those that have not undergone formal evaluation by federal, state, or local government agencies with respect to their historical significance. The inventory maintained at the __IC consists of information derived from resource records, reports, maps, and other documents and materials; this feature dataset serves as the spatial component and includes resources not recorded on DPR 523A primary record forms and not submitted in CHRIS standard format to an IC by OHP. Feature classes in this feature dataset include informal resource points, informal resource lines, and informal resource polygons.
- **Credits:** (same as geodatabase credits)
- **Use Limitations:** (same as geodatabase use limitations)

FEATURE CLASSES

Resources
- **resource_points**
  - **Tags:** (same as geodatabase tags)
  - **Summary:** This feature class is a portion of the statewide CHRIS Inventory of data related to historical resources in California. The __IC maintains the CHRIS Inventory data for _____ counties.
  - **Description:** resources or portions of resources less than 12m (40ft) in diameter
  - **Credits:** (same as geodatabase credits)
  - **Use Limitations:** (same as geodatabase use limitations)
- **resource_lines**
  - **Tags:** (same as geodatabase tags)
  - **Summary:** (same as resource_points summary)
  - **Description:** resources or portions of resources less than 12m (40ft) wide and 12m (40ft) or more long
  - **Credits:** (same as geodatabase credits)
  - **Use Limitations:** (same as geodatabase use limitations)
- **resource_polys**
  - **Tags:** (same as geodatabase tags)
  - **Summary:** (same as resource_points summary)
  - **Description:** resources or portions of resources 12m (40ft) or greater in both length and width
  - **Credits:** (same as geodatabase credits)
  - **Use Limitations:** (same as geodatabase use limitations)
- **resource_districts**
  - **Tags:** (same as geodatabase tags)
  - **Summary:** (same as resource_points summary)
  - **Description:** resources recorded using a DPR523D District Record
  - **Credits:** (same as geodatabase credits)
  - **Use Limitations:** (same as geodatabase use limitations)
- **resource_aprxloc**
  - **Tags:** (same as geodatabase tags)
  - **Summary:** (same as resource_points summary)
  - **Description:** resources incorporated into the CHRIS having a general location and lacking specific locational information or map(s)
  - **Credits:** (same as geodatabase credits)
  - **Use Limitations:** (same as geodatabase use limitations)
- **resource_restricted**
  - **Tags:** (same as geodatabase tags)
  - **Summary:** (same as resource_points summary)
  - **Description:** resources or portions of resources incorporated into the CHRIS with restricted access through CHRIS policy or through a written agreement between the __IC and/or OHP and another party; level of precision/generalization of resource

location mapping is dependent of the terms of the policy or agreement, and may vary from one restricted area to another within this feature class

- o **Credits:** (same as geodatabase credits)
- o **Use Limitations:** (same as geodatabase use limitations)

Reports

- **report_points**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** report study areas or portions of study areas less than 12m (40ft) in diameter
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **report_lines**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** report study areas or portions of study areas less than 12m (40ft) wide and 12m (40ft) or more long
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **report_polys**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** report study areas or portion of study areas 12m (40ft) or greater in both length and width
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **report_other**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** report study areas for which the report content is almost entirely non-fieldwork related and/or for which the presentation of the study area boundary doesn't add value to a records search
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **report_aprxloc**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** reports incorporated into the CHRIS having a general location and lacking specific locational information or map(s)
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **report_restricted**
  - o **Tags:** (same as geodatabase tags)

- o **Summary:** (same as resource_points summary)
- o **Description:** reports or portions of reports incorporated into the CHRIS with restricted access through CHRIS policy or through a written agreement between the __IC and/or OHP and another party; level of precision/generalization of resource location mapping is dependent of the terms of the policy or agreement, and may vary from one restricted area to another within this feature class
- o **Credits:** (same as geodatabase credits)
- o **Use Limitations:** (same as geodatabase use limitations)
- **report_CFMOU**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** study areas of CAL FIRE project-generated reports that have been produced by archaeologically trained resource professionals and incorporated into the CHRIS under the terms of the CAL FIRE/OHP/CHRIS MOU (amended 2006) or its replacement; reports that have been produced by an individual that has been through the CAL FIRE archaeological site recognition training course
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)

Informal Resources
- **informal_resource_points**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** resources or portions of resources less than 12m (40ft) in diameter
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **informal_resource_lines**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** resources of portions of resources less than 12m (40ft) wide and 12m (40ft) or more long
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)
- **informal_resource_polys**
  - o **Tags:** (same as geodatabase tags)
  - o **Summary:** (same as resource_points summary)
  - o **Description:** resources or portions of resources 12m (40ft) or greater in both length and width
  - o **Credits:** (same as geodatabase credits)
  - o **Use Limitations:** (same as geodatabase use limitations)

