

# NEW MEXICO CULTURAL RESOURCE INFORMATION SYSTEMS

Retrospective and Lessons Learned



NEW MEXICO DEPARTMENT OF  
**CULTURAL AFFAIRS**





New Mexico Department of Cultural Affairs is dedicated to preserving and celebrating the cultural integrity and diversity of New Mexico.

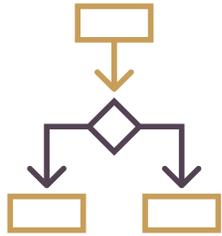


# RESPEC

RESPEC is a diverse community of technologists, engineers, and scientists. We empower our clients to innovate and modernize their organizations.



# WHY DID NEW MEXICO INVEST IN A NEW CRIS?



## LEGACY SYSTEM

New Mexico first created their CRIS in 200X, the system was outdated and designed for older processes



## INCREASED WORKLOADS

Federally funding has increased project volumes, along with more compliance and reporting



## LACK OF RESOURCES

Staffing levels stay the same and it's difficult to fulfill critical placements



# WHAT WERE OUR GOALS?



## PROCESS MORE PROJECT REVIEWS

The SHPO wanted to reduce our response time to project reviews, by making the system easier to use



## IMPROVE DECISION MAKING

The system should help users make decisions faster with better workflows and improved visibility



## DIGITAL SUBMISSION

Passing paper forms between different agencies and consultants is inefficient



# HOW DID WE ACHIEVE OUR GOALS?

## PEOPLE



## PROCESS

- ▶ Agile Project Methodology
- ▶ Project Plans
- ▶ Stakeholder Engagement
- ▶ Daily Standups
- ▶ Design Thinking
- ▶ Workflows

## TECHNOLOGY



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# PEOPLE AND PROCESS





# RESPEC CLIENT-CENTRIC AGILE METHODOLOGY



Partnering approach to software projects



Upfront facilitated discovery sessions



High-level design and UI Mock-ups



User story creation



Frequent demos of working software



Weekly status reports, Microsoft Project Plan & no surprises



# HOW CAN WE MAKE THE SHPO'S LIFE EASIER?

## REVIEW FASTER & WORK SMARTER

- ▶ **Connect** - Access Digital Data Simultaneously with Reviewer's allowing for Concurrent Review of the Same Project
- ▶ **Deliver** - Respond to Submitters Digitally
- ▶ **Accelerate** - Workflows that assist in Conducting Required Tasks in separate modules:
  - ▶ Section 106 Project Reviews
  - ▶ Sites, Surveys, & Inventories
  - ▶ Certified Local Governments
  - ▶ National Register of Historic Places
  - ▶ Federal Rehabilitation Tax Incentives

## RESOLVE ISSUES & TRACK PROGRESS

- ▶ **Prompt** - Set Reminders for Report and Review Updates
- ▶ **Track** - Projects in Real Time
- ▶ **Resolve** - Identify Potentially Significant Section 106 and Issues ahead of time
- ▶ **Utilize** - Pre-Filled Letter Templates

## OPTIMIZE, CONNECT, & STORE DATA

- ▶ **Access** - Data Designed with functionality for Consultants, Reviewers, Tribes, and External Users
- ▶ **Export** - Selected Records in Multiple Formats (fgdb, .csv, .xlsx)
- ▶ **Generate** - PDF Reports of Submitted Projects and Resources created within the System



# HOW CAN WE MAKE THE CONSULTANT'S LIFE EASIER?

## STREAMLINE WORKFLOW

### Reduce Cost & Save Time, Improve Data Accuracy & Compliance & Accessibility

#### VIEWING DATA

- ▶ Access the fullest Amount of Information and Data Available on Sites
- ▶ Keep Track of Sites and Preserved Buildings
- ▶ Identify Changes Over Time in Preserved Sites
- ▶ Know Previously Surveyed Locations and Likelihood of Additional Cultural Resources
- ▶ Accurately Predict Positions of Cultural, Historical or Agricultural Sites

