



*Center for Buildings, Infrastructure and Public Space*

# HISTORIC HOUSE TRUST

**Under the guidance of  
Prof. Feniosky Peña-Mora & Prof. Fredric Bell**

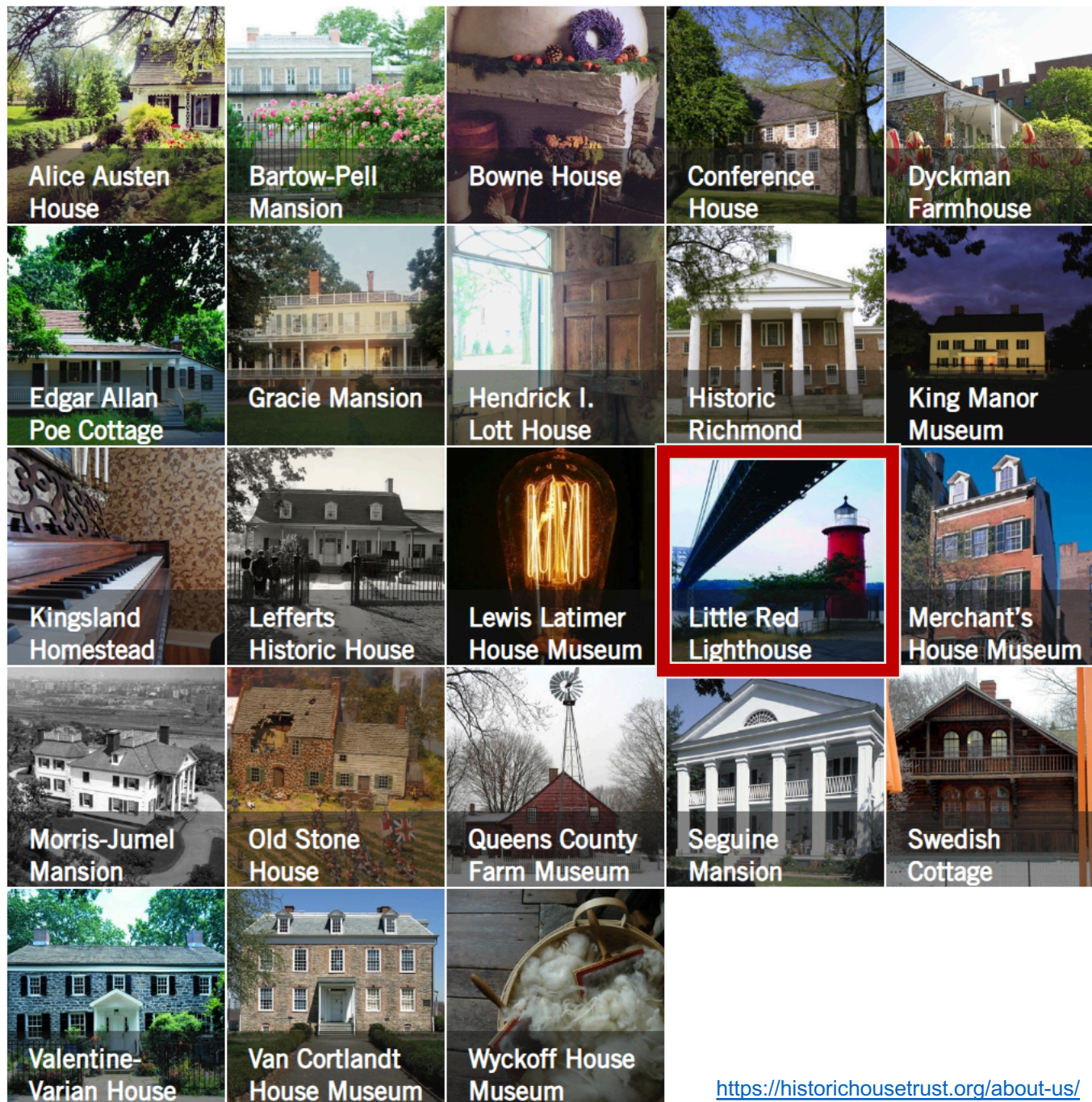
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The Historic House Trust, founded in 1989, is a non-profit organization operating in tandem with the NYC Parks. Their mission is to restore, interpret, and promote the sites, which span 350 years of New York City life. The Trust includes 23 historic sites located throughout the city's five boroughs.



