

Improving National Park Service Design & Construction Partnerships

August 2020



Acknowledgements

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Background

The National Park Service (NPS) Park Planning, Facilities and Lands Directorate (PPFL) initiated revAMP as a coordinated effort to improve NPS's facility management by evaluating current business processes, identifying gaps and moving toward an improved future state. As part of the revAMP effort, NPS and Booz-Allen-Hamilton consultants conducted a series of rapid improvement events (RIEs) that addressed issues and made recommendations to improve facility management processes. Many of these recommendations can streamline how asset management is done at the park level by reducing workload and shifting the focus to making sound lifecycle decisions to support facility investment.

In November 2018 an RIE was held for Design and Construction Partnerships. Various issues and questions were raised about the partnership construction process and requirements. Per the recommendation of the RIE participants, a task group was established to follow up on the following three actions:

- 1. Highlight successful partnerships**
- 2. Document common issues and lessons learned**
- 3. Develop strategies to provide partnership guidance to regions and parks.**

To accomplish Actions #1 and #2, the task group conducted interviews with parks who had partnership construction experience, to better understand what constitutes a successful project and partnership, common issues, and lessons learned. To accomplish Action #3, the task group provided information and feedback to issues, recommendations, and questions raised by the RIE participants.

Actions

Action #1: Partnership Construction Case Studies

The task group selected several parks to interview about their construction projects and partnerships. Selection was based on parks that had had several such projects over the years or ones recently completed, and that were successfully funded totally, or in large part, by private donations. However, the task group had no pre-conceived notions as to whether the parks would consider their projects or partnerships “successful.” The common response from these parks was that the same components that contribute to successful relationships are the same components for successful partnerships, whether they are short or long-term.

- Knowledge and appreciation of one another’s organization and mission
- Respect for one another’s skills and expertise
- Understanding each other’s needs
- Clearly articulated mutual goals
- Ability to amicably resolve conflicts
- Apply lessons learned to subsequent projects / activities
- Overall – develop and maintain good communications.

The NPS works with a variety of partner types on construction related activities: other public agencies and governments, concessioners and cooperating associations, lessees, non-profit organizations, and individuals. The November 2018 RIE participants focused on philanthropic non-profit organizations that support individual parks. These non-profits are often referred to as friends groups, park support groups, foundations, or conservancies. Overall, these philanthropic partners raise funds to support park programs, activities, and projects; host events; and provide park volunteers.

While numerous parks have park support groups, few have the organizational capacity to undertake a partnership construction project¹. Those groups with greater capacity (and success) typically have:

- Board members, who are well known in the community and have the financial resources to contribute toward a fundraising campaign;
- Full-time professional development and project management staff;
- A track record of successful fundraising;
- Experience working with the National Park Service or other federal / public agencies.

¹ **The Potrero Report 2016 – National Park Partners Status & Trends:** Out of 214 identified non-profit organizations supporting national parks, 7% had more than \$6M in annual revenue, 12% had \$1-6M, 43% had \$50,000 - \$1M, and 38% had less than \$50,000. Annual revenues often reflect the ability to have and retain full-time / paid Executive Directors and professional staff who can manage large fundraising campaigns or construction projects.

Action #2: Document Common Issues and Lessons Learned

Common benefits cited by those interviewed included:

- Ability to accomplish projects that would not likely have otherwise been funded
- Ability to bring park resources into better condition and bring significant non-NPS resources to the table
- Opportunity to target the selection of design and construction firms with specific skills and, in some cases, to hire locally and source specific supplies and equipment
- Greater flexibility in contracting with designers and contractors, including modifications and change orders.

In all cases, the parks interviewed were equipped with the professional staffs to manage projects, whether in-house or by bringing in the expertise of the Denver Service Center (DSC) and / or Harpers Ferry Center (HFC). In all cases, the parks either have or expect to have a long-standing ongoing relationship with their partners.

Common challenges included:

- Partners making design or value engineering decisions in conflict with the park, or absent the park's participation
- Working to ribbon cutting deadlines regardless of whether a project was truly finished
- The significant investment of time needed, not only to oversee projects undertaken by partners, but to help them understand NPS planning, design compliance, and construction processes.