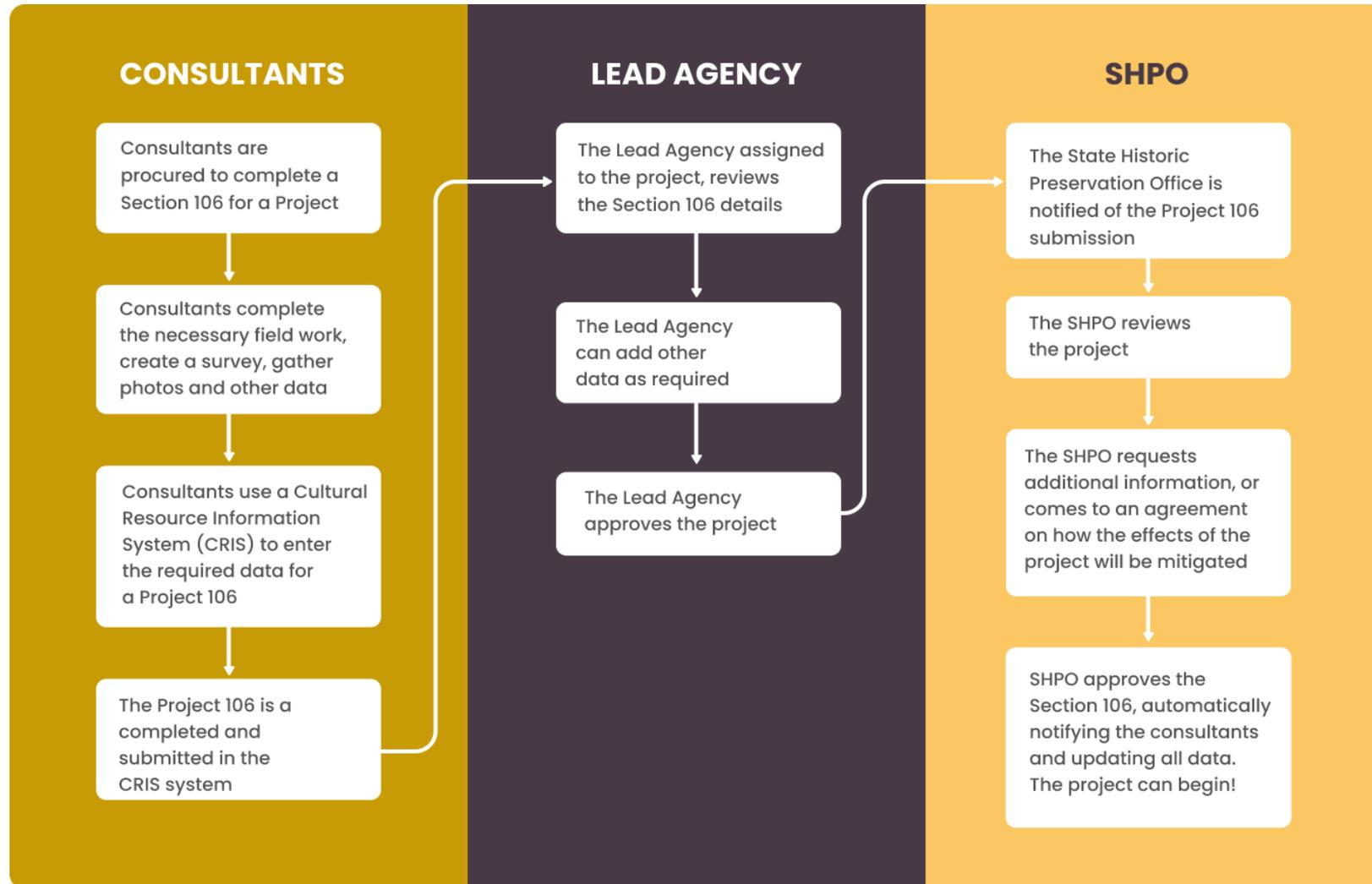
#### SUBMITTING DATA

- ▶ Section 106 and Section 110 Project Submission and Management
- ▶ Real-Time Tracking of Projects and Activities
- ▶ Streamlined Federal and State Review Processes
- ▶ Submit Digital Data (Photos, Documents, Attachments, GIS)





# EXAMPLE PROJECT 106 WORKFLOW



# Human Focused Transformation

We focus on your goals, so your organization will too

At RESPEC, we make smarter ways and smarter worlds for our clients.

