

PLANNING TO SUSTAIN AMERICA'S TREASURES

FINANCIAL AND OPERATIONAL SUSTAINABILITY IN NATIONAL PARK SERVICE PLANNING:
AN APPLIED POLICY PROJECT



Prepared by Meredith Randolph
for the Park Planning and Special Studies division of the National Park Service



FRANK BATTEN SCHOOL
of LEADERSHIP and PUBLIC POLICY



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Disclaimer

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Honor Statement

On my honor, I have neither given nor received unauthorized aid on this assignment.

A handwritten signature in dark ink, appearing to read "Meredith Randall". The signature is fluid and cursive, written over a light background.

April 4, 2024



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EXECUTIVE SUMMARY

The National Park Service (NPS) faces a reality where it must plan for the future while accounting for resource constraints arising from a growing and aging system of park units, depleted staffing levels, and budget appropriations that aren't keeping pace with inflation, much less growth. As the national level entity responsible for NPS planning policy, the Park Planning and Special Studies (PPSS) division is grappling with how to ensure that planning functions align with these organizational realities while continuing to advance NPS missions and mandates.

This policy analysis outlines the context in which PPSS' focal challenge exists, and it discusses the policy, financial, and organizational factors influencing insufficient consideration of financial and operational sustainability within NPS planning processes. This analysis explores academic and professional evidence that offers insight into potential strategies for mitigating this challenge, and it examines key findings from robust conversations with stakeholders at the center of planning in the NPS. This analysis culminates in the evaluation of three interventions for PPSS to consider:

1. **PPSS issues a plan scoping guide** for regional planning teams and park-level planners to reference and follow in the early phases of the planning process.
2. **PPSS develops an implementation readiness assessment** for entities competing for Unit Management Planning (UMP) funding to complete prior to requesting funds.
3. **PPSS publicizes the benefits of strategic planning** to drive cultural shifts in how parks and planning entities think about strategic planning and the role it plays in comprehensive planning efforts.

This report recommends that PPSS move forward with issuing a plan scoping guide based on its likely high effectiveness, low costs, high feasibility, and positive impact on organizational culture. Concrete steps for implementing this alternative are proposed, and above all, this report indicates that PPSS and its regional planning counterparts face clear opportunities to enhance their influence and functional alignment in order to positively impact the NPS' long-term organizational success.



INTRODUCTION

Like many government agencies, the NPS faces ever-increasing demands to ‘do more with less.’ Over the past decade, total visitation to the NPS increased by 10% and 23 new park units were added to the system (Comay, 2024). Despite cumulative inflation of more than 30% over this same time period, the NPS’ congressional budget appropriations only increased by 7% when adjusted for inflation (Comay, 2024). A growing NPS system has added strain to a budget capacity that has failed to even keep pace with inflation. While this evidences a need to ‘do more with less’ motivated by external demands, the NPS faces similar challenges resulting from internal pressures. The PPSS division of the NPS manages limited funds allocated for various types of park planning functions. The division, regional planning teams, and park units requesting plans must manage tradeoffs when deciding how to expend these resources. Competing priorities, changing organizational realities, and information asymmetries create challenges for ensuring that resources are allocated to the soundest planning investments.

PROBLEM STATEMENT

The NPS faces unique challenges to investing limited park planning resources efficiently and effectively. With over 75,000 real property assets, the NPS has an average annual budget of around \$900 million for facilities and maintenance needs (Comay, 2024). However, as of FY22 year-end, the NPS was tracking more than \$22 billion worth of deferred maintenance needs (National Park Service, 2023b). Further exacerbating the asset upkeep strains, NPS park staffing levels have declined by around 20% since 2008 (NPS PPFL Dashboard, 2023). Yet, the NPS continues to invest limited park planning resources identifying infrastructure expansion opportunities and chartering aspirational strategic and management plans. These decisions are enabled by strategic and management plans which often fail to account for key organizational realities. ***The NPS lacks sufficient mechanisms to ensure that park planning resources are allocated to projects deemed financially sustainable, feasible to implement, and considerate of staffing realities.***

While facility and capital investments offer poignant and easily quantifiable examples, the challenge identified by PPSS affects all types of planning: transportation, facilities, general management, visitor use management, strategic, etc. The scope of this project has evolved to place particular focus on high-level strategic and management planning efforts, as those are the bedrock forms of planning with which other types of investments must align.

In the absence of processes and decision-making frameworks focused on viable and sustainable park planning investments, park plans often reflect aspirational thinking rather than practical and constrained realities. According to the PPSS division, “PPSS funded plans (and NEPA plans more broadly) repeatedly identify actions that do not address the park’s most critical needs, are not implemented, or, when implemented, contribute to agency and park financial and operational burdens.” The team describes a widespread culture of aspirational thinking in the NPS that is misaligned with current realities, and in turn jeopardizes the service’s ability to carry out its purpose.



CLIENT OVERVIEW

This analysis was conducted on behalf of the NPS PPSS division. Organizationally, PPSS is the highest-level planning entity within the park service. As such, the team performs oversight, guidance, and coordination functions for the NPS planning community and stakeholders requesting planning functions. Regional planning teams and the Denver Service Center (DSC) are primarily responsible for performing technical planning functions, while PPSS operates at a higher strategic and oversight level. Within the NPS structure, PPSS falls under the Park Planning, Facilities, and Land associate directorate, one of six associate directorates comprising the NPS Operations directorate.