Action #3: Develop Strategies to Provide Guidance to Regions and Parks

The task group noted the following recurring strategies leading to design and construction partnership success:

- Get to know one another (mission, goals, needs, expectations) and build trusting relationships before committing to a design and construction project.
- Involve people with expertise in the design, construction, funding, and partnership processes for both the partner and the NPS.
- Provide an initial overview of NPS processes and review periodically with partners to avoid unanticipated impacts to project cost and schedule.
- Collaboratively develop a funding strategy to cover O&M costs related to the project. Partners with responsibility for O&M costs may better understand NPS facility management efforts to reduce future maintenance.

WASO and Regional support of parks is critical in all stages of partnership projects to ensure their success. Parks need to have, and know where to find, the resources available to support their partnership projects. All issues identified as RIE pain points can be addressed by using the above strategies. Each of the **strategies** is discussed in more detail, below.

Strategy 1:

Get to know one another (mission, goals, needs, expectations) and build trusting relationships before committing to a design and construction project.

- Establish trust and respect between the NPS and its partners so that the parties have a solid foundation for amicably solving problems and challenges during a project's multiple phases; i.e., agreements, design, construction, and post-construction.
- Facilitate events that include experienced staff from both parties, structured around specific topics: e.g., goals, responsibility for design and construction management, resolution of disagreements, compliance, reviews, approvals, operations and maintenance responsibility, and other components of partnership projects. Capture discussion results in a Memorandum of Intention, subsequent Partnership Agreements, and Review/Approval documents.
- Develop a common understanding and agreement for the park's and partner's priority for the project. Define the available resources and schedule for the project and commit staff to be engaged at the level needed for success.

Strategy 2:

Involve people with expertise in the design, construction, funding, and partnership processes early in the Partner-NPS discussions.

NPS assistance is available through WASO-Park Planning, Facilities and Lands Associateship, Regional Facility Managers and Partnership Coordinators, Fund Managers, Denver Service Center, Harpers Ferry Center, Solicitors, and other WASO and Regional subject-matter specialists.

- **WASO-PPFL and PCE** for assistance with agreements and partnership processes. Reference Director's Order 21, Chapter 7, and the website, *Creating Possibilities Through Partnerships*: <https://www.nps.gov/subjects/partnerships/index.htm>
 - Discuss staffing assignment and funding options with AD-PPFL, DSC / HFC Managers, and WASO Comptroller.
 - Involve Subject-Matter-Experts to advise park-partner on specific issues or facets of the project (e.g. Project Management, Construction Management, Cultural and Natural Resources, Funding)
- **Regional Partnership Coordinators / Facility Managers**
 - Provide guidance on policies and processes for Design & Construction Partnership projects and associated funding.
 - Provide training to parks for relevant DO 21 issues.
 - Assist with Partnership Agreements and their management
 - Assist in preparing for DAB/IRB approvals (ADAB Website)
- **Solicitors**
 - Provide Legal advice and review / negotiate agreement terms
 - Provide risk assessments and risk management

- **Denver Service Center**
 - Provides site and building project management of partnership projects from initial planning, concept development, design, and construction completion.
 - Communicates the details of the NPS design and construction processes, per DSC Workflows: <https://www.nps.gov/dsc/workflows/index.htm>

- **Harpers Ferry Center**
 - Provides exhibit project management of partnership projects from initial planning, design, fabrication, and installation.
 - Communicates the details of the NPS design and fabrication processes, per HFC Website: <https://www.nps.gov/subjects/hfc/index.htm>

Strategy 3:

Provide an initial overview of NPS processes and review periodically with partners to avoid unanticipated impacts to project cost and schedule.

- Communicate each step of project development. Provide the partner with an understanding of the NPS process: project agreements, natural and cultural resource compliance, concept and design approvals, contracting for design and construction services, project completion, and operations and maintenance.
- Establish project expectations. Collaboratively plan how these processes will be addressed. Include people with relevant experience to develop schedules and budgets based on realistic time frames and costs associated with each process step.

Strategy 4:

Collaboratively develop a funding strategy to cover operations and maintenance (O&M) costs related to the project. Partners with an understanding of and/or responsibility for O&M costs will better support NPS facility management efforts to reduce the total life cycle costs of the project.