We develop innovative technology processes and solutions to modernize and bring efficiencies to our clients.

Our principles in design and human empathy, combined with our abilities and experience, have allowed us to successfully transform organizations.



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# FEATURES

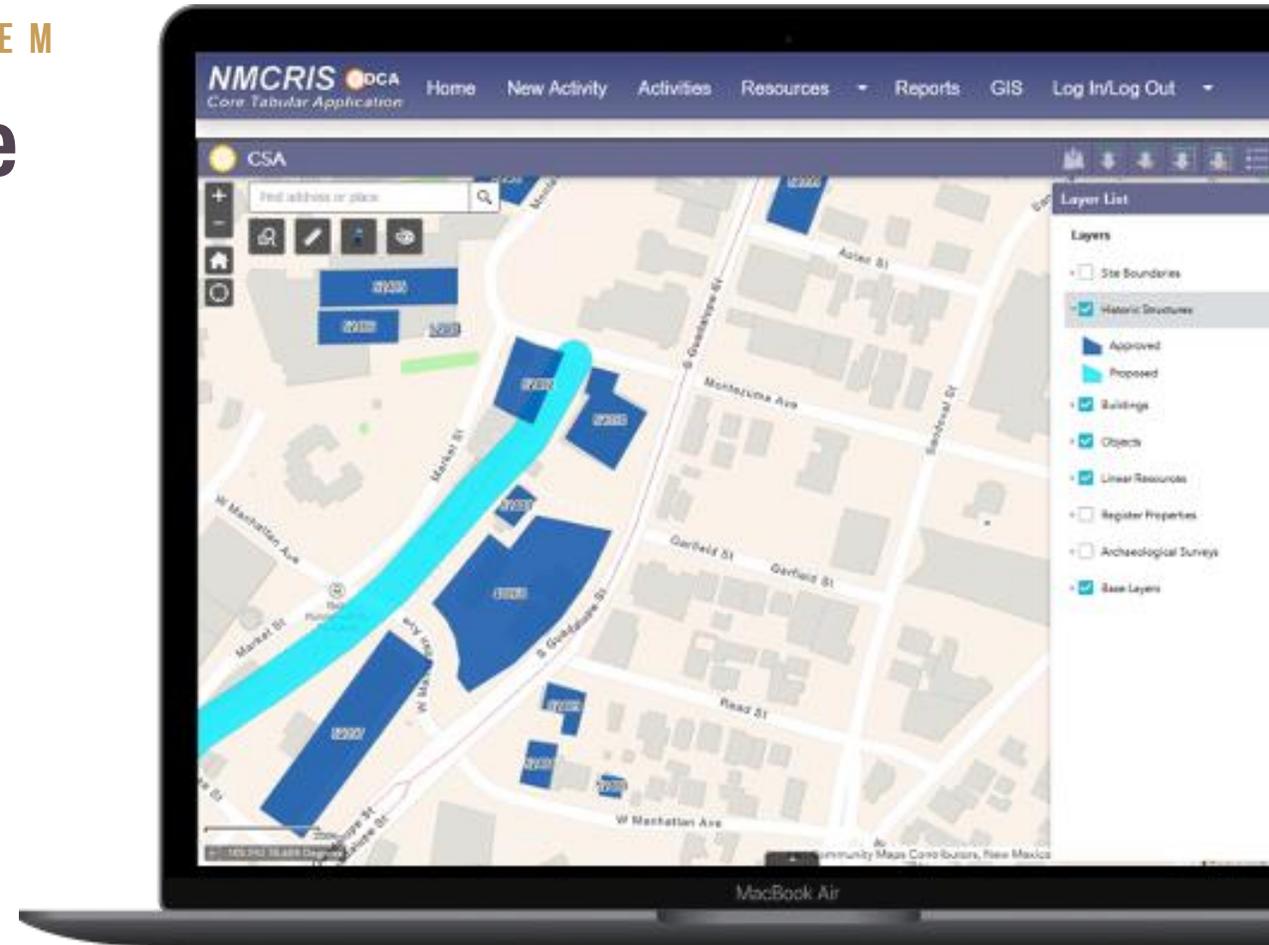




## CULTURAL RESOURCE INFORMATION SYSTEM

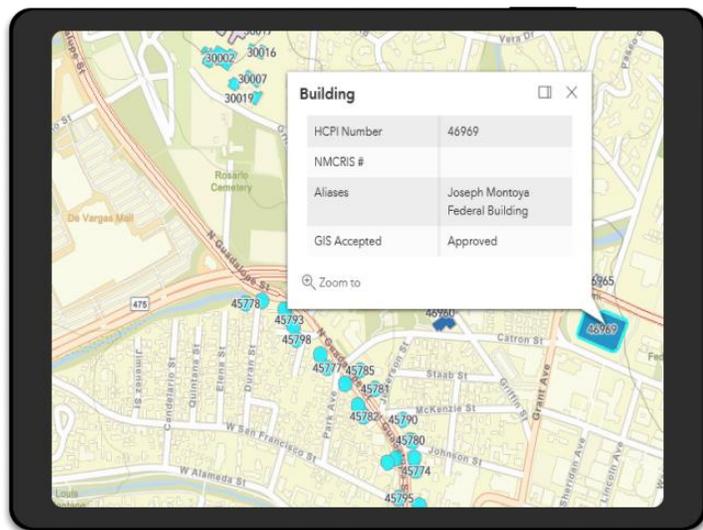
# The Future of SHPO Software

- ▶ Project 106 and 110 Digital Submission and Reviews
- ▶ Store, Manage, and Analyze large amounts of Data Related to Cultural Resources, such as Archaeological Sites, Historic Structures, and Cultural Landscapes
- ▶ Data Mapping with Advanced GIS Capabilities
- ▶ Reporting and Data Exports
- ▶ Facilitate Collaboration Among Different Stakeholders
- ▶ Data can be Standardized Across different Projects, Ensuring Consistency and Accuracy in Reporting



