REQUEST FOR PROPOSAL

Digital Platform Development for Our Genetic Legacy

Issued: December 2025
Proposal Window: Open until further notice
Desired Start Date: On or before February 1, 2026

1. Organizational Background

Our Genetic Legacy (OGL) is a California-based 501(c)(3) nonprofit organization that equips youth with workforce skills in drones, GIS, photogrammetry, digital storytelling, and marine science. OGL expands the public historical record through community-led, place-based research.

OGL's public-facing work is delivered through the We The People Virtual Museum, a digital museum that connects exhibits to real-world locations locally, nationally, and globally.

2. Primary Contact

To submit a proposal or request a conversation, please contact:

Shellie Baxter
Founder and CEO
Email: Shellie@ourgeneticlegacy.org

3. Partnership Context and Budget Considerations

As a nonprofit organization, OGL welcomes proposals aligned with the following engagement models:

- Community service or corporate social responsibility engagements
- Reduced-rate partnerships
- Hybrid models combining funded and in-kind work
- Fully funded, non-discounted proposals at standard market rates

OGL is open to phased development approaches. Our priority is a transparent, sustainable partnership that balances quality, long-term viability, and community impact.

4. Project Overview

OGL is seeking development partners to support two connected digital platforms that serve different audiences and purposes while sharing data where appropriate.

- Platform One: OGL Organizational Platform (Internal System)
- Platform Two: We The People Virtual Museum (Public Platform)

Vendors may submit proposals for one platform or for both platforms. Proposals must clearly state which platform or platforms are included and identify any assumptions or dependencies.

OGL may select one vendor for both platforms or separate vendors for each platform.

5. Platform Ownership and Long-Term Control Requirement

Wherever reasonably possible, OGL intends to own and control the core platform codebase, data, and content.

Proposals should demonstrate:

- Use of open standards and documented architectures
- Minimal long-term vendor lock-in
- Full documentation and knowledge transfer
- Clear identification of third-party tools, licenses, or ongoing costs

Proposals must specify what OGL will own at project completion, as well as any required ongoing licenses or dependencies.

6. Current Platform Assessment

At present, there is no centralized organizational platform or internal system supporting operations, training, asset management, or evaluation. Program administration, participant tracking, content updates, and reporting are handled through a combination of disconnected tools and manual processes, creating inefficiencies and limiting scalability.

The current We The People Museum demonstrates a strong conceptual and architectural foundation, particularly its San Diego-anchored museum environment and integration with Google Earth. This approach enables visitors to transition seamlessly from the museum to real-world mapped locations and confirms the viability of OGL's place-based digital museum model.

However, the current implementation does not meet OGL's desired level of sophistication, usability, or visual coherence. The platform relies heavily on proprietary systems that limit internal control and flexibility, and several existing features do not meaningfully enhance the visitor experience. As a result, the interface lacks consistency and intuitive navigation.

The next phase of development should preserve the museum's spatial architecture and Google Earth connectivity while replacing these proprietary constraints with solutions that are more flexible, user-centered, and manageable by OGL staff over time.

Current museum:
https://bit.ly/WTPmuseum2025

Current tools in use include:

- Cesium and Unity for three-dimensional environments
- Eagle3D Streaming
- Google Earth-connected workflows for geospatial navigation

7. Deliverables

Proposals should address the following deliverables:

- Technical architecture and platform approach
- User experience and interface strategy
- Development phases, milestones, and timelines
- Security, privacy, and accessibility considerations
- Staff training and documentation, particularly for asset placement workflows
- Deployment, handoff, and long-term cost considerations

8. Proposal Requirements

Proposals must include:

- Platform or platforms covered
- Proposed timeline and milestones
- Cost estimates or level-of-effort breakdowns
- Partnership model, including community service, reduced-rate, hybrid, or fully funded
- Relevant experience and portfolio
- Proposed technology stack and rationale
- Ownership, licensing, and dependency disclosures
- Key risks and mitigation strategies

9. Selection Criteria

Proposals will be evaluated based on:

- Alignment with OGL's mission and long-term vision
- Strength of user experience and accessibility approach
- Experience with geospatial, immersive, or complex platforms
- Ability to support in-house content and asset management
- Sustainability, ownership alignment, and cost transparency
- Quality of communication and partnership approach

Platform Architecture Summary

This document outlines the architecture and functional requirements for two interconnected digital platforms supporting Our Genetic Legacy initiatives.