- Determine the total cost of facility ownership early in the project planning process. Design and construction costs represent only a small portion of the cost of a project over its lifespan. Minimizing or reducing future O&M costs for the NPS will benefit the financial wellbeing of the park.
- Resolve who will fund any additional annual and long-term O&M costs resulting from the project. Partners may not always agree to cover O&M costs, but the NPS needs to understand and approve any increased costs that will be incurred as a result of the partnership project. Partner understanding of a project's impact to future O&M validates NPS input in the project's design.
- Facilitate events to discuss the O&M topic and create a joint understanding of the total cost of the project, the ability to include these costs in fundraising goals, and mutually beneficial long-term approach to maintaining the partner/donor investment and park facility.

Follow up Actions:

Follow Up 1: Develop criteria for NPS Staff involvement in partnership projects. Provide training to park and regional staff to develop competency and consistency for NPS partnership projects.

(Countermeasures 2.1 – 2.4)

- Partnership Training Course for all involved, with curriculum addressing the project process and issues typically encountered in NPS partnership projects.
- Project Management Course for project planning, design, and construction management for any NPS project.
- Natural and Cultural Resources Compliance Course for project planning, design, and construction compliance requirements for any NPS project.

Follow Up 2: Establish a funding source for partnership projects for predesign, compliance, O&M cost estimates, archaeological reports, and other NPS requirements that partners may not be able or willing to fund but are necessary for NPS processes and approvals. *(Countermeasure 4.1, 4.8)*

Follow Up 3: Account for park time required for partnership projects. The Partnership Questionnaire, MOI, and Fundraising Feasibility Study act as initial scoping aids; however, the investment of time by the park in partnership projects is often overlooked or underestimated. Include park time factor in partnership project scoping aids. *(Countermeasure 4.2)*

Follow Up 4: Research best practices of other DOI agencies that may apply to NPS partnership projects. The National Academy of Public Administration (NAPA) report on NPS Design-Construction will reflect NAPA's interviews with other agencies, within and outside the NPS, and may provide data / recommendations that are applicable to partnership projects. *(Countermeasure 4.6)*



Compilation of Interview Questions and Responses

Below is a compilation of the most common responses to the interview questions. Boxed text includes additional feedback and responses that reflect different park experiences and perspectives.

1. What are the advantages and disadvantages of having a partner carry out design and / or construction of a park project?

Advantages: Access to funds, designers, and resources not readily available through NPS funding and procurement processes.

Partners:

- Can fund projects that address park needs but do not score as high park priorities and do not compete well for NPS funding.
- Have more flexibility in selecting contractors with specific skills; e.g., landscape architect or exhibit designers, and in selecting products and materials.
- Are able to hire locally, which gives local firms a sense of pride and ownership.
- Have more flexibility to change the project as it progresses. This can be an advantage or disadvantage.
- Have more resources and funding to get publicity for the project and to stoke public interest and anticipation.

Disadvantages: Some partners are not experienced in design-construction and often are in a hurry to show progress to their donors. Some partners are resistant to responding to cultural resource concerns. Many outside groups view the NPS as requiring too much red tape and find NPS standards costly and challenging to understand. It can be difficult to get partners to buy into the life cycle cost approach to design. Partners often focus on schedule and budget rather than scope and quality.

- NPS standards [for design-construction] are different than standard industry. It takes time and effort to explain our standards, building codes, and cultural and natural resource considerations. *Ex: completing compliance requirements may impact project design and/or schedule.*
- Steep learning curve with new partners.
- Building toward a specific deadline can result in an incomplete project and long punch list for contractor to complete.
- Scope creep [*which also happens in many NPS-funded projects*] that may require additional NPS approvals and impacts schedule.
- Reduced control in design decisions – [*Many parks referenced this as having long-term sustainability implications.*] The need for Partners to acknowledge and incorporate the review feedback by park/NPS staff, who have experience and expertise in site specific

issues; e.g., site weather conditions, impact visitors have on facilities and landscapes in high traffic zones, cultural resource management, etc.

2. Did the region, DSC, and / or WASO provide assistance to help the park through the partnership process?

WASO, region, and DSC support was provided to most parks, but type of support varied depending on the skills of the park and the ability of the partner to assist/fund.