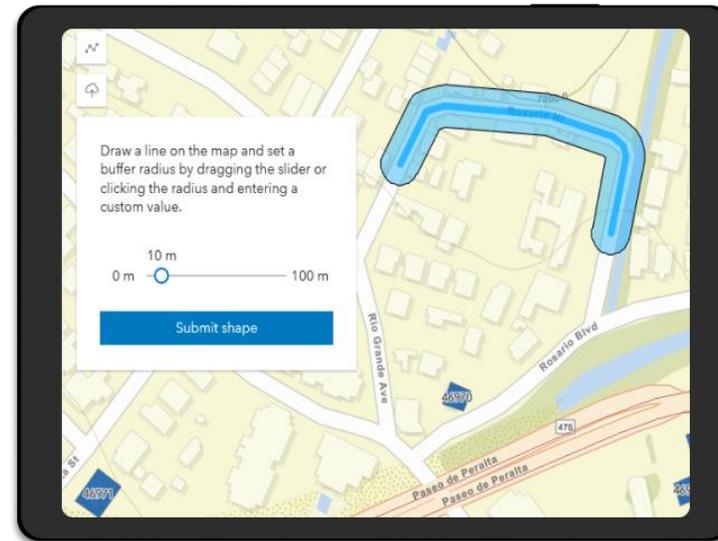


# Fully Manage your GIS data



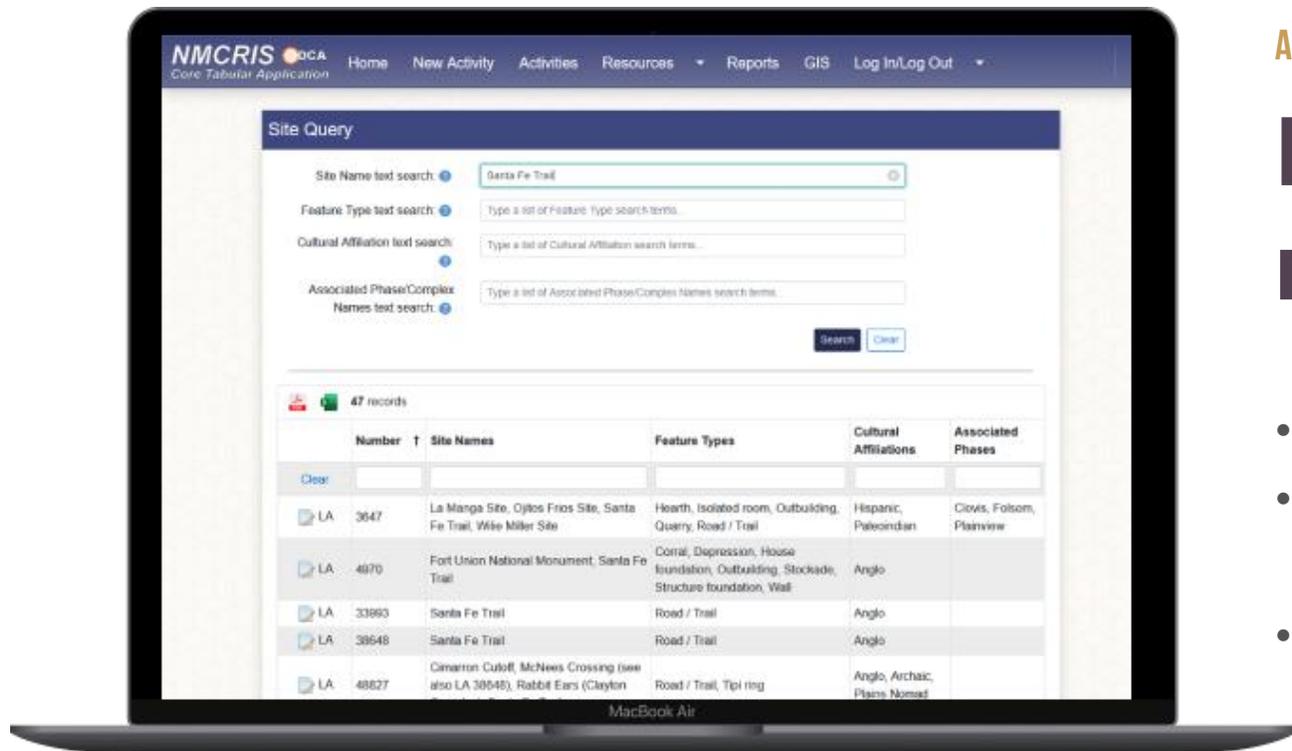
## Edit

- Drawing Shapes
- Uploading Shapefiles
- Drawing and Buffering Lines
- Merging Shapes
- Moving Shapes
- Adding and Changing Vertices



## View

- Searching by Feature Type or State Feature
- View multiple resource types
- Configurable Base Maps
- Export in multiple file formats
- Lat/Long, UTM, and other coordinate systems
- Measuring
- Integration between resources and application