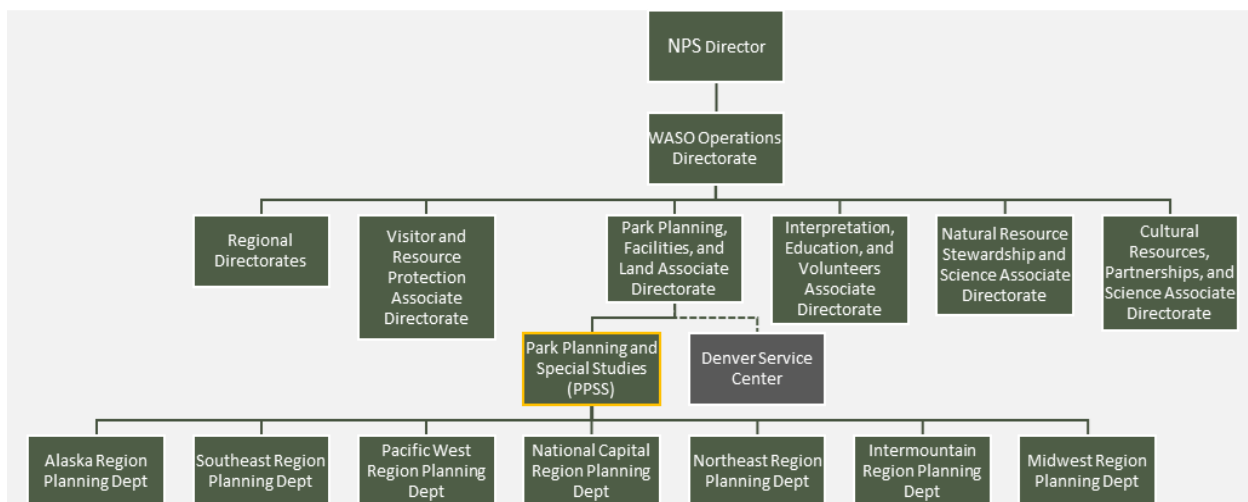


Figure 1 – High-Level NPS Organizational Chart

BACKGROUND & PROBLEM ORIENTATION

The NPS is experiencing shifts in organizational realities like staffing capacity, budget levels, and visitor engagement. As these shifts in the organizational landscape occur, planning investments must account for new financial and operational realities and leave behind outdated assumptions. The PPSS team recognizes some gaps in policy supporting responsible, sustainable, and feasible park planning decision-making, but also sees entities failing to consider existing guidance or employ critical analyses that reflect current realities when developing plans for which they desire funding. For example, estimates for initial construction costs may be included in a request to plan a new maintenance facility's development, but the request may fail to consider long-term upkeep costs once the asset is in place, or whether the park's current budget can support even those initial costs. Initial construction costs typically account for only 20% of the total expenditures required for NPS to maintain a facility through the entirety of its lifetime (National Park Service, 2023c). Failure to align long-term plan requirements with current capacities affects higher-level programmatic planning, too, and this report addresses those trends in more detail in subsequent sections.

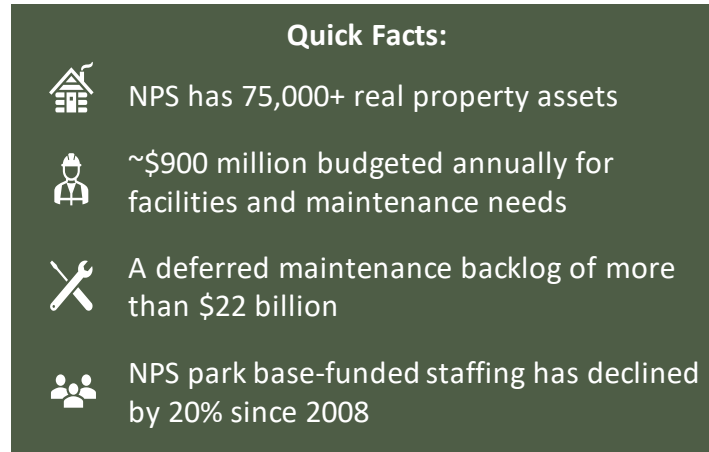


Figure 2 – Quick Facts
(Comay, 2024; National Park Service, 2024b)

To understand the problem orientation and explore potentially effective interventions requires understanding current financial and operational realities, the existing policy landscape, and current decision-making processes.

FUNDING LANDSCAPE

Core NPS functions are primarily funded with annual Operation of National Park System (ONPS) base appropriations (National Park Service, 2024a). ONPS base funds are not eligible for use beyond the fiscal year for which they are appropriated. This discretionary appropriation is subject to congressional review and approval resulting in annual fluctuations. The NPS is also authorized to generate revenue through recreation fees enabled by the Federal Lands Recreation Enhancement Act (FLREA), concessions and bookstore sales, and private donations (National Park Service, 2024a).

PPSS manages several base-funded sources designated for planning expenditures. Designated funds exist for Unit Management Planning (UMP), transportation planning, and facilities investment planning. When park units wish to pursue a particular planning project, they may request funds from the relevant PPSS-managed stream. However, parks may also request funds from regional planning entities or tap other more generalized fund sources (e.g. generated FLREA or concessions revenue). So, while PPSS is not the only way by which park units may secure funding for planning projects, the division carries an outsized responsibility for guiding planning resources and efforts to smart, viable projects.