Appendix B: Initial Inventory Assessment

An initial assessment of digitization status for the CHRIS Inventory was carried out during the summer of 2013. There are six basic types of CHRIS Inventory Data Types:

1) Resource PDFs – electronic copies of submitted historical resource records
2) Report PDFs – electronic copies of submitted research reports (this item is not included in Phase 1 or Phase 2 of the CHRIS Modernization and Sustainability Plan, but is included here for informational purposes)
3) Resource GIS – digitally mapped locations of historical resource locations
4) Report GIS – digitally mapped locations of research reports
5) Resource Database – descriptive information about historical resources
6) Report Database – descriptive, bibliographic information about research reports

Each of the Information Centers has some digitization work remaining to be done, and the amount of information in OHP's database for each IC's service area is an indicator of the level of effort needed to reconcile data at the OHP and that IC.

As of the initial inventory assessment, the amount of digitization work remaining to be done, including the amount of information in the OHP database for each Information Center's service area, is indicated in the following chart and graph.

AMOUNT OF DIGITIZING WORK REMAINING IN THE CHRIS (NUMBER OF ITEMS)
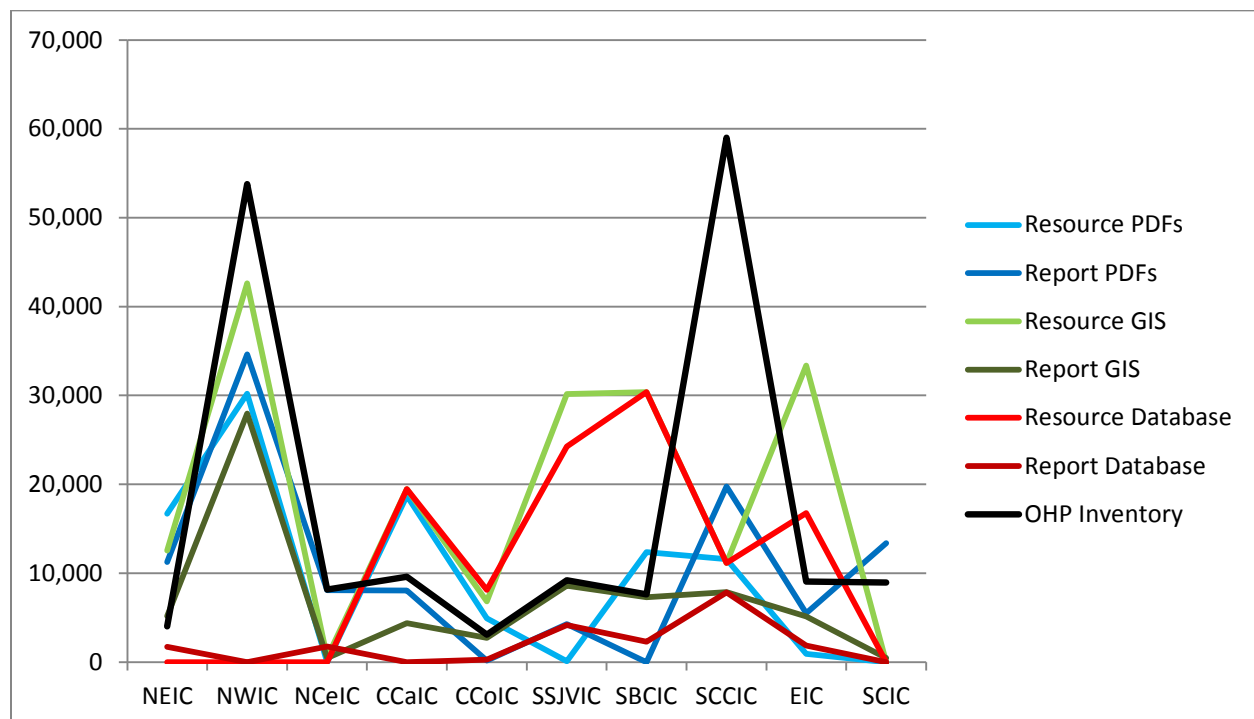
Phase 1 Digitization: Resource Records

IC	Total Resources	Resource PDFs NOT Done	Resource GIS NOT Done	Resource Database NOT Done	OHP Resources
NEIC	37,170	16,691	12,570	0	4,016
NWIC	52,798	30,193	42,622	0	53,794
NCeIC	23,716	0	510	0	8173
CCaIC	25,666	18,700	19,473	19,473	9,603
CCoIC	11,724	4,910	6,814	8,114	3,068
SSJVIC	31,799	89	30,171	24,260	9,202
SBCIC	30,365	12,365	30,365	30,365	7,617
SCCIC	23,051	11,598	11,137	11,137	58,990
EIC	41,746	929	33,379	16,773	9,071
SCIC	47,816	0	0	0	8,941
TOTALS	**325,851**	**95,475**	**187,041**	**110,122**	**172,475**