OGL Organizational Platform (Internal System)

- Supports internal operations, training delivery, workforce pathways, compliance, asset management, and impact reporting for staff, instructors, mentors, and participants.
- Core functionalities include program management, participant tracking, training modules, workforce placement, outcomes evaluation, grant management, and equipment inventory.
- Emphasizes secure, modular design, mobile accessibility, and reduced administrative burden to enhance organizational sustainability.

We The People Virtual Museum (Public Platform)

- A public-facing digital museum anchored in a San Diego virtual environment, allowing visitors to explore exhibits and real-world locations via Google Earth connectivity.
- Key features include a persistent museum environment, location-based exhibits, and a robust asset management workflow for OGL staff to update content independently.
- Supports multi-modal experiences (2D, 3D, VR) and includes monetization strategies such as a virtual store, food court, membership programs, and customizable avatars as guides.
- Focuses on accessibility, performance, and maintainability, ensuring a user-friendly interface and seamless transitions between experiences.

This architecture aims to enhance public engagement, cultural preservation, and workforce development while ensuring internal efficiency and sustainability.

Platform Architecture Needs Overview

Our Genetic Legacy requires two connected digital platforms that serve different audiences and functions while sharing data where appropriate. Together, these platforms support workforce development, cultural preservation, impact evaluation, sustainability, and public engagement.

The platforms are designed so that core systems are built once, and content, assets, and experiences can be added, updated, and managed internally by OGL staff through clearly defined workflows and training.

Platform 1: OGL Organizational Platform (Internal System)

The Organizational Platform supports OGL's internal operations, training delivery, workforce pathways, compliance, asset management, and impact reporting.

This platform is not public-facing. It is used by staff, instructors, mentors, partners, and participants.

Core Functional Areas

1. Program & Operations Management
   - Manage programs, cohorts, schedules, field missions, instructors, mentors, and staff
   - Role-based access (Admin, Program Manager, Instructor, Mentor, Participant)
   - Task-based workflows for enrollment, compliance, and readiness tracking

2. Participant Management
   - Participant profiles with enrollment history, required forms/consents, and documentation
   - Credential and milestone tracking (FAA Part 107, GIS skills, marine science benchmarks)
   - Link participants to cohorts, projects, equipment usage, and workforce placements
   - Exportable participant records for reporting, references, and partner verification

3. Training & Learning Modules (LMS-Lite)
   - Structured learning pathways (Program → Cohort → Course → Module → Lesson)
   - Content delivery including videos, documents, quizzes, assignments, and checklists
   - Completion requirements, instructor feedback, and progress dashboards
   - Certification readiness indicators
   - Ability to reuse training modules across multiple programs

4. Workforce Placement & Paid Opportunities
   - Assign participants to internships, stipended roles, or project-based contracts
   - Track scopes of work, deliverables, hours, approvals, and completion
   - Generate participant work histories and outcomes summaries
   - Designed for future integration with payroll, stipends, or invoicing systems

5. Outcomes, Evaluation & Impact Measurement
   - Pre- and post-program surveys tied to cohorts and initiatives
   - Customizable survey templates and question banks
   - Automated survey triggers (enrollment, completion, follow-up)
   - Outcomes dashboards for internal learning and funder reporting
   - Ability to connect outcomes to certifications, employment, and museum exhibits

6. Grant & Funding Management
   - Track grant pipeline (prospect → applied → awarded → active → closed)
   - Store applications, award letters, reports, and budgets
   - Reporting calendars with automated reminders
   - Link grants to programs, participants, and outcomes
   - Generate summaries for leadership and board oversight

7. Equipment, Drone & Technology Inventory
   - Registry for drones, cameras, LiDAR, ROVs, laptops, and other equipment
   - Fields include make/model, serial number, purchase date, funding source, warranty, and condition
   - Check-in/check-out tied to participants, staff, and field missions
   - Maintenance logs (repairs, inspections, firmware updates, battery health)
   - Alerts for inspections, warranties, and replacement planning
   - Incident tracking for loss, damage, and insurance documentation

Design Principles

- Secure, privacy-first architecture (youth data and genealogy-related content)
- Modular and scalable design
- Mobile-friendly for field use
- Built to reduce administrative burden and improve accountability
- Supports long-term organizational sustainability and growth

Platform 2: We The People Virtual Museum (Public Platform)

The We The People Virtual Museum is a public-facing digital museum anchored in a San Diego–based virtual environment that functions as the museum's permanent home. This environment contains rooms, galleries, exhibits, and shared public spaces, mirroring the experience of a physical museum.

From within this San Diego museum space, visitors can explore exhibits housed inside the building or travel directly to real-world mapped locations through a Google Earth–connected experience. At these locations (e.g., Gberefu Island in Nigeria), spatial data and 3D assets are presented in geographic context. Visitors can return seamlessly to the museum environment at any time.