The NPS maintains Service-wide Comprehensive Call (SCC) guidance for each primary funding source available for discretionary usage, including PPSS-managed funds. The guidance outlines goals for the fund source and general project eligibility criteria but fails to define technical requirements for planning requests utilizing the fund source. PPSS is particularly interested in improving the quality of UMP requests because plans eligible for this fund source often lay the groundwork for a park unit's future investments. General and comprehensive management plans, which may include strategic planning, are the types of work eligible for UMP funding.



These types of plans serve as the guiding documents for a park’s direction and – upon implementation – enable parks to make critical decisions regarding infrastructure expansions, visitor experiences, or priority initiatives for years to come. Granting UMP funding for these long-term, strategic plans serves as an early-stage touchpoint for ensuring parks are on financially and operationally sustainable trajectories. UMP formulated plan funded amounts increased nearly 70% from FY22 through FY23, signaling the importance of this fund source and urgency for addressing gaps related to UMP fund allocations (National Park Service, 2023a).

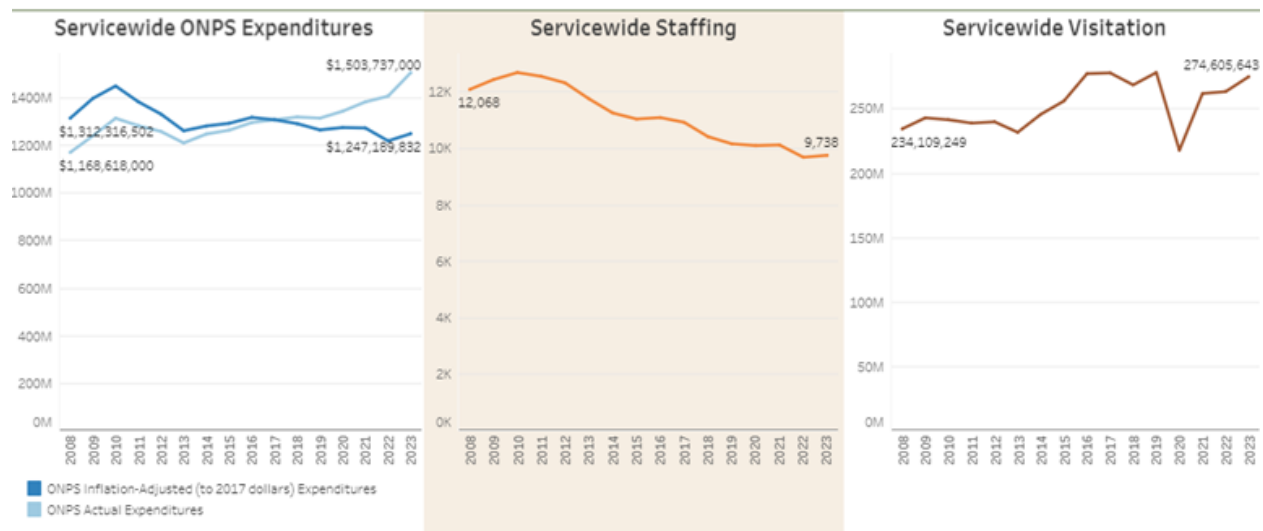
NPS FINANCIAL & OPERATIONAL REALITIES

Investing in plans that are financially sustainable and operationally feasible requires accurately accounting for staffing capacities, budget spending power, and existing asset management needs. However, current planning investments often rely on inaccurate assumptions about these factors or fail to consider them entirely. Base funded full time equivalent (FTE) park staffing levels decreased by nearly 20% from 2008 to 2023 (National Park Service, 2024b). Over that same period, inflation-adjusted base funding expenditures at the park level decreased by 5% from \$1.31 billion to \$1.24 billion (National Park Service, 2024b).

From 2008 to 2023 ONPS Inflation-Adjusted Expenditures (to 2017 dollars) decreased from \$1,312,316,502 to \$1,247,189,832 (-5%).

From 2008 to 2023 Park Base FTE decreased from 12,068 to 9,738 (-19%).

From 2008 to 2023 number of recreation visits increased from 236,295,102 to 262,997,445 (11%).



Sources
ONPS expenditures and FTE are sourced from the NPS Greenbook, 2008-present. Inflation adjustment is performed with Composite Deflator, OMB Historical Table 1.3.
Visitation Data is sourced from the Integrated Resource Management Applications (IRMA) Visitor Use Statistics site.

Figure 3 – Park level expenditures, park level base-funded staffing, and visitation.
(National Park Service, 2024b).

