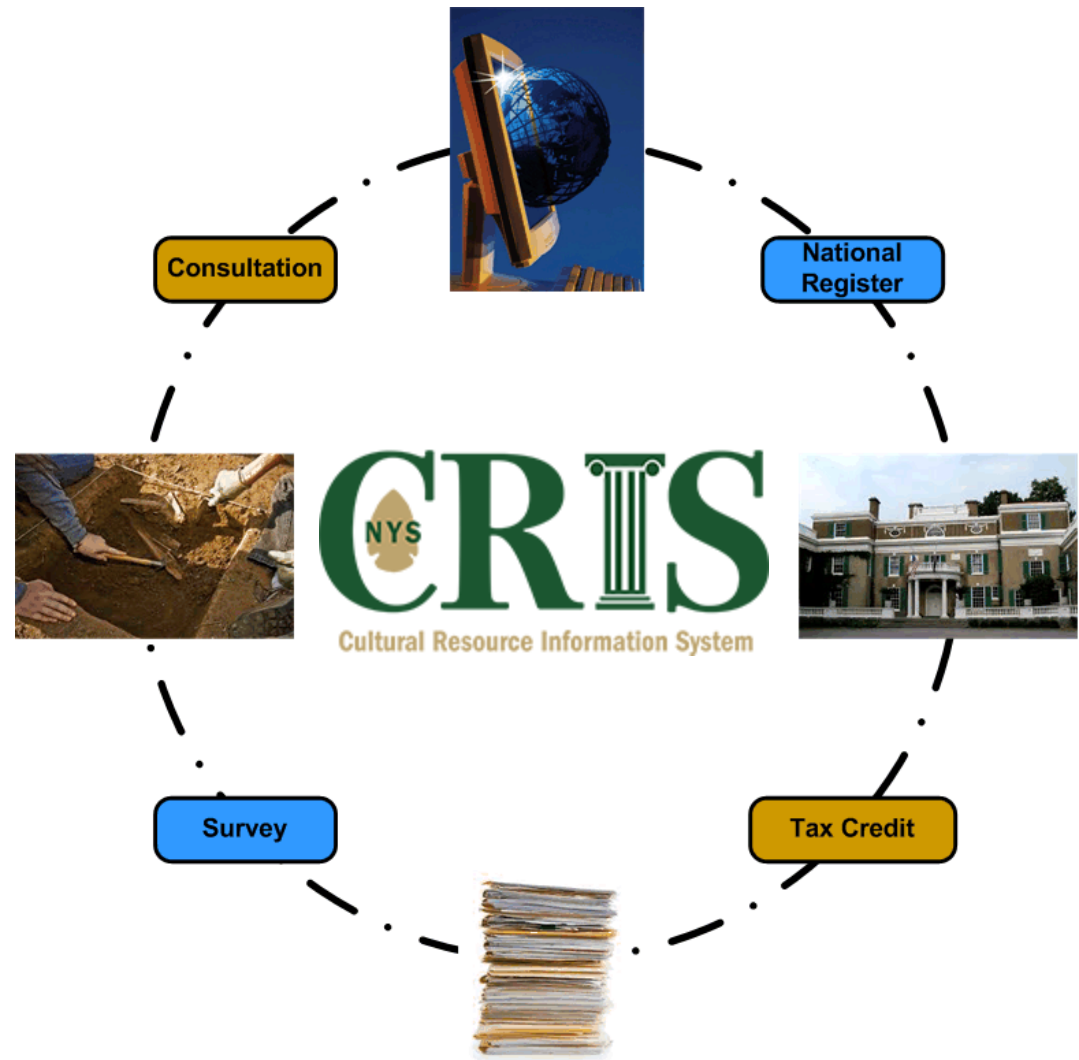


CRIS - The New York State *Cultural Resource Information System*

Larry Spraker
Fountains Spatial

Michael Schifferli
*NY State Historic
Preservation Office*



NYS SHPO Mission



- The NYS State Historic Preservation Office (SHPO) manages and protects the cultural resources within the state
- Process 8,000 – 12,000 environmental review projects/year (e.g., Section 106/1409)
- Determine the eligibility of resources and process nominations for the National Register
- Process and evaluate applications for the Investment Tax Credit Programs
- Manage incoming Building and Archeo Surveys