The museum must support 2D access, 3D immersive exploration, and VR-capable experiences using technologies available today, all powered by a shared content backbone that allows OGL to manage and expand content internally.

The current platform demonstrates spatial storytelling and teleportation concepts but is limited by a clunky interface, restricted content update workflows, and reliance on streamed environments that are difficult to manage internally.

Current software in use:

- Cesium + Unity for 3D environments
- Streaming delivery (e.g., Eagle)
- Google Earth–connected workflows for geospatial navigation

The next iteration must significantly improve usability, internal control, scalability, and monetization.

Platform Milestones in Order of Priority

1. Platform Transition and Core Museum Experience
    - Transition the existing We The People Museum to the new OGL platform
    - Maintain the current Google Earth connection and location-based exhibit behavior
    - Preserve the existing San Diego–anchored museum environment and digital facade
    - Support two-dimensional web access and three-dimensional immersive exploration
    - Enable free movement within museum spaces using mouse, touchscreen, or supported immersive controls
    - Provide a persistent control to return to the main museum environment
2. Museum Navigation and Wayfinding
    - Interactive museum map for navigation
    - Ability to navigate by:
        - Exhibit name
        - Room or gallery location
    - Click-to-enter spaces from the map
    - In-space navigation allowing users to walk through rooms and galleries
    - Consistent navigation behavior across devices where possible
3. Exhibit and Asset Management
    - Staff-controlled system to create, update, and manage exhibits
    - Upload and manage text, images, video, and three-dimensional assets
    - Assign assets to:
        - Existing museum rooms and galleries
        - Individual exhibits
        - External Google Earth–based locations
    - Add, move, replace, or remove assets and update layouts independently
    - Publish updates in real time without developer involvement
4. Template-Based Expansion Tools
    - Prebuilt exhibit templates with prewritten code
    - Menu-based selection of desired exhibit functionality
    - Ability for staff to select and apply features such as:
        - Media displays
        - Interactive elements
        - Avatar-based components
    - Consistent behavior across exhibits created using templates
5. Accessibility and Language Support
    - Language translation for museum content and navigation
    - Ability to add additional languages over time

- Keyboard navigation support
- Screen reader compatibility for text-based content
- Captioning and transcripts for audio and video
- Alternative interaction modes for users unable to use immersive controls

6. Avatar Guides and Assisted Experiences
   - Configurable digital avatar guides
   - Use of avatars to:
     - Welcome visitors
     - Guide tours
     - Explain exhibits
   - Availability across two-dimensional, three-dimensional, and immersive experiences

Monetization and Community Participation

All transactions and user data must integrate with the OGL Organizational Platform for centralized management and reporting.

8. Museum Store
   - Integrated online store
   - Accept payments for merchandise and digital goods
   - Staff-managed products, pricing, and inventory
   - Accessible through both the museum interface and two-dimensional web access
   - Transaction data synced with the OGL Organizational Platform

9. Donations and Memberships
   - Accept one-time and recurring donations
   - Issue automatic receipts and acknowledgments
   - Tiered membership options
   - Subscription billing and renewals
     Ability to associate donations with:
     - General organizational support
     - Specific exhibits
     - Programs or campaigns
   - All donor and membership records synced with the OGL Organizational Platform

10. Performance, Accessibility, and Maintenance
    - Functional across devices and bandwidth conditions
    - Graceful fallback when immersive features are unavailable
    - Content updates managed by non-technical staff
    - Architecture supports long-term maintenance and expansion

11. Digital Legacy Tree Requirements
    - The museum will include a persistent Digital Legacy Tree designed as a trunk with branches inside the existing museum environment.
    - Visitors can purchase a leaf and place it on the tree through a guided, self-service flow.
    - The leaf creation flow must support user-controlled design options, including at minimum:
      - Leaf style or shape options from a preset library
      - Color or finish options from a preset palette
      - User-entered name and short inscription
      - Optional photo and story attachment, based on membership level
    - Users must be able to preview their leaf design and placement before finalizing purchase.
    - After purchase, the leaf must appear on the tree in real time without developer involvement.
    - Users must be able to select placement on an available branch position, or the system must auto-assign placement if the user chooses “auto-place.”
    - The tree must support growth as participation increases, including:
      - The ability to add additional branches or expand the visible tree area as leaf capacity is reached
      - Continued performance and usability as the number of leaves scales
        A consistent visual design as the tree expands
    - The system must include administrative controls for moderation, removal, and content management when needed.
    - All purchases, user data, and associated content must connect back to the OGL Organizational Platform for centralized reporting and management.