# Table of Contents:

Brief review of last presentation:

- Research Process
- Brief Background of Little Red
- Objective
- Scope of Research

- **Three Types of Company**
- **Off-site & On-site Approach**
- **Funding Options for the Conservation of Historic Lighthouses**



# Research Process:

## What?

What we need to do?

- Little Red Site Visit
- National Lighthouse Museum
- The Noble Maritime Collection

## Why?

Why we need to preserve the lighthouse, most importantly why does Little Red need a preservation plan?

- Existing Policy: National Historic Lighthouse Preservation Act

## How?

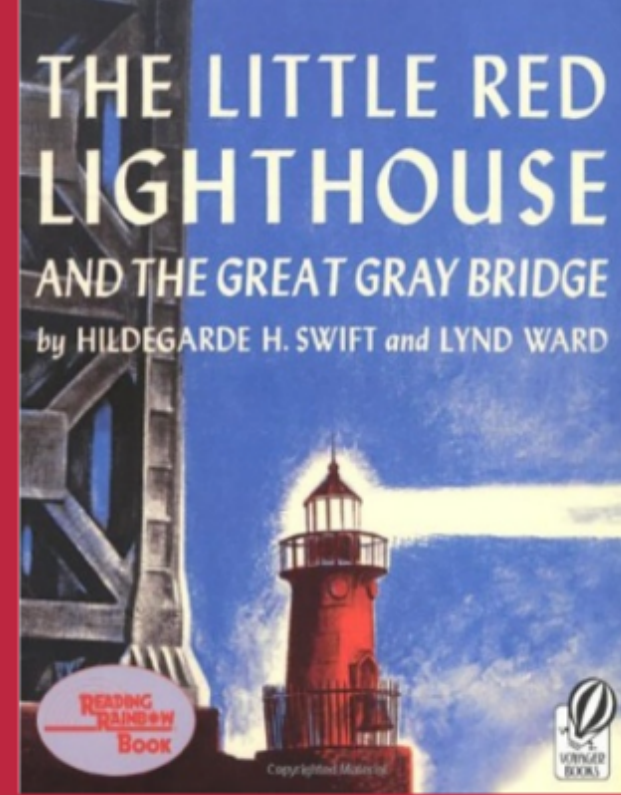
How we should execute the preservation process ?

- Three levels of scope of research
- Off-site and On-site approach
- Fund raising



# Brief Overview of the Background

- Made famous by the children's book
- Added to the National Register of Historic Places in 1979
- The only lighthouse on the island of Manhattan
- Current physical conditions are in bad shape
- The lighthouse celebrates its 100<sup>th</sup> anniversary in 2021
- Needs a long lasting plan



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- Uninviting Routes
- Security Issue



- Challenge I: Physical Condition of the Lighthouse
- Challenge II: Accessibility

**Objective: Rehabilitate the lighthouse and improve the site**



1. Bridge to cross Riverside Drive



2. Tunnel to go under Henry Hudson Parkway



3. Bridge to cross Amtrak



4. First sight of the lighthouse



## WHY?

If a lighthouse is destroyed today, the government is not required to rebuild the lighthouse, since its original useful purpose has been replaced by 21<sup>st</sup> century technology.

**Why continue to save these historic beacons?**

Former Secretary of the Interior, Gale Norton, stated, “Lighthouses capture the spirit of the seafaring adventurers and tap into the call we all have inside us to be adventurers.”

Lighthouses are a threatened species and once gone, they are lost forever.