Objectives

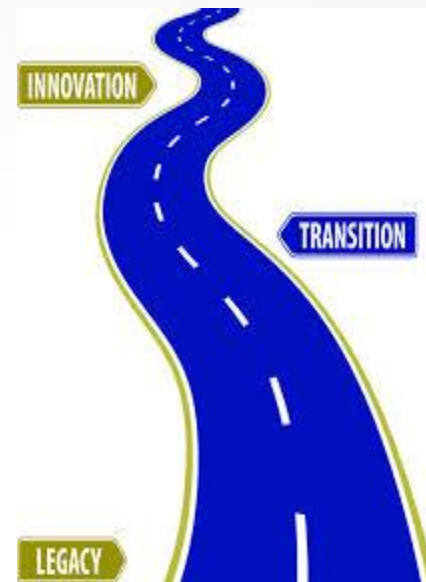


- Migrate from the legacy SPHINX system to a new, spatially enabled, state of the art system
- Provide the public with on-line access to all cultural resource data
- Streamline the internal processing of all projects
- Insure security of all sensitive data, protect privacy
- Based on a digital submission, tracking and communication process
- Build a robust inventory of cultural resources

A Journey from SPHINX to CRIS...



- Old technology to a state-of-the-art solution
- Separate modules to a fully integrated solution
- Standalone maps to spatially-enabled application with integrated GIS technology
- Paper submissions to digital submissions
- “Snail mail” and standalone email to integrated communications, notifications and requests
- Basic login to advanced security, privileges and integration with NY.GOV authentication
- Rooms of paper files to over 1 million pages of digitally scanned documents
- Integration of countless disparate data sources



What does CRIS Support?



- Consultation/Review Projects
- Requests for Evaluation of Eligibility
- Building and Archeological Surveys
- National Register Nominations
- Commercial and Homeowner Tax Credits
- CRIS is the “digital backbone” of SHPO



Cultural Resources (USNs)



- **USN = Unique Site (Number)**
- **What is a USN?**
 - Any resource that could be nominated for the National Register
- **Three types of USNs**
 - Buildings, structures, objects and sites (“above ground” resources)
 - Archeological Sites (“below ground” resources)
 - Districts (Historic Building Districts and Archeological Districts)

USNs (Continued)



- Buildings/Structure/Objects
 - Over 300,000 in database
 - Geocoded as point features in spatial database
 - About 1/3 of USNs did not successfully geocode due to address completeness/quality in SPHINX database
- Archeology Sites
 - Over 20,000 in database
 - Stored as a point feature in the spatial database
 - Already existed as point features in GIS at SHPO
 - Highly sensitive data, requires “Archeo” privileges from SHPO
- Historic Districts
 - Hundreds of districts
 - Stored as polygons in spatial database

Architecture



- Built with HTML, JavaScript and Dojo
- Leverages secure services with ArcGIS Server
- Middle tier of WCF web services
- Centralized Databases in SQL Server
 - Primary CRIS Database
 - CRIS Enterprise Geodatabase
- Utilize Views across both databases

Security and Privileges



- NY.GOV Authentication via SAML exchange
- HTTPS based services
- ArcGIS Server security
- Secure document delivery based on privileges
- Archeological Privileges

Searching the Database



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The screenshot displays the CRIS search interface. On the left, there are three tabs: 'Criteria', 'Spatial', and 'Results'. Under 'Criteria', there are two sections: '1. Navigate to your area of interest' and '2. Define or refine the location/area for your search'. Section 1 includes 'Option A: Zoom to a County or Municipality' with dropdown menus for 'Select County...' and 'Select Municipality...', and a 'Zoom' button. It also includes 'Option B: Find an Address Location' with a text input field containing '93 west ferry st buffalo ny' and a 'Find Address' button. Section 2 includes a text instruction and buttons for 'Point', 'Line', 'Rectangle', 'Circle', and 'Polygon'. Below this is '3. Generate a search radius around your graphic (Optional)' with a 'Generate Buffer' button. At the bottom left of the criteria panel are 'Search', 'Reset', and a refresh icon. The main map area shows a street grid with a blue polygon highlighting a specific area. A popup window titled 'Buildings' is open over one of the red square markers on the map. The popup contains the following information: 'USN Number: 02940.006777', 'Name: FIRST PRESBYTERIAN CHURCH OF BLACK ROCK', 'House: 44', 'Street: BRECKENRIDGE ST', 'City: BUFFALO', 'ZIP:', and 'Status: Eligible'. There are 'View' and 'Close' buttons at the bottom of the popup. The map includes a scale bar (0, 150, 300ft) and an ESRI logo in the bottom right corner.