## ADVANCED QUERY AND SEARCH

# Find exactly what you need easily

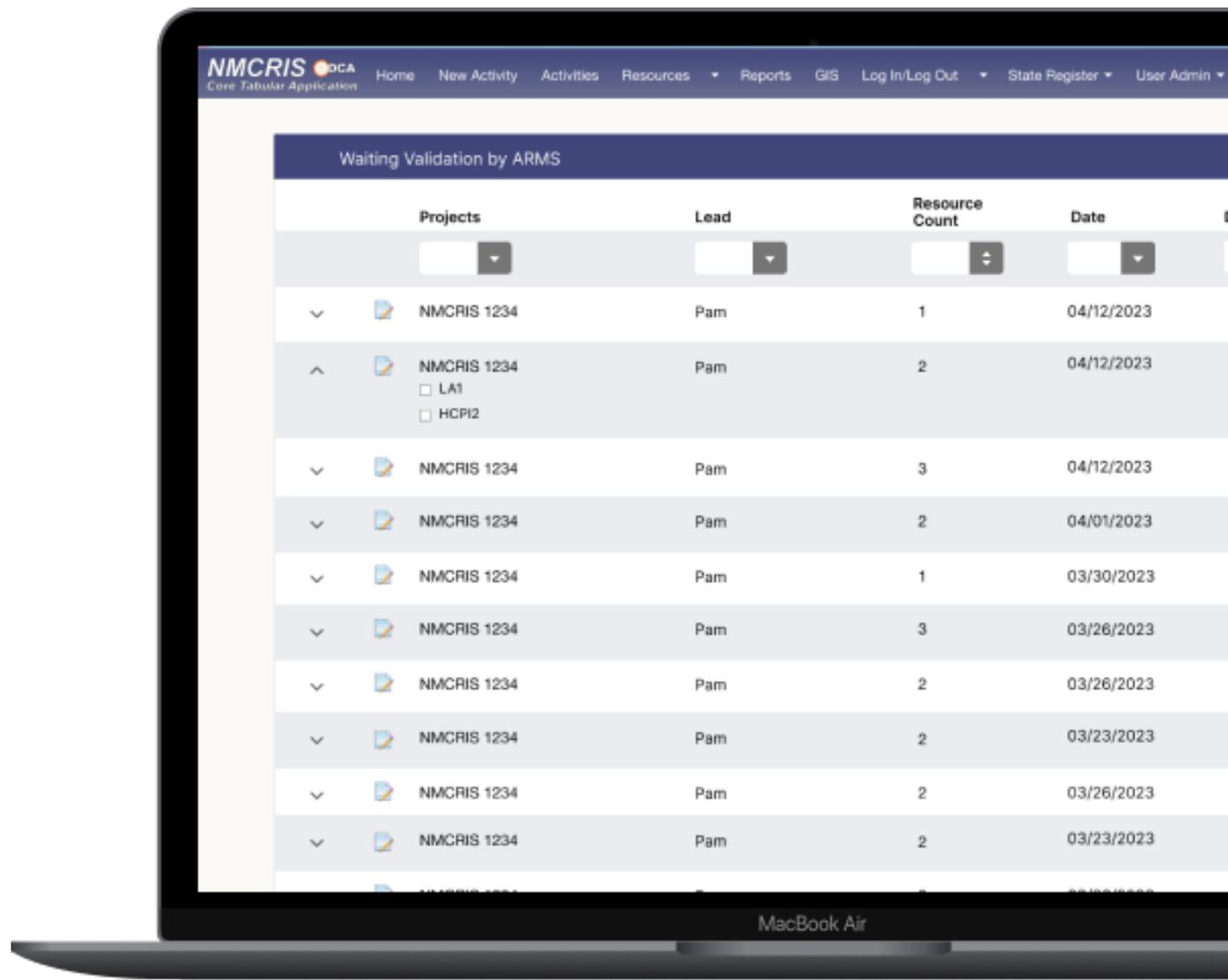
- Search resources based on attributes
- Filter by feature type, organization, or status
- Export data to PDF or XLS



## DASHBOARDS

# Work queues that tell you what to work on

- User specific dashboard with assigned projects
- Real-time view of the highest priority projects and their status
- Count of active project reviews and projects assigned to me



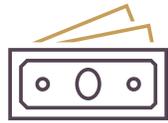
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# LESSONS LEARNED





# LESSONS LEARNED



## LARGE INVESTMENT

Time and Money



## DEDICATED STAFF

A dedicated team brings significant value to the project



## PROCUREMENT DIFFICULTIES

Procurement can cause delays, if you're not proactive and prepared it can affect the project schedule



## RELATIONSHIPS

Your relationship with your vendor is a partnership, teamwork and communication are a significant driver in success of a project