**Level I:** The Basic  
Preservation  
Planning Process

**Level II:** Solutions for  
Little Red Lighthouse

**Level III:** Beyond  
Basic Preservation  
Study

**Scope of Research**



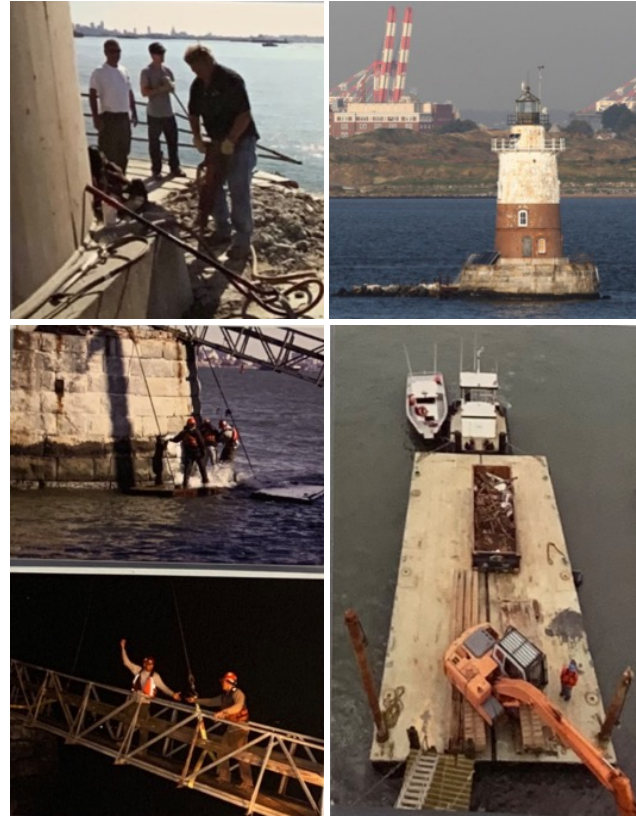
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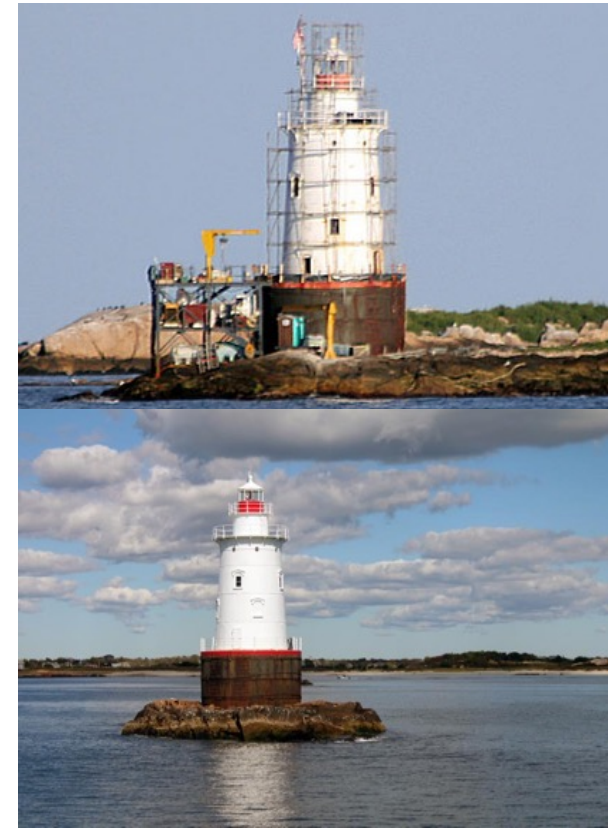
## Level I: The Basic Preservation Planning Process

- Identification of Character-defining Features
- Condition Assessment and Analysis
- Historic Research: Case Study



### Robbins Reef Lighthouse

Lighthouse in Bayonne, New Jersey



### Sakonnet Point Lighthouse

Lighthouse in Little Compton, Rhode Island



**Level I: The Basic  
Preservation  
Planning Process**

**Level II: Solutions for  
Little Red Lighthouse**

- **Types of Company**
- Off-site
- On-site

**Three Types of Company:**

- I. **Chimney Companies**
- II. **Restoration Companies**
- III. **Metal Fabrication Specialized Companies**