Search Results



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Criteria Spatial **Results**

Building USNs (7 Results Found) [Download Results](#)

View	Zoom	USN	Name	Status
		02940.002584	593 WEST FERRY ST	Undetermined
		02940.015073	95 ALBANY ST	Undetermined
		02940.024081	925 West Ave	Not Eligible
		02940.024292	Private Residence-1917 - 49 Arkansas St	Not Eligible
		02940.024311	Residential - 642 Plymouth Ave	Not Eligible
		02940.025641	Italianate double house, ca. 1885 - 98 Breckenridge St	Undetermined
		02940.027712	Former White & Craft Malt House/A. Victor & Co Warehouse - 80 Lakeview Ave 14201	Not Eligible

Projects (2 Results Found) [Download Results](#)

View	Zoom	Number	Name	Status
		14PR03794	Christopher & Rissa Przekop	Closed
		14PR03795	Building Demolition - West End 2 Interpretive Building	Closed

Building Surveys (1 Results Found) [Download Results](#)

View	Zoom	Number	Name
		12SR00215	North Prospect Hill Neighborhood Reconnaissance Level Survey

Digital Submissions and Communications



- Users submit new projects via a series of wizards
- Incoming Data is stored in a “queue”
- SHPO staff triage the data in the queue, import the data into the CRIS database, assign reviewers
- Conduct Reviews
- All communications with the end user are done digitally within the system (emails, dashboards)
 - Request for more information
 - Consolidated Responses from reviewers

SHPO Reviewers



- Review the incoming data
- Determine the eligibility of each resource
- For consultation projects reviewers determine whether the project will have any affect on cultural resources in the project area
- Different types of reviewers (Survey, Archeological, Technical, NR)

Submission Wizards – Consultation Project



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Submit

The links below provide access to a series of “wizards” to submit information to SHPO for any of the available program areas. To begin a submission, click the desired link below which will display a more detailed description in the right panel, then click the Start button provided.

I would like to submit a new project to SHPO in one of the following program areas:

- [Consultation Project](#)
- [Independent Survey](#)
- [Request for Evaluation of Eligibility](#)
- [National Register Application](#)
- [Tax Credit Pre-application](#)

I would like to submit information to SHPO for an existing project:

- [Submit New Information for an Existing Project](#)

I would like to continue a submission I've already started:

- [Continue/Edit an Existing Submission](#)

Consultation Project

If you require a letter from SHPO to conduct a project, this process will guide the user through a wizard to submit information regarding the location and nature of the project to SHPO for review. A more detailed description of the Environmental Review program and SHPO consultation process is provided below.

The Environmental Review program is a planning process that helps protect New York's historic cultural resources from the potential impacts of projects that are funded, licensed or approved by state or federal agencies. Under Section 106 of the National Historic Preservation Act and Section 14.09 of the New York State Historic Preservation Act, the SHPO's role in the review process is to ensure that effects or impacts on eligible or listed properties are considered and avoided or mitigated during the project planning process. In addition, the SHPO advises local communities on local preservation environmental reviews, upon request, under the provisions of the State Environmental Quality Review Act.

Please be aware that reviews undertaken by the Field Services Bureau relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

[\[Show Less\]](#)

Step 1 – Contact Information



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New Consultation

Contacts | Overview | Location | Resources | Attachments | Summary

Cancel

New Project

Step 1: Contact Information

Please enter the information for the primary contact person for this project. The accuracy of this information is extremely important as all communication and correspondence regarding the review of this project will be sent to this person.

* Sal./First Name	Mr. LARRY	* Last Name	SPRAKER
Title		Organization	Fountains Spatial, Inc.
* Address 1	137 Jay St	Address 2	
* City	Schenectady	* State	NY
* ZIP	12305	Primary Phone	
Alternate Phone		Fax	
* Email	lspraker@hotmail.com	* Confirm Email	lspraker@hotmail.com

If there are additional contacts for this project, please add the information for each additional contact person below.

+ Add Additional Contact

Step 2 – Project Overview



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New Consultation #XT2ORJNHC5FT

[Contacts](#) | [Overview](#) | [Location](#) | [Resources](#) | [Attachments](#) | [Summary](#)

[Cancel](#)



Step 2: Project Overview

Please enter the information regarding the nature and extent of your project. Please be comprehensive when completing the form

* Project Name :

* Project Description :

* Will this project involve ground disturbance? :

* Has there been previous ground disturbance on this property :

* Does the project area have one or more buildings present? :

* Primary Agency : New York State Department of Health

Type of permit/approval :

Reference Number :

Secondary Agencies : If there are additional agencies involved with this project, please add the agencies below

Step 3 – Project Location



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New Consultation : XT2ORJNHC5FT Test Project

[Contacts](#) | [Overview](#) | **[Location](#)** | [Resources](#) | [Attachments](#) | [Summary](#)

Cancel

Step 3: Project Location

Please enter the location of your project. For larger project areas you will be required to draw your project area on a map.