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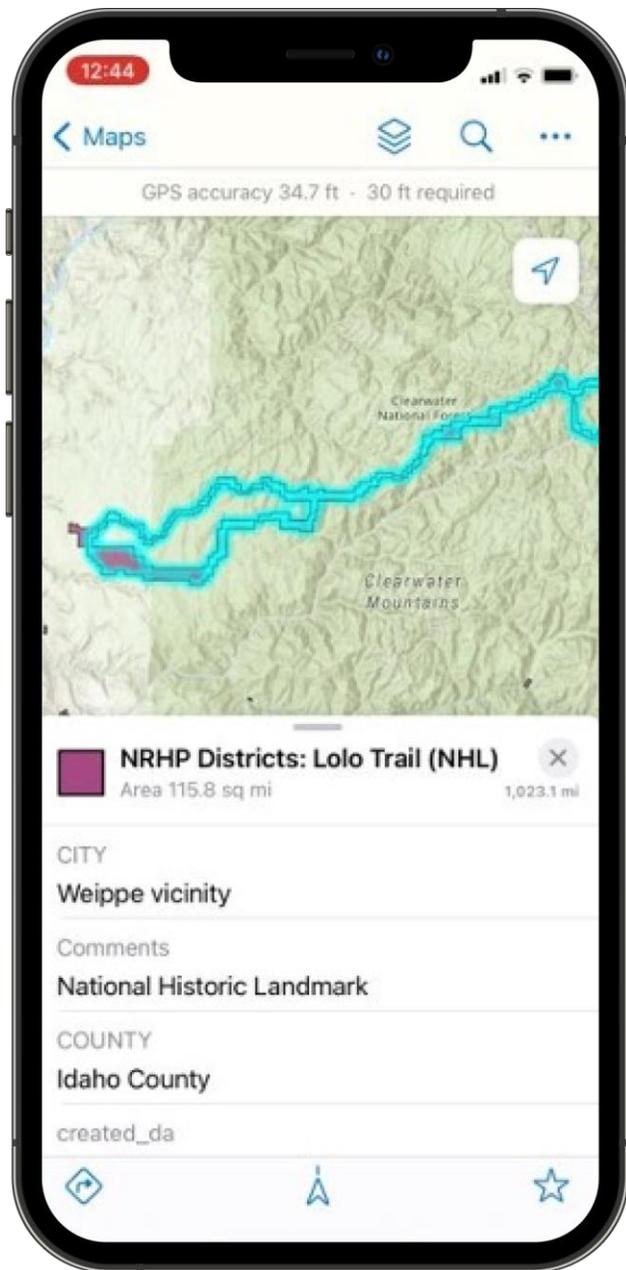
FUTURE