Examples:

- **DSC:** While some partners don't want to pay for DSC Project Management services, for parks without the staff resources, it's a necessary addition.
DSC has tools available to help Partner A+Es understand why we operate as we do. Once we explained the reasoning behind the requirements, it made it easier for them to comply.
- **WASO PPFL:** Provided support on negotiating and advising on agreements and securing Solicitor assistance when needed.
- **DOI Solicitors:** For one park, this was critical to the success of their project. The Partner's Board included several lawyers and they responded well to discussing issues with our Solicitor as issues arose. Was very efficient.
- **WASO Budget:** Advised and assisted on the use of Centennial Challenge funding.
- **HFC:** Advised on what type of exhibit technology was most successful and the O&M costs associated with different design choices. With their help the project was able to avoid technology that was costly and difficult to maintain.

3. What additional resources would have been useful to you?

Help with developing and managing long-term relationships with partners. The DSC could be a source but DSC leaves after a project is completed and that does not build the ongoing relationships needed at the park. * Help with communicating the importance of cultural resources to the partners. * Additional NPS staff at the park to support the project; i.e., ability to fill vacancies.

- More on the ground support; there's a need to have a NPS PM on site as much as possible during design and construction.

Park Recommendations:

- A) Have a partnership construction project branch at DSC, staffed with people who can translate the construction language and help small parks without staff resources carry out projects.
- B) Have a full-time DSC PM duty-stationed at parks that have enough work and could be funded by donations.

C) Duty station DSC PM near a cluster of parks needing that service.

- Every project is different – the Superintendent should be able to decide what resources are needed and have access to them.

4. Did the project follow the processes and intent of the partnership design and construction agreement? Did the park and partners fulfill their obligations per the agreement?

The agreement was good for developing the initial understanding, but it is rarely referred to after signatures. Project closeout requirements are frequently a challenge [*can also be an issue for non-partnership projects*]. It is difficult to challenge a partner who is “out of agreement” without creating relationship issues.

Examples:

- The project followed the processes and intent. The team had to turn back to the Agreement several times to ensure the Agreement’s requirements were met.
- Generally, the Partners fulfill their obligation. The Agreements only become important when something goes wrong. That said, reviews occur as the project proceeds. Typically, our park speaks up if something comes to light and catches things before they are unacceptable.
- Most of our park’s partnerships are not one-off relationships and we’ve told Partners we will not start work on a new project until the final deliverables are provided for the previous project.
- Park never received the design contract [in advance] from the Partner, as per the Agreement; therefore, there was no way to verify that NPS special language was included.
- When construction started, the contractor elected to use his own *SharePoint* site, which was not compatible with NPS systems. To date, DSC does not have the final documents.
- Deliverables are still outstanding [post construction]: Workflows, fire inspection documentation, building inspection documentation, and punch list items.

5. Were there design solutions or construction changes implemented by the Partner that were not supported by the park?

Yes, this happens. Breakdown in communications, agree to disagree. Sometimes, the Partner feels “It’s our money” – i.e., that they can justify spending for their needs even if the park objects, whereas the park feels “It’s our asset” and we have to be able to maintain and operate it long-term.

- A lot of changes were suggested, but the park was able to manage it and only minor changes occurred.
- A large part of successful projects is communication and how to deal with a problem when one arises. Planning meetings / workshops are not exciting, but they are necessary.

6. Does the project represent a long-term partnership expected to continue? Or, was it a one-time effort?

All interviewed parks said their partnerships were long-term. The parks build upon the lessons learned with each project.

7. Did you learn anything in the process that you wished you had known beforehand?

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BEST PRACTICES & LESSONS LEARNED

- The success of partnerships often depends on the experience of the park and Partner. If everyone understands the process and standards, the project goes smoothly. Otherwise, “it can be a mess.” If a park is working with a new partner, they should consider starting with small projects or a project where the partner raises the funds and the park performs the work.

BUILDING THE RELATIONSHIP - EARLY DISCUSSIONS - COMMUNICATIONS

Good communication is a theme raised repeatedly throughout the interviews.