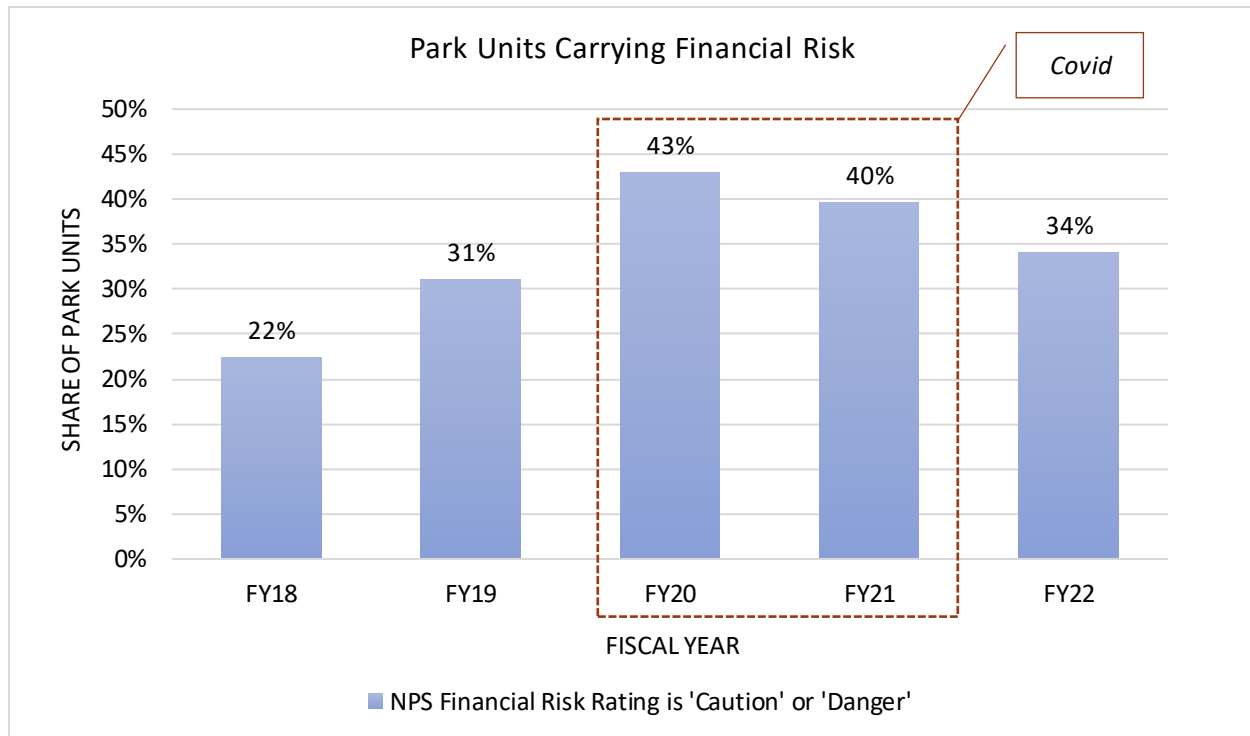


Figure 4 – Share of park units with high risk ratings.
(NPS Risk Scorecard, 2023).

Constrained budgets and staffing decline contribute to more than 30% of all park units carrying levels of financial risk labeled as ‘Caution’ or ‘Danger’ by the NPS Risk Report.

PPSS remains concerned that plans submitted for funding do not adequately consider current park staffing and budget trends or rely on the assumption that increases in resources will be available to support the plan in the future. As such, plans – when implemented – may contribute to additional strain on resource capacities where expanding those capacities is not an option. There is a sense that this pattern begins at the park level when parks request large, sweeping plans for things that they likely do not have the capacity to implement. Anecdotes suggest that park leaders are incentivized to ‘go big’ in planning requests in order to secure a plan that can bolster their resume as they pursue job opportunities at other units. In these instances, having a completed plan might be the end goal for some leaders who do not intend to stick around to see those plans enacted, so they lack incentives to consider the implications for budgets and staffing if the plan were to take effect.

“In my experience, it’s been mainly the leadership that just gets caught up in the process, loses track of what they were trying to solve, and starts to think about ‘well, it can also include this, and this, and this would be great!’ The next thing you know, it’s got a little crazy. We’ve rewarded that as part of a culture thing.”

- Planning Portfolio Manager



At the center of this challenge is thinking about how the planning community can guide parks towards more sustainable thinking, and how PPSS can align the planning community in that pursuit.

LEGAL AND REGULATORY ENVIRONMENT

Created by the Organic Act of 1916, the stated purpose the NPS serves “is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (Winks, 1997). While this purpose is often considered contradictory for requiring both the unimpaired preservation of resources *and* provision of recreational enjoyment, it is unambiguous in its commitment to the longevity of the system and the resources it stewards. The NPS is also governed by the National Environmental Policy Act (NEPA) signed by President Nixon in 1970, which provides further mandates for utilizing organizational resources in a manner harmonious with environmental protection, and also for assessing the environmental impacts of an organization’s activities (Environmental Protection Agency, 2023).

Park planning processes are guided by the 2006 NPS Management Policies and subsequent Director’s Orders (DO) which amend, clarify, or update guidance from the management policies. As defined in the management policies, General Management Plans (GMPs) are the highest-level park planning documents, while Strategic Plans, Program Plans, Implementation Plans, and others address more narrow aspects of park planning (National Park Service, 2006). Effective since January, 2021, DO #2 “defines the NPS planning framework and the park planning portfolio; outlines the types of planning documents available to meet park planning needs; and provides clarity and guidance about how a park’s planning portfolio meets the statutory requirements for GMPs,” (National Park Service, 2021).