Phase 2 Digitization: Reports

IC	Total Reports	Report PDFs NOT Done *	Report GIS NOT Done	Report Database NOT Done
NEIC	12,000	11,268	5,182	1,729
NWIC	41,114	34,628	27,949	0
NCeIC	11,260	8,093	449	1,757
CCaIC	8,145	8,036	4,366	0
CCoIC	11,828	171	2,731	274
SSJVIC	9,971	4,290	8,586	4,174
SBCIC	7,300	Unknown	7,300	2,300
SCCIC	19,749	19,749	7,881	7,835
EIC	11,049	5,500	5,129	1,843
SCIC	15,878	13,382	449	0
TOTALS	**148,294**	**105,117**	**70,022**	**19,912**

This item is not included in Phase 1 or Phase 2 of the CHRIS Modernization and Sustainability Plan, but is included here for informational purposes (scanning of reports will occur on an as-needed-by-customers or as-staff-time-is-available basis, whichever occurs first).

Appendix C: Projected Funding Needs for Digitization

This Appendix lists the cost estimate breakdown for completing Phases One and Two of the CHRIS Modernization and Sustainability Plan, based on the estimate of digitization work remaining to be done as identifed in Appendix A. These cost estimates will be refined and adjusted based on the results of Task 1: Inventory Assessment.

NOTE: The following cost estimates were calculated in order to <u>estimate</u> the overall budget for CHRIS inventory digitization, not to identify specific outlays for individual tasks. That level of detail will be developed for planning purposes as this effort continues.

Phase 1 Digitization: Resource Records

Task	Variables	Estimated Costs
Scanning		
Average # of Pages/Resource	6	
Estimated Total Pages to Scan	540,318	
Estimated Cost/Page to Scan	$0.12	
Prep/QC/Refiling	$180,106	
Sub-Total		**$244,944**
GIS Digitizing and QC		
Total # to be done	96,708	
#/yr a person can do	20,000	
# of people needed to do all in one yr	4.8	
Cost/Yr/Person	$80,000	
Sub-Total		**$386,832**
GIS QC only		
Total # to be done	90,333	
#/yr a person can do	20,000	
# of people needed to do all in one yr	4.5	
Cost/Yr/Person	$80,000	
Sub-Total		**$361,332**
Data Entry and QC		
Total # to be done	61,751	
#/yr a person can do	10,000	
# of people needed to do all in one yr	6.2	
Cost/Yr/Person	$80,000	

Task	Variables	Estimated Costs
Sub-Total		**$494,008**
Data QC only		
Total # to be done	48,371	
#/yr a person can do	10,000	
# of people needed to do all in one yr	4.8	
Cost/Yr/Person	$80,000	
Sub-Total		**$386,968**
OHP Digitization		
Props with no Street Address or Primary Number	48,598	
Arch Sites with Z-Number no Primary Number	2,990	
#/yr a person can digitize to GIS	20,000	
# of people needed to do all in one yr	2.6	
Cost/Yr/Person	$80,000	
Prep/QC/Refiling Cost/Yr/Person	$25,000	**$206,352**
Sub-Total		**$300,000**
Total for Resource Records Digitization		**$2,380,436**

Phase 2 Digitization: Reports

Task	Variables	Estimated Costs
GIS Digitizing and QC		
Total # to be done	38,218	
#/yr a person can do	5,000	
# of people needed to do all in one yr	7.6	
Cost/Yr/Person	$80,000	
Sub-Total		**$611,488**
GIS QC only		
Total # to be done	31,804	
#/yr a person can do	5,000	
# of people needed to do all in one yr	6.4	
Cost/Yr/Person	$80,000	
Sub-Total		**$508,864**
Data Entry and QC		
Total # to be done	9,232	

Task	Variables	Estimated Costs
#/yr a person can do	3,500	
# of people needed to do all in one yr	2.6	
Cost/Yr/Person	$80,000	
Sub-Total		**$211,017**
Data QC only		
Total # to be done	10,680	
#/yr a person can do	7,000	
# of people needed to do all in one yr	1.5	
Cost/Yr/Person	$80,000	
Sub-Total		**$122,057**
Total for Reports Digitization		**$1,453,426**

Total Costs

Task	Variables	Estimated Costs
Total for Resource Records Digitization		**$2,380,436**
Total for Reports Digitization		**$1,453,426**
Management Staff and Other Costs		
Project Manager or Contractor overhead	$110,000	
Equipment/Rent/Travel/etc.	$150,000	
Sub-Total		**$260,000**
Estimated Total for Phases 1 and 2 Digitization		**$4,039,862**