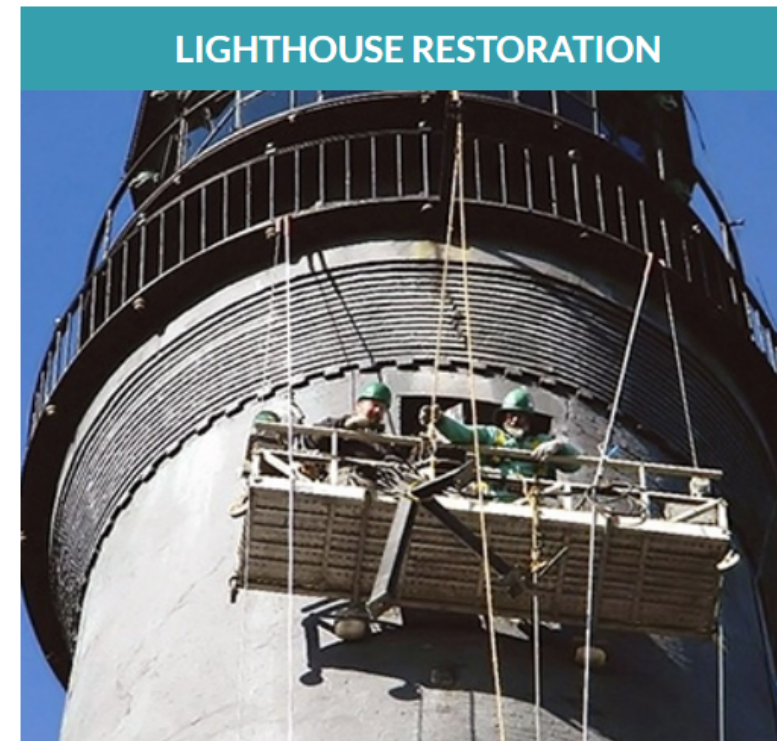


## Scopes and Specialties

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Lighthouse Restoration              | Murals Relocation and Restoration    |
| Structure Relocation and Shoring    | Residential and Commercial Buildings |
| Historic Smokestacks and Chimneys   | Artwork Restoration                  |
| Monument Relocation and Restoration | Arches and Gates Restoration         |



- Specialized in chimney demolition and maintenance
- Had experience working with tall historic structures
- Worked on more than 50 light station projects and are recognized as the industry leader







ABCORE RESTORATION IN RHODE ISLAND

- Over 35 years of experience in historic restoration and renovation throughout Rhode Island
- Thorough project planning process and coastal experience
- Awarded Plum Beach Lighthouse exterior restoration project and completed it in 2003



PLUM BEACH LIGHTHOUSE



<http://www.abcorerestoration.net/lighthouses.html>





- Offers comprehensive support in casting and metal fabrications
- Evolved in a nationally-recognized organization with expertise in restoration, preservation and custom design building
- Had previous collaborations with NYC Parks Department



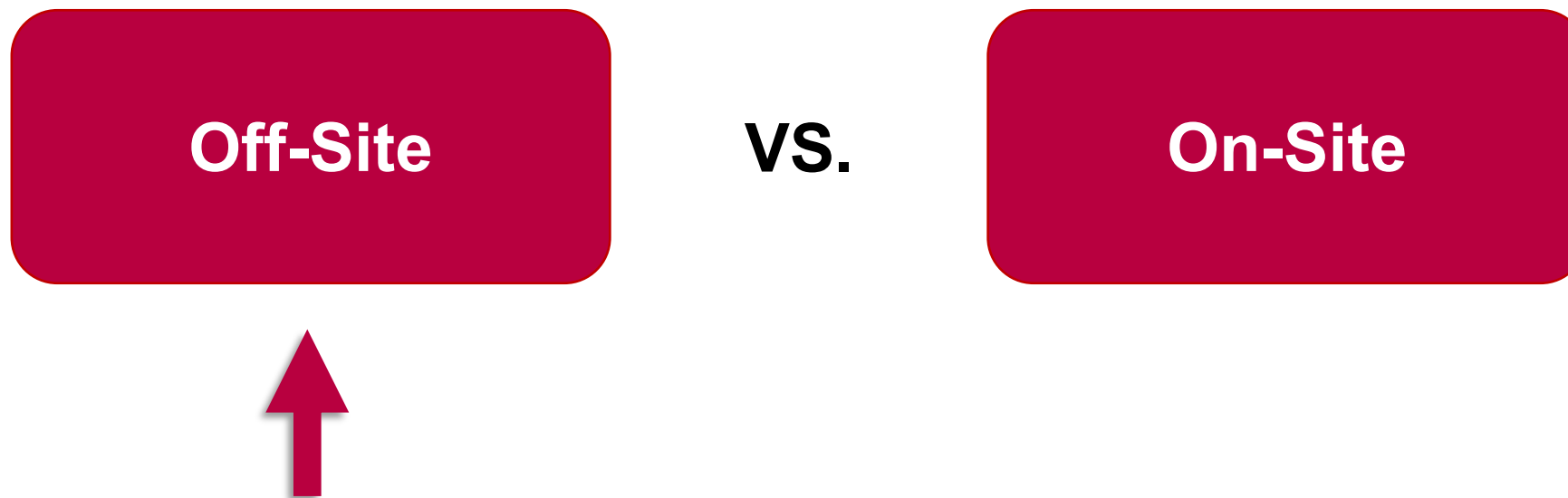
Washington Square, New York, NY

- Restoration and re-creation of the historical cast iron gates post and fencing

<http://www.allenmetals.com/>



## Off-site and On-site Approach





# Off-site restoration plan – Provided by HHT

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1. Architecture Contract Items: \$2,000,000
  - a) Lighthouse deconstruction and off-site shipping
  - b) Off-site restoration: blasting, priming, first coat painting, and dry fit reconstruction
  - c) New foundation reconstruction
  - d) Wrought iron fence reconstruction
  - e) Electrical upgrades: new electrical supply to lighthouse
2. Landscape Contract Items: \$1,000,000
  - a) ADA Access: ramp, grading, paving and other landscape upgrades
  - b) Architectural lighting
  - c) Restrooms