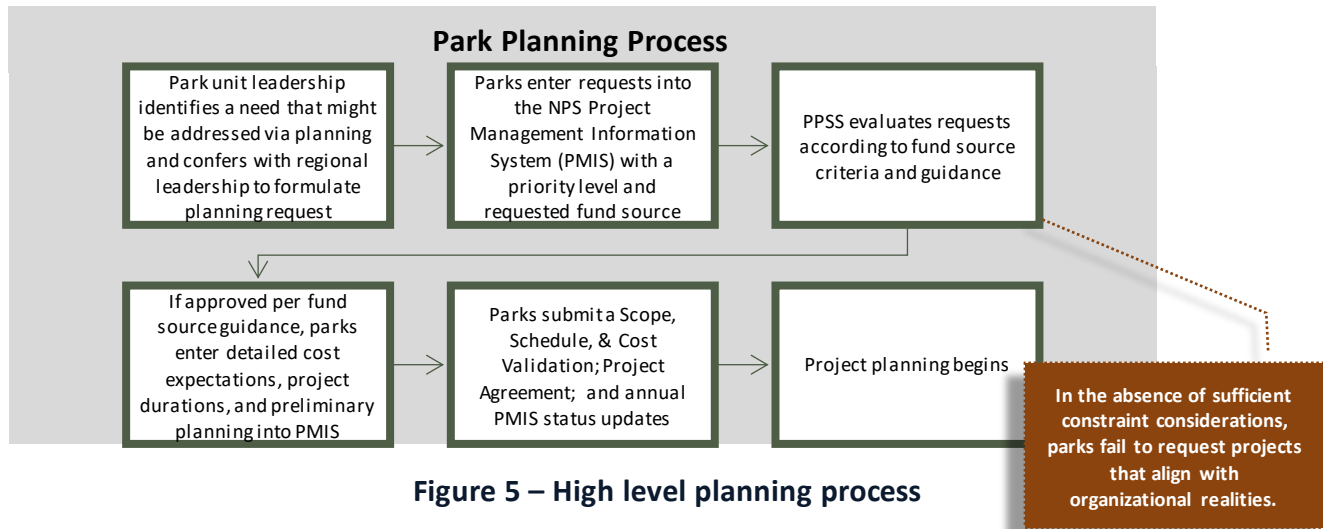
Primarily, current policy requires plans be guided according to a park’s foundation statement. Foundation statements document the park’s “purposes, significance, fundamental resources and values and primary interpretive themes,” (National Park Service, 2006). Subsequently, policy requires that all types of park plans focus on the park’s enabling resource and adhere to its foundation statement. While these policies clearly identify how park planning should consider resource preservation, visitor access, and environmental impacts, they lack guidance accounting for financial sustainability, implementation feasibility, and alignment with evolving operational realities. Further, current policy fails to sufficiently define these key viability and strategic criteria in an enforceable manner. The absence of these definitions may be in part attributable to intentional efforts to make planning more flexible for parks. However, PPSS is intent on ensuring that flexibility and appropriate accounting for resource constraints coexist within the NPS planning program.

CURRENT PROCESS OVERVIEW

To determine whether to fund certain planning projects, PPSS follows fund stream guidance and internal prioritization methods. Fund stream guidance indicates the types of plans that are



eligible for different types of funding, and it serves as a critical reference point for parks and regional planners as they put forth plans to compete for limited pools of funding.



In this current process, the fourth and fifth phases entail most of the formalized scoping that will occur during a plan’s development. The Preliminary Project Planning (P3) process is an existing process where planning teams work with park units to identify anticipated resource needs associated with their proposed project. While the P3 provides a structured mechanism for gathering detailed information on the resources that a given plan will need, it does not contain any components that explicitly map the resources that a project will need against the resources currently available. This suggests that despite it facilitating more information on resources associated with a planning project, the P3 may still enable planning projects that assume budget and/or staffing capacity increases.

DESIRED OUTCOMES & METRICS

The earliest iterations of this project focused on arriving at what plan selection criteria PPSS should implement to ensure that it was better allocating its resources to financially sustainable and feasible projects. As conversations evolved, it became clear that while selecting such projects is important to PPSS, they are also interested in both understanding and influencing how the planning community currently incorporates these concepts into planning, and where there might be opportunities to impact change at more foundational levels than plan funding selection. Therefore, rather than set out to identify the “best” plan selection criteria, this project transitioned to focus on gathering information from members of the planning community and identifying potential opportunities to better align the planning program towards practices that promote outcomes consistent with organizational realities.

I also worked with PPSS to understand what making progress on this task might look like. PPSS identified some key outcomes that they would view as evidence that planning was better aligning with organizational resource realities, or at least on a path to do so. Some examples of those outcomes included:



- Plans funded are those most aligned with strategic priorities
- Strategic priorities are clear across planning community
- Funded plans **do not increase** financial or operational burden on park units
- Planning funds are used for creative solutions that align with a park's most critical needs, rather than for cookie-cutter plans
- Formulated plans competing for funds demonstrate more data-informed design that clearly align with meeting a park's most critical needs

PPSS also identified a few technical output trends that might be helpful metrics by which to measure progress. Some metrics that might indicate progress include:

- Higher rates of funded plan implementation
- More funding requests for strategic plans and non-traditional plans/planning support
- Increase in funding requests for plans that align with current budget and staffing capacities

While these metrics were identified as ideal measures, PPSS nor its regional planning partners are currently tracking these data in a comprehensive fashion. For this reason, to the extent that they are employed to evaluate potential alternatives later in this report, these measures are discussed in terms of likely and relative changes from the observed current state. In order to realize the full benefits of data-informed analysis and effectively measure progress on key outcome goals, PPSS should make strides to increase its data collection on these metrics.