- One Partner Board has day-long orientations for their new Board members and the Park is invited. Park staff share a “behind the curtain” look at NPS / park policies, laws, regulations, budget procedures, etc. This gives Board members a framework to help them understand the decision-making during projects. The orientation sets the foundation before they get into a design-construction project so that they understand the larger system. If they understand where we come from, they are more patient and willing to work with us.
- There’s a huge value in setting up a facilitated session with all stakeholders early in the partnership. Could be an hour or a full day. During the session, everyone can lay out their expectations. Topics include roles, responsibilities, communications strategy, and problem solving. Understand who brings what to the table.

Ex: The park/NPS brings institutional knowledge around construction, park-specific site conditions, how visitors use and impact park resources, and the implications of higher O&M costs on park budgets.

- Projects tend to be smoother if the Partner has experienced construction managers. It is difficult if the Partner’s point person is the Executive Director of a non-profit with no construction experience.
- Document all decisions so there’s no need to repeatedly discuss them throughout the project.
- Good communication permitted the park to alleviate potential issues prior to construction.
- Critical to have the agreements in place and everything agreed upon before the construction begins.

Pros and cons of Partner managing DESIGN ONLY:

Some Partners are uncomfortable taking on the liability for construction and either establish a LLC, a subsidiary to protect individual board members from liability claims – or manage the design phase only.

Benefits described earlier: flexibility, funding availability, and ability to jump start a project. Disadvantages include inefficient hand-offs, sometimes requires sole source contracting if the

Partner was working with a contractor that is necessary to the project; accessing the design documents after the hand-off. Some possible solutions suggested by parks:

- Have the Partner retain the designer through construction
- Bring in the Partner's construction manager early in the process
- Have partners pre-qualify contractors
- Be selective: Know what projects will work with a Partner just doing the design or those that require a soup-to-nuts partnership.

TIME INVESTMENT

- NPS and Partners look at deadlines differently.
- Understand the time involved in developing a partnership construction project. Time comes with a big price tag that is not initially calculated.
- Address schedule and project review deadlines early in the process. Park staff need to be involved but have day-to-day priorities and demands associated with running a park. Important to have a good project manager who can communicate well with the Partner and contractors.

RELATIONSHIP BUILDING

- Need to build trust with one another early in the project. Team members must be willing to disagree, discuss, come to a consensus, and learn from the experience.
- Conversations should happen daily and start early. Important to ensure everyone is on the same page concerning the purpose and goals of the project.
- Important that the park select the right staff to be involved – must have good communication skills and the right attitude. It's a time commitment to build relationships and coordinate work.

OTHER COMMENTS

- A park taking on a partnership project needs to have funds for "inherently governmental" activities; e.g., compliance.
- Partners and their designers need help understanding the O&M and compliance challenges created by new projects.
- It's good to get an endowment set up before construction. For our next project, the Partner is fundraising for both the cost of the project and the endowment at the same time.
- Be proactive in receiving approvals / permits in the early stages of design and construction.
- Use local designers when possible as they are familiar with local requirements.

Three other questions were asked:

- **Estimated design and construction costs versus actual final costs?**
- **Pre- and post-project operations and maintenance costs?**
- **Amount of deferred maintenance addressed by the project?**

Several of the partnership projects were still underway or recently completed and specific information was not yet available. However, all parks said their projects addressed significant amounts of DM.

In one case, the park asset was mothballed and had no O&M costs. After the project, park had O&M costs associated with utilities, HVAC, and electrical systems. Costs were not significant, and park was prepared to incorporate these costs into its annual budget.

Parks noted that:

- Many/most parks are not able to cover new O&M costs [due to flat operating budgets], and Partners are generally not interested in establishing an endowment. Some prefer to seek donations as needs arise.
- NPS matching programs (such as Centennial Challenge) aim to reduce a park's DM and several Partners have contributed matching funds / services toward that goal.
- Design choices affect how well and long the project's facility and materials will hold up.
- Partners and their consultants need to accept more input by the park (the end-user) regarding design decisions / material selections. Park knows the history of the impact that thousands of visitors have on park resources, such as vandalism and daily wear and tear.
- Partners who occupy or co-operate park facilities tend to have a better appreciation of O&M costs and design accordingly.

Please see accompanying APPENDIX