Total Hard Cost: \$3,000,000

Complexity Factor 20%: \$600,000

Total Soft Cost (40% per Capital): \$1,440,000

Escalation at 8% per annum from 2021 to 2023: \$1,310,000

Total Project Cost \$6,350,000



## Off-site:

### Pros:

- Deconstruction - completely restored and last longer
- Cost effective
  - Prevailing wage is relatively low (a construction worker's salary: \$20/h in NYC; \$17/h in Buffalo; \$13/h in Alabama) -[indeed.com]
  - Less permitting cost
- Feasible to reconstruct a new foundation
- Less influence on George Washington Bridge and nearby environment

### Cons:

- Lighthouse will not exist on site – whole reconstruction process may take around two years
  - Inconvenient for events: Annual Little Red Lighthouse Festival; Little Red Lighthouse Group Tour
  - Local community protest
- Large amount of initial investment - \$6 million
  - Capital fund may not be realistic at this time due to COVID – 19

## On-site:

### Pros:

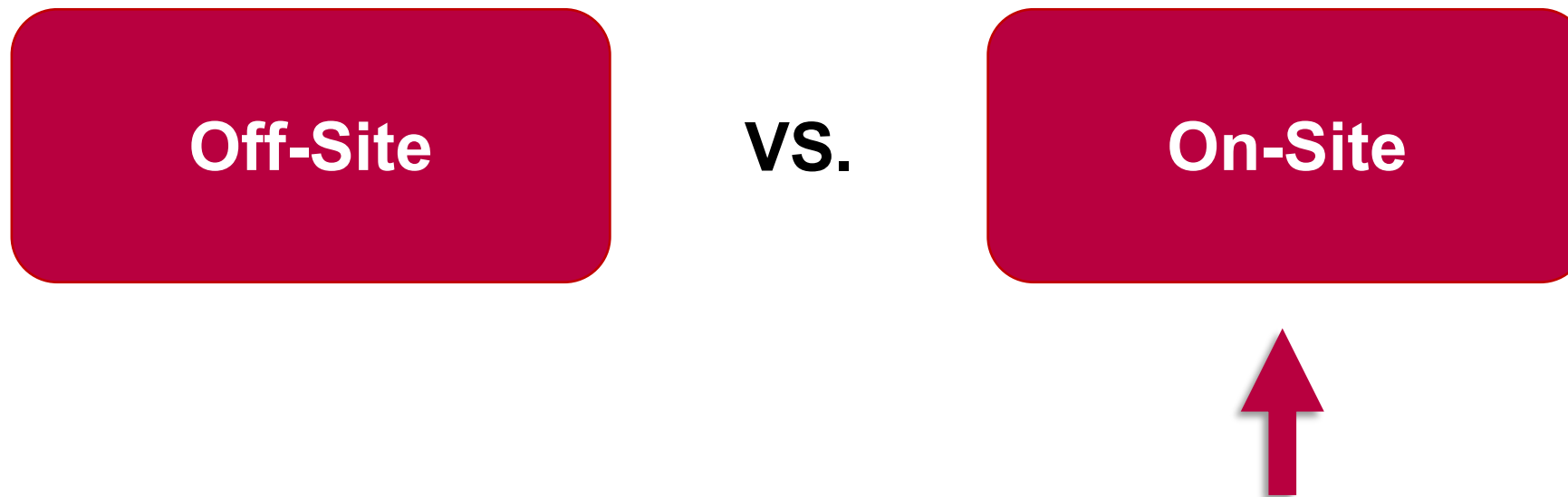
- Restoration process can be completed through several phases
  - Funds can be raised in phases
  - Combine capital and private funds
- Work partly done by volunteers – reduce labor costs
- Have lighthouse on site during construction
  - People in the community can feel involved – maybe willing to provide help

### Cons:

- Higher labor and material costs in NYC
- Need NYC Parks Construction Permit -[nycgovparks]
  - Issued for duration not to exceed two years
  - Amendment request is needed when scope or limits of work changes
- Some historic materials or components may still need to be shipped to off site for experiment or research
- Potential influence on George Washington Bridge and surrounding environment: grass, water, rocks, trees