Methods

The research and analysis in this report employs three primary methods for data collection:



A survey of existing academic and professional literature from related contexts



A review of current NPS policies and guidance pertaining to planning



Interviews with 30+ NPS staff from PPSS and regional planning teams from 6 out of 7 NPS regional offices.

Figure 6 – Key components of research methods.

When discussing these metrics, PPSS also underscored that their ultimate desire is for the NPS planning program to meet the highest priority needs of park units while ensuring the long-term financial and operational sustainability of the NPS. Keeping this in mind, I made efforts throughout my research and analysis to drive towards understanding root causes and opportunities for better alignment at the deepest levels of planning, rather than achieve symptomatic goals. For example, injecting capacity to implement as a consideration in the earliest scoping conversations eliminates the need for an implementation readiness assessment



later in the selection process. Therefore, the alternative that proposes a plan scoping guide is evaluated as having a higher potential effectiveness than an implementation readiness assessment because it facilitates that earlier touchpoint. See figure 10 and the **Alternatives** section for more on how targeting root causes, rather than symptoms, is central to this analysis.

EVIDENCE & LITERATURE REVIEW

Central to this policy challenge is thinking about how PPSS as an entity within the larger NPS planning ecosystem can drive park units, other planning entities, and even members of their own division towards a unified approach to decision-making. This challenge involves aspects of general governmental management practices, planning-specific decision-making, infrastructure investment prioritization, asset management strategies, organizational policy, as well as defining how to measure success for criteria like financial sustainability and implementation feasibility. Evidence from adjacent contexts within the NPS, environmental planning literature, infrastructure investment literature, and organizational change management work for government contexts all provide valuable insights for interventions which may be beneficial to PPSS.

EVIDENCE FROM OTHER NPS CONTEXTS

The NPS has implemented some measures to improve the viability of facility and capital investment planning requests. This narrower context provides helpful lessons for all planning efforts, including those which specifically meet UMP or other individual fund source eligibility criteria. Intended to drive park units to consider and analyze multiple alternatives before requesting funds for facility planning projects, the NPS rolled out the *Investment Concept* (IC) program in FY22. IC implements new prerequisites for approval of facility projects estimated to value over \$2 million. Funds from the PPSS-managed facility investment source (FIS) are currently requested for many of these qualifying projects. IC requirements include detailed cost estimates, evidence of considered alternatives, and anticipated staffing needs associated with the desired facility project. IC information must be presented to the NPS Bureau Investment Review Board (BIRB) for approval. To support parks with these new requirements, PPSS launched a resource repository complete with proposal templates, links to data sources for deriving information about a park's financial and operational status, and completed IC examples. PPSS also offers onsite or virtual IC training workshops to coach parks through the process and how to better think about their facility planning requests.

While IC is designed to ensure that park planning resources are allocated to financially sustainable and operationally feasible facility projects, park adoption of the program and its guidelines was initially fraught. Internal surveys conducted during early 2023 revealed that parks found the IC resource repository confusing and felt that they lacked the resources to put in the additional efforts to request facility planning funds. To address these concerns, PPSS enlisted a team of fellows to improve the IC program's accessibility and uptake. The fellows conducted a breadth of interviews with key stakeholders to understand what could be done to make IC more useful for them. In early 2024, the fellows released a comprehensive guide to IC resources alongside the launch of a more consolidated repository for those materials. Initial



reactions suggest that these updates are being well-received by IC end users who are finding the additional guidance helpful for structuring FIS requests.

NPS has also historically used a Capital Investment Strategy (CIS) to prioritize needs and requirements for existing facility and infrastructure upkeep. Financial sustainability is a key metric that the CIS employed to make prioritization decisions; however, it was not immediately clear in my research how financial sustainability is measured quantitatively within this process.

CAPITAL INVESTMENT STRATEGY

The NPS uses the Capital Investment Strategy (CIS) to prioritize project funding and direct funding towards our higher priority assets. The table below shows the four elements that comprise the CIS scoring algorithm.

Element	Strategic Goal	Activities Captured
Financial Sustainability	<ul style="list-style-type: none">• Build only what can be maintained• Right-size the portfolio• Reduce liabilities• Eliminate non-essential development in parks to emphasize the parks' natural and cultural significance	<ul style="list-style-type: none">• Disposing of non-essential facilities• Reducing operations and maintenance requirements and liabilities• Reducing energy requirements• Practicing fiscal stewardship• Sharpening the focus on core resources
Visitor Use	<ul style="list-style-type: none">• Invest in facilities that primarily serve visitors, are primary points of recreation, and encourage all users to spend more time outdoors	<ul style="list-style-type: none">• Investing in facilities that directly enable outdoor recreation• Investing in facilities that are primary touch points for park visitors
Resource Protection	<ul style="list-style-type: none">• Preserve and protect valuable and unique natural and cultural resources	<ul style="list-style-type: none">• Preserving and repairing historical and List of Classified Structures assets, cultural landscapes, and natural resources• Restoring environmental and cultural assets
Health and Safety	<ul style="list-style-type: none">• Correct facility or site-related deficiencies and hazards that may cause injury or harm to the public, staff, or the environment	<ul style="list-style-type: none">• Correcting existing and identified unsafe and hazardous conditions at NPS facilities

Figure 7 – CIS scoring considerations.
(National Park Service, 2018)

The IC and CIS processes demonstrate how clear, structured guidance and requirements for planning investments can bolster the effectiveness and uptake of such measures. The evidence from these facility-focused processes indicates a need for streamlined processes, more defined measurements, and accessible resources in interventions targeting non-facility planning investments, as well.