Can you locate your project by entering an address, street intersection, or X,Y coordinates?

Yes

Address Intersection Coordinates

House Number:

Street Name:

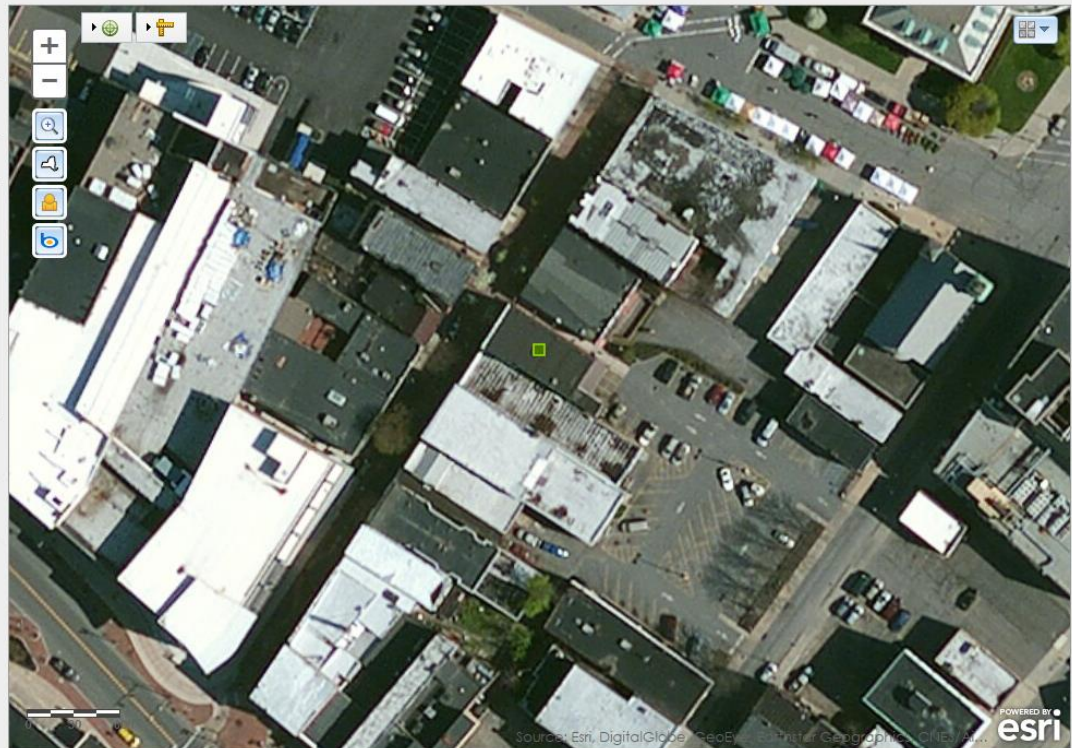
City:

State: ZIP:

Do you want to accept this location or do you need to adjust it?

Is this project limited to a single parcel? Yes No

You may now proceed to the next step.



Step 4 – Identify Built Resources



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New Consultation : XT2ORJNHC5FT

Test Project

[Contacts](#) | [Overview](#) | [Location](#) | **[Resources](#)** | [Attachments](#) | [Summary](#)

Step 4: Identify Built Resources

Please enter the location(s) of the built resources within your project area. Please click the "Enter Built Resource" button below to add each building, structure, object, or site within the project area. For each resource entered, the wizard will guide you through the process of entering the location, information, photos, and other relevant documents for the resource.



Step 4A – Resource Location



Step A: Locate the Resource

Please use the form and map interface to locate the resource. If the address is known, please enter this information in the form below.

Address Intersection Coordinates Manual

House Number:

Street Name:

City:

State: ZIP:

NOTE: Since your project was successfully located in a previous step using an address, the same address and point location (after any adjustments) has been imported as the potential location for the first built resource within your project area.

Click the button below to adjust the location or proceed to next step if it is correct.

Previous

Step 4B – Resource Information



Built Resources x

137 Jay St Location | **Details** | Documents Cancel

Step B: Resource Information

Please enter the information about the resource below. Please note the first tab is REQUIRED information, while the Supplemental tab, although not required, is extremely helpful in reviewing the project and will expedite the project review. The Comments tab can be used to provide notes on this resource to SHPO.