## Off-site and On-site approach





# Exterior and Interior Restoration of the Kīlauea Point Light Station

\$ 1,500,000



| Steps   | 2012                      |   |                           |   | 2013                      |   |   |   |
|---|---------------------------|---|---------------------------|---|---------------------------|---|---|---|
|   | 1                         | 2 | 3                         | 4 | 1                         | 2 | 3 | 4 |
| <ul style="list-style-type: none"> <li>• Exterior Restoration                             <ul style="list-style-type: none"> <li>• Clean and paint the tower</li> <li>• Remove inappropriate elements</li> <li>• Repair the cast iron roof</li> </ul> </li> <li>• Interior Restoration                             <ul style="list-style-type: none"> <li>• Clean and paint interior surface, stairs</li> <li>• Install new windows</li> <li>• Open the closed vents</li> </ul> </li> <li>• Additional stabilization                             <ul style="list-style-type: none"> <li>• Protection of the Fresnel lens</li> <li>• Replace the disintegrated anchor bolts</li> </ul> </li> </ul> | [Bar spanning 2012 Q1-Q4] |   |                           |   |                           |   |   |   |
|   |                           |   | [Bar spanning 2012 Q3-Q4] |   |                           |   |   |   |
|   |                           |   |                           |   | [Bar spanning 2013 Q1-Q2] |   |   |   |

Lighthouse in Kalihiwai, Hawaii



# Site Feature Upgrades of the Grand Haven Lighthouse

\$ 1,000,000



Lighthouse in Grand Haven, Michigan

| 2017                               | First quarter |   |   | Second quarter |   |   | Third quarter |   |   | Fourth quarter |    |    |
|------------------------------------|---------------|---|---|----------------|---|---|---------------|---|---|----------------|----|----|
| Steps                              | 1             | 2 | 3 | 4              | 5 | 6 | 7             | 8 | 9 | 10             | 11 | 12 |
| • Plan and Approvals               |               |   |   |                |   |   |               |   |   |                |    |    |
| • Close to make decision           |               |   |   |                |   |   |               |   |   |                |    |    |
| • Approval and fund from City      |               |   |   |                |   |   |               |   |   |                |    |    |
| • Restore path toward the pier     |               |   |   |                |   |   |               |   |   |                |    |    |
| • Upgrade the catwalk              |               |   |   |                |   |   |               |   |   |                |    |    |
| • Restore the pier                 |               |   |   |                |   |   |               |   |   |                |    |    |
| • Design and wait fund             |               |   |   |                |   |   |               |   |   |                |    |    |
| • Chip away the pier project       |               |   |   |                |   |   |               |   |   |                |    |    |
| • Push back the pier project again |               |   |   |                |   |   |               |   |   |                |    |    |
| • Save the catwalk campaign        |               |   |   |                |   |   |               |   |   |                |    |    |
| • Push back the pier project again |               |   |   |                |   |   |               |   |   |                |    |    |
| • Fundraise for the fashion show   |               |   |   |                |   |   |               |   |   |                |    |    |

<http://www.ghlighthouse.com/>





# On-site restoration plan (our plan)– Updated cost estimate and timeline

Hard Cost: \$ 3,073,000

| Steps   | First year |   |   |           | Second year |              |   |   | Third year |            |   |   | Fourth year |   |   |   |
|---|------------|---|---|-----------|-------------|--------------|---|---|------------|------------|---|---|-------------|---|---|---|
|   | 1          | 2 | 3 | 4         | 1           | 2            | 3 | 4 | 1          | 2          | 3 | 4 | 1           | 2 | 3 | 4 |
| • <b>Stabilization</b>  | \$ 3,000   |   |   |           |             |              |   |   |            |            |   |   |             |   |   |   |
| • <b>Condition Assessment Report</b>  | \$ 7,500   |   |   |           |             |              |   |   |            |            |   |   |             |   |   |   |
| • <b>Bid and Approvals</b>  |            |   |   | \$ 12,500 |             |              |   |   |            |            |   |   |             |   |   |   |
| • <b>Exterior Restoration</b><br>• Clean and paint the steel tower<br>• Wrought Iron fence reconstruction<br>• Caulk all open joint in the structure<br>• Foundation reconstruction |            |   |   |           |             | \$ 1,000,000 |   |   |            |            |   |   |             |   |   |   |
| • <b>Interior Restoration</b><br>• Clean and paint interior surface, stairs and metal floor<br>• Repair damaged surfaces and equipment<br>• Install video cable for web-cam         |            |   |   |           |             |              |   |   |            | \$ 800,000 |   |   |             |   |   |   |
| • <b>Site Feature</b><br>• Provide new electrical supply<br>• Provide architectural lighting<br>• Provide ramp, grading, paving upgrades<br>• Install interpretive signages         |            |   |   |           |             |              |   |   |            |            |   |   | \$1,250,000 |   |   |   |