EVIDENCE FROM NC STATE PARKS

The North Carolina State Parks system is in the process of implementing a facility project prioritization method utilizing Data Envelopment Analysis (DEA). Drawing on the benefits of multi-criteria analysis (discussed in the subsequent section), DEA quantifies the relative efficiency of multiple inputs and outputs through a linear programming model (Parker & Reisman, 2005). DEA can then inform investment prioritization according to model outputs using these relative measures. When analyzing DEA for the NC State Parks context, researchers conducted a survey to determine the inputs and outputs most valued by system stakeholders (Deutsch, 2023). Researchers derived evidence-based measures for each input and output identified through the survey, and weighted each input and output category to then feed the



DEA model (Deutsch, 2023). The study concluded that prior facility investment decisions made by the NC State Parks were not consistently aligned with highest-priority needs.

The system is now in the process of implementing the DEA-informed prioritization process to drive planning decisions towards highest-priority facility needs as informed by criteria set by key system stakeholders. While PPSS has robust processes in place to select plans for funding, this example from NC State Parks emphasizes the importance of developing selection criteria and identifying priorities according to input from key stakeholders.

LESSONS FROM MULTI-CRITERIA ANALYSIS

Most commonly employed in planning and environmental policy domains, multi-criteria analysis (MCA) – also known as multi-criteria decision analysis (MCDA) – offers an alternative evaluation method to traditional single criteria methods such as cost-benefit analysis (CBA) (Mouter et al., 2020). Whereas CBA assesses a policy according to its economic outcomes by weighing costs and benefits in monetary terms, MCA considers “the various dimensions of interest, and the interplay between multiple, often contrasting, objectives, and different decision criteria and metrics,” (Mouter et al., 2020). These dimensions of interest encompass economic measures of well-being, but also account for factors like ecological well-being and cultural and moral considerations of a policy’s impacts (Saarikoski et al., 2016). Because of its broader scope of measurement criteria, MCA is frequently employed in contexts where there is high-conflict potential between goals and interests (Gamper & Turcanu, 2007). The literature demonstrates that both government environments and contexts dealing with natural resources and/or land-use contain this high-conflict potential and present prime opportunities for MCA to offer benefits (Gamper & Turcanu, 2007). The NPS and its planning policy challenges exist at the intersections of these contexts.

Within the MCA practice exist a variety of specific techniques for “overcoming the difficulties of monetizing intrinsically non-monetary attributes,” (Prato, 2019). Depending upon the available data and identified interests, these techniques may include quantitative, qualitative, or mixed metrics which allow MCA to consider outcomes like risk, moral or strategic tradeoffs, and tolerance for uncertainty (Prato, 2019).

Case Study Example

In Using Multi-Criteria Decision Analysis in Natural Resource Management, Tony Prato assesses 10 case studies using various MCA techniques in natural-resource related contexts. One case study considers selection of preferred management plans for National Parks according to committee members’ utility functions for consumer goods/services outputs versus wildlife habitat impacts. Utility for these two plan outputs lead individual committee members to ranked order preferences between plan options. To arrive at a final decision, committee members may use individual ranked preferences to score plans collectively, they may agree to weight plan attributes to re-align overall plan scores, or members may use their privately determined plan preferences to vote on a plan as a group (Prato, 2019).

Figure 8 – Case study example.



The case in **Figure 8** reveals the benefits and flexibility of employing MCA in national park planning where factors which are difficult to monetarily quantify – like cultural and historical significance or expressed public preferences – can be justly weighed against monetizable attributes like recreational goods and services. My research suggests that current PPSS plan-selection processes do incorporate MCA principles, but I believe there is room to further realize its benefits by expanding MCA-informed thinking to earlier phases of the planning process (e.g. during initial plan scoping conversations between regional planners and park units).

EVIDENCE AROUND PLAN IMPLEMENTATION

PPSS is keenly interested in investing its resources in, and driving parks to pursue, plans that have high feasibility for implementation. Feasibility studies are a tool used in a variety of planning contexts to assess implementation likelihood. Like MCA, feasibility studies account for a combination of quantitative and qualitative factors to arrive at a wholistic understanding of a project’s feasibility (Bonifachi et al., 2016). Feasibility studies consider “whether the economic, legal, political, and market environments favor a new project for development or support the continuation of current operations,” and center a potential project’s ability to appropriately meet citizen’s needs in public sector planning environments (Liu et al., 2018). This methodology provides unique benefit in the NPS planning context where implementation feasibility cannot depend on technical factors alone. Plans pursued by park units face input and pressures from local stakeholders, political representatives, private and non-governmental investors, all while needing to meet environmental and mission-based standards set forth by federal laws and NPS’ enabling legislation (*National Park Service - Planning*, n.d.).