Required

Required Information

Resource Type:

Enter the Property Name:

Year of Original Construction:

Number of Residential Units:

Are there any outbuildings or landscape features?

Please identify the current uses for this resource (minimum of one):

Current Uses

Use	Type	Other Description
<input type="button" value="x"/> COMMERCE/TRADE	professional	

Step 4C – Resource Photos



Built Resources x

Fountains Spatial Offices Location | Details | Documents Cancel ?

Step C: Photographs and Attachments
This step will allow you to upload digital photographs as well as other attachments (documents) related to this built resource.

Photos Attachments

Photographs
Please upload digital photos of this resource. At least one photo is required. Acceptable photo file formats are JPG, GIF, PNG, or TIF.
NOTE: Uploading PDFs in the Photos tab may delay the review of your project.

* Title

Description

* Date of Photo * Interior / Exterior Exterior ▼

Max file size: 30MB

* File Choose File No file chosen

+ Upload Photo

Uploaded Photos:

	Title	File
x	Front of Building	2015-10-27T16-20-09_house.jpg

Step 4 – Identify Built Resources



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New Consultation : XT2ORJNHC5FT

[Contacts](#) | [Overview](#) | [Location](#) | **[Resources](#)** | [Attachments](#) | [Summary](#)

[Cancel](#)

Test Project

Step 4: Identify Built Resources

Please enter the location(s) of the built resources within your project area. Please click the "Enter Built Resource" button below to add each building, structure, object, or site within the project area. For each resource entered, the wizard will guide you through the process of entering the location, information, photos, and other relevant documents for the resource.

[+ Enter Built Resource](#)

Delete	Edit	Add Outbuilding	Resource Name
			Fountains Spatial Offices

Step 5 – Project Attachments



New Consultation : XT2ORJNHC5FT

Contacts | Overview | Location | Resources | **Attachments** | Summary

Cancel

Test Project

Step 5: Project Level Photographs and Attachments (OPTIONAL)

This is an OPTIONAL step which allows you to upload photographs as well as attachments related to the project (beyond those already uploaded for each built resource at Step 4C). Examples of additional documentation that may help to expedite review of your project include:

- Streetscapes
- Photo key maps
- Floor plans or sketches of existing and proposed conditions
- Elevation drawings
- Specifications for proposed work, including methods and materials
- Condition or structural reports
- Environmental impact statements
- GIS shapefiles compiled in .zip format

Do you have any additional photos or attachments for the project?

(Note: This is different than resource specific photos/attachments that may have already been uploaded)

Photos Attachments

Photographs

This is an optional section which will allow you to upload digital photos for the project. Acceptable photo file formats are JPG, GIF, PNG, or TIF.

NOTE: Uploading PDFs in the Photos tab may delay the review of your project.

* Title

Description

* Date of Photo * Interior / Exterior

Max file size: 30MB

* File No file chosen

Previous Next

Step 6 - Summary



New Consultation : XT2ORJNH5FT

[Contacts](#) | [Overview](#) | [Location](#) | [Resources](#) | [Attachments](#) | **Summary**

Test Project

Step 6: Summary

This is the final step of the New Consultation Project wizard. The dialog below provides a summary of the information submitted for your project. Please review carefully and if any information is incorrect or incomplete, please use the "Previous" button to return to a desired step to correct or expand upon the information provided. When the summary below is confirmed, click the "Submit to SHPO" button to complete your submission.

Primary Contact : LARRY SPRAKER (lspraker@hotmail.com)
Secondary Contacts :

Project Name : Test Project
Project Description : Test
Primary Agency : New York State Department of Health
Secondary Agencies :

Project Location : 137 Jay St, Schenectady, , 12305

Built Resources :

Project Photos : 0 photo(s)
Project Attachments : 0 attachment(s)

Challenges/Thoughts/Tips



- External Authentication and privileges/security
- Address data incomplete = Incomplete geocoding
- Dojo is complex, poor documentation
- Query layers and performance
- Privacy was a challenge
- Securing ArcGIS Server services (need for other HTTPS services)
- Never send attachments via email
- JavaScript and session timeouts
- Browser differences
- Google docs for collaboration!

Thank you!

Larry Spraker

Fountains Spatial

137 Jay St

Schenectady, NY 12305

Larry.spraker@fountainsamerica.com

518-346-0942