## Baseline --- Safety and Accessibility

### around the lighthouse

- Pedestrian access kept away from vehicles
- Access for disabled persons
- Fences and handrails for steps, slopes or other dangers
- Warning signs, first aid and emergency telephones



### within the lighthouse

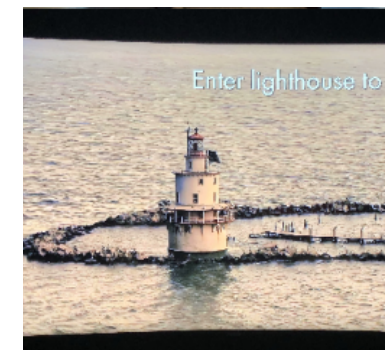
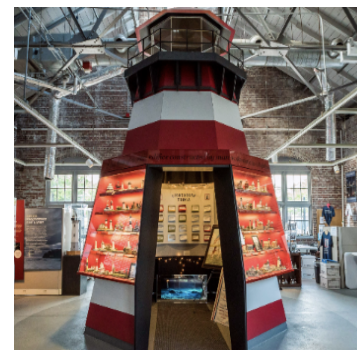
- Add restrictions to access, and display clear signs
- Paint edges of stairs with non-slip paint of different colors
- Provide enough light
- Consider the special visitors





## Platform --- Exhibition and Presentation

- Staff: people with appropriate knowledge and experience
- Display boards: a balance of text, diagrams and pictures to make information as clear as possible for adults and children
- Audio visual: Small presentations can stand-alone to arouse interest
- Computer based: a database to show information or games to enrich knowledge



<https://www.intellectuالتakeout.org/article/life-lessons-modern-day-lighthouse-keeper/>



## Large volume of visitors

Successful

- a. The book *Little Red Lighthouse*
- b. A few inexpensive souvenirs related to the children's story include postcards, calendars, pin badges, candles, posters
- c. Bakery, candle making, drawing

### Theme Park/Gift Shop



- a. Run as a separate venture
- b. Attractive to families and couples
- d. Run as a place to hold special events

### Café



## Landscape upgrade

Unsuccessful

### Museum



- a. Drawings and photographs in an art form
- b. Lighthouse's specific knowledge and its history
- c. Exhibit related equipment and illustrate their unique features

Successful

### Floating Restaurant



- a. Search for additional revenues
- b. Make full use of the scenarios
- c. Help to arrange tours and encourage revisits

Unsuccessful



**Level I:** The Basic Preservation Planning Process

**Level II:** Solutions for Little Red Lighthouse

**Level III:** Beyond Basic Preservation Study

- Funding Options for the Conservation of Historic Lighthouse

- National and Local
- Potential Sources of Revenue from Commercial Operations
- Public Sponsorship

**Scope of work**



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# Funding Use

- Capital Fund
  - > 90% of the cost for lighthouse reconstruction
- Commercial and Public Revenue
  - General Money for HHT
  - Daily Operation
  - Routine Maintenance





# National and Local Funding Options

## ➤ New York City Budget

- Each June, the NYC Community Board's committees consider the most pressing needs for improved government services and capital investment. In September and October, a list of Capital and Expense Priorities is created. In February and March, the Community Boards and the City Council review the Mayor's preliminary budget for the coming fiscal year.
- FY21 Capital Priority

## ➤ Manhattan Delegation Funding

- Potential target funding source

## ➤ Preservation Grants Program by United States Lighthouse Society

- Up to \$10,000
- Starting fund for preservation planning or small restoration project
- Non-profit organization with official 501(c)3 designation
- National Register of Historic Place and New York City Landmark