# STATE HISTORICAL PRESERVATION OFFICES

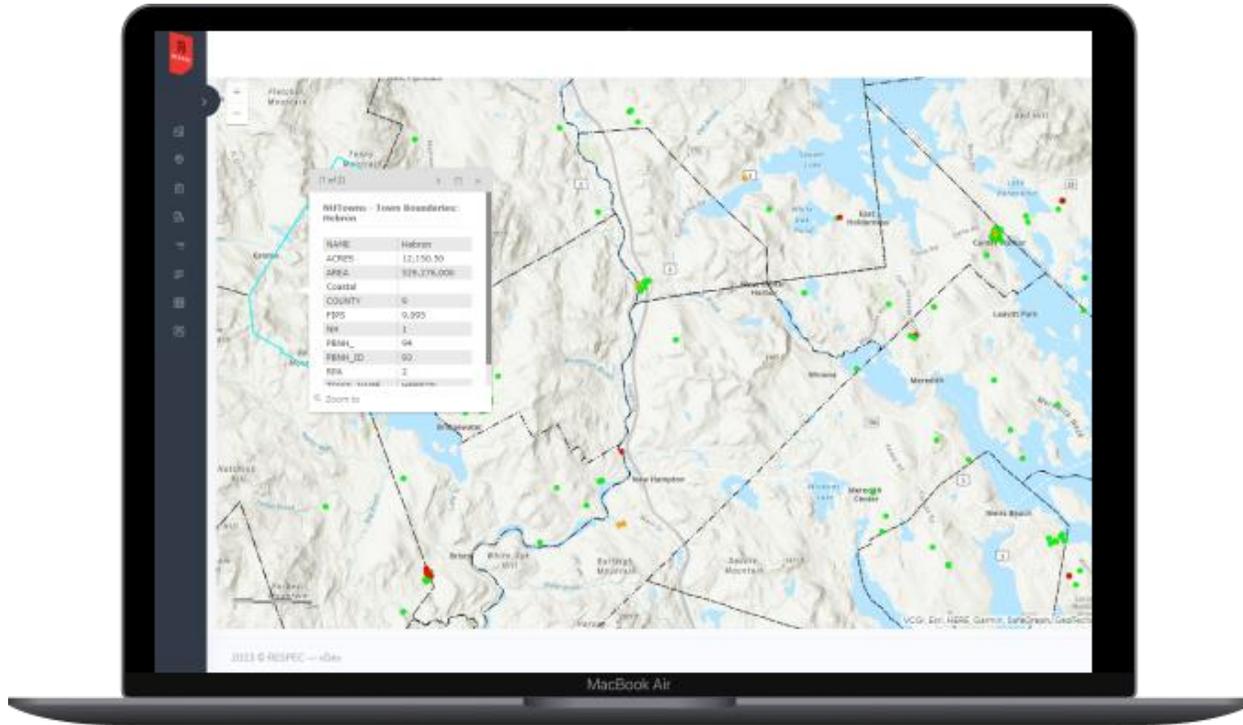




## FIELD MOBILE APPLICATION

# Access the CRIS from the field on your phone

- ▶ Field Data Collection
- ▶ Data Driven Maps
- ▶ Desktop and Mobile Publishing
- ▶ Offline/Online Data Syncing
- ▶ Photo Capture and Feature Creation



## PUBLIC MAP

# Allow citizens to see publicly available data

- ▶ Help to Raise Awareness and Appreciation for Cultural Heritage
- ▶ Promote Tourism and Economic Development
- ▶ Know What Locations have been Previously Surveyed
- ▶ Query the Database for Cultural Resources, Projects, National Register Listings, Surveys & Related Documents
- ▶ Increased Service & Accessibility to Federal and State Agencies, Tribes, County & Municipal Gov., Contractors, Academics, Researchers, & the General Public.
- ▶ Assistance to Gov. Agencies at all levels in Planning of Infrastructure Improvement Projects Years in Advance.



# FLEXIBLE BILLING OPTIONS



## Usage Based Pricing

- ▶ Pay for using the system
- ▶ Only pay for what you use
- ▶ Flexibility and Scale for your users



## Subscription Pricing

- ▶ User Based Pricing
- ▶ Access to everything **all the time**
- ▶ No need to download **everything**
- ▶ No need to pay **every time**



# CULTURAL RESOURCE INFORMATION SYSTEM

## THE FUTURE IS NOW

### **A Powerful Tool**

for managing and analyzing spatial data related to cultural resources, survey areas, archaeological sites, historic sites, and more.

### **Efficient and Effective Data Management**

Stores the Location of all Features (APEs, Survey Areas, Archaeological Sites, Historic Sites, etc.)

### **Easy Access to Valuable Information for Researchers & Other End Users**

Map-Based Online Inventory of Historic and Archaeological Records on File

### **Easy to Search for and Analyze Data**

Web-Based Maps for End Users to Provide all Geographic Query and Analysis Functionality

### **Display of FEMA Flood Plain Maps**

National Risk Index, provides Important Information for Planning and Development Purposes.

### **Compliance with Relevant Regulations**

An Alert System that notifies Users when their project Intersects with other Features, Avoiding Potential Conflicts.

### **Spatially & Keyword-based Search**

Efficient and Effective Data Retrieval, Ability to allow for Multiple Polygons for a Single Survey Area, while providing greater Flexibility in Data Mgt.

### **View, Display, Upload & Print Capabilities**

Using a Combination of Map Displays and Attribute Listings, we offer a Comprehensive Set of Tools for managing and Analyzing Spatial Data.

### **Pan, Zoom, Identify, Measure, & Plot Data**

While also Creating Custom Queries based on Data Fields.



THANK YOU  
QUESTIONS?

CONTACT US



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