# Potential Sources of Revenue from Commercial Operations

## Revenue Arising From:

### ➤ Renting out Property:

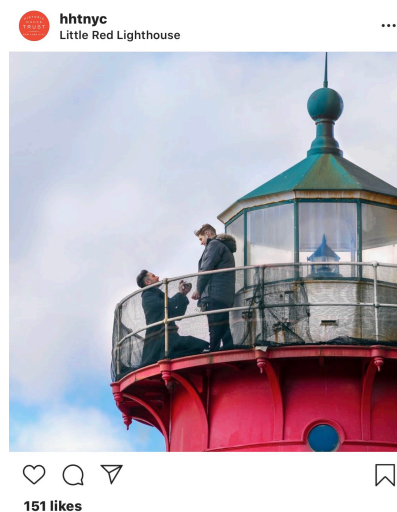
#### ▪ **Filming**

- Example: In the Cut (2003) directed by Jane Campion

#### ▪ **Business Shooting**

- Example: Fisgard Lighthouse, British Columbia, Canada, where the lighthouse is being used as a backdrop for wedding photographs

- Revenue: Depends



### Awesome New York Film Locations No. 12: The Little Red Lighthouse in 'In the Cut'

<https://theculturetrip.com/north-america/usa/new-york/new-york-city/articles/awesome-new-york-film-locations-no-12-the-little-red-lighthouse-in-in-the-cut/>





# Potential Sources of Revenue from Commercial Operations

## Revenue Arising From:

### ➤ Renting out Property:

#### ▪ Private Events

- Reasons: Unique place in Manhattan, meaningful for people who love the book
- Example: Belinda McCarthy got married at the Little Red Lighthouse on December 20<sup>th</sup>, 2011
- Revenue: ~ \$500 for 30-minute block



#### Ponce Inlet Lighthouse & Museum in Florida

- National Historic Landmark
- Available for wedding ceremonies consisting of 50 guests or less
- Cost includes a non-refundable \$500 donation, plus regular admission costs of \$6.95 per adult and \$1.95 per child. Additional services require additional charge.



(<https://www.ponceinlet.org>)



# Potential Sources of Revenue from Commercial Operations

## Revenue Arising From:

- Business idea of **café and water taxi**
  - Reasons:
    - Potentially run as a combined business
    - Lack of ferry station in the area
    - Avoid traffic congestion and crowded public transportation, especially in the Post-COVID environment
  - Requirements:
    - Increase accessibility
    - Compare potential revenue and expense
    - Take survey of the population

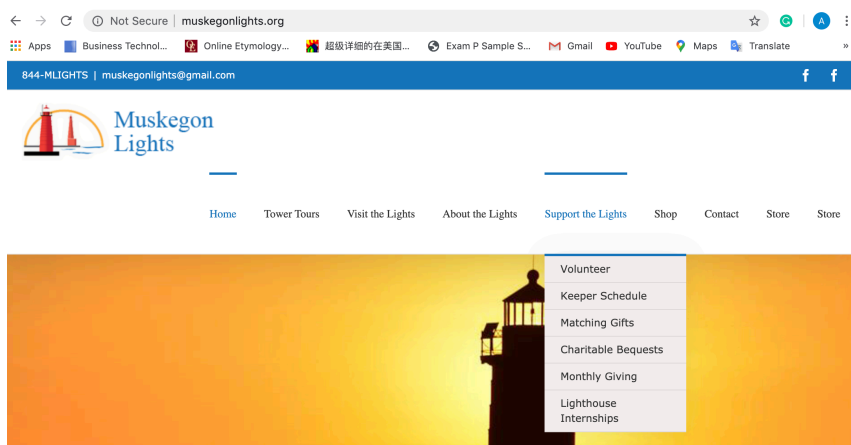




# Public Sponsorship

Funding support may be provided by general public through:

- Donations and bequests
- Tours provided in the future
- Activities like tent camping and picnicking
  - Requirements: full-service restrooms, electricity, and running water
  - Example: Lighthouse Landing Campground in Manhattan, NY
    - Daily Camping Rates: \$25/night (basic)
    - \$35/night (water, electric, sewer)





**Thank You!**

**Any Questions?**



# Reference

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- [https://www.ponceinlet.org/Weddings-At-The-Lighthouse-6-113.html?gclid=Cj0KCQjwtLT1BRD9ARIsAMH3BtVZm1hLiu04Yn8au83-moJMcV7by6fAjXG4jamR59DzKhWqGiN3\\_AUaAh01EALw\\_wcB](https://www.ponceinlet.org/Weddings-At-The-Lighthouse-6-113.html?gclid=Cj0KCQjwtLT1BRD9ARIsAMH3BtVZm1hLiu04Yn8au83-moJMcV7by6fAjXG4jamR59DzKhWqGiN3_AUaAh01EALw_wcB)
- <http://lighthouselandings.org>