Feasibility Study Example

A feasibility study conducted to understand Oklahoma state park lodge management used qualitative general information like local demographics, property purposes, and current management strategies to supplement market and financial analyses (Liu et al., 2018). The study analyzed peer markets, demand trends among community members and visitors, and operational finance needs to understand total value-add potential of lodges in Oklahoma state parks. It ultimately concluded that lodges were feasible to implement within the system “even though they may not be self-sufficient in business,” (Liu et al., 2018). Rather than arriving at binary decisions like ‘build’ or ‘don’t build’, which often result from decision-making based on the net of costs and benefits, the study recommended actions for lodges in particular contexts. One lodge was recommended to receive major renovations and bolstered marketing efforts while another was recommended for demolition and replacement by individual cottages. These tailored recommendations reflected the feasibility study’s consideration of localized demands, demographics, and market environments which demonstrated its more nuanced approach to planning investment decision-making than traditional economic-only frameworks (Liu et al., 2018; Mouter et al., 2020).

Figure 9 – Feasibility study example.



The conclusions from the study in **Figure 9** also emphasized the importance of collaboration among stakeholders and leveraging strong professional relationships to promote comprehensive decision-making in an environment with trust and buy-in (Liu et al., 2018). Other sources also confirm that plans developed in a collaborative environment with high levels of stakeholder buy-in are more likely to be implemented than plans developed in isolation (Leone, 2009). A study of local comprehensive plans in New Zealand found that plan quality, implementer capacity and commitment, and collaboration between the planning agency and the implementers drove higher plan implementation (Laurian et al., 2004). This evidence strongly suggests that implementation feasibility must consider localized and multi-faceted conditions, and that planning processes where planners and implementers are aligned and engaged reduce the likelihood that resulting plans are shelved.

ADDITIONAL STRATEGIES

The Government Accountability Office (GAO), World Bank, and federal government consulting firms also offer evidence supporting interventions which may be relevant to PPSS and the NPS. In general, many of these resources also invoke the core principles from the previously discussed literature by considering a portfolio of quantitative and qualitative factors. A World Bank working paper proposes the Infrastructure Investment Prioritization framework to guide government entities facing financial constraints toward strategic investments according to social-environmental and financial-economic outcomes (Marcelo et al., 2016). This framework provides a more accessible alternative to economic assessments which require intensive quantitative data in order to produce reliable measures like Net Present Value (NPV) (Marcelo et al., 2016). The GAO also recommends best practices for asset management, asset acquisition, and infrastructure investments by government agencies. These best practices rely on an agency maintaining comprehensive and accurate information about current asset portfolios, operational capabilities, and agency needs (Government Accountability Office, 2000). GAO also released an Asset Management Framework to guide agency investment decisions (Government Accountability Office, 2018).

Consulting literature suggests broader considerations for government entities wrestling with planning challenges amid resource constraints. In addition to intentional cost cutting in plan proposals and development, firms again underscore the importance of multi-faceted decision-making that includes social, environmental, political, and economic outcomes (Bielenberg et al., 2020). McKinsey's framework for better infrastructure decision-making suggests quantifiable economic measures to ensure "that projects yield measurable benefits," as a mechanism for resisting political pressures (Bielenberg et al., 2020). This framework also emphasizes the benefits of planning infrastructure projects that realize "network effects" where new developments explicitly complement an entity's existing asset portfolio. This "network effects" focus is particularly relevant in the NPS context where many parks carry long-standing and robust asset portfolios so plans for new investments cannot be made in a vacuum.

Some federal consulting firms also suggests that government might benefit from more and better strategic planning (Boland et al., 2020). An analysis by Boston Consulting Group (BCG) emphasized stakeholder engagement, aligning resources with strategy, and cultivating a



strategic culture as specific recommendations for government entities conducting strategic planning (Boland et al., 2020) These recommendations closely align with some of the best practices gleaned from the planning literature discussed previously.

EVIDENCE KEY FINDINGS

Exploring this evidence from an array of contexts reveals several key takeaways that should inform how PPSS moves to address the challenges it has identified.

Takeaway 1: Plan development and selection should consider a variety of outcomes in addition to traditional economic measures, and both qualitative and quantitative data are needed to do this effectively.

As discussed in the **Desired Outcomes & Metrics** section of this report, PPSS has identified a range of outcomes that would indicate more feasible and financially sustainable trends in planning but lacks sufficient data to measure these outcomes concretely. Most of PPSS' desired outcomes would be observed during the stages of the process when requested plans are being selected for funding, but the strength of surveyed evidence indicates that incorporating economic and non-economic considerations into earlier stages of the planning process may be beneficial. These comprehensive frameworks also offer customizable approaches for managing planning among conflictual interests. In the NPS context, conflictual interests take multiple forms: satisfying external investor desires versus meeting park unit immediate needs; preserving and protecting natural resources while providing recreational opportunities for visitors; addressing deferred maintenance needs versus acquiring new assets; etc. The evidence suggests that PPSS should continue to articulate quantitative and qualitative considerations for both plan development and selection while also collecting more data that can be deployed to support those considerations.

While much of this literature focuses on avoiding overreliance on traditional economic measures in decision-making, it is important to note that the evidence does not suggest ditching economic or quantitative considerations altogether. In fact, these findings should impress the importance of a balanced approach such that if current planning processes lack economic and/or data-driven methods, it is just as problematic as a process which only considers quantitative information and avoids public sentiments, historical significance, or moral arguments.

Takeaway 2: Collaboration and stakeholder engagement should be prioritized in all stages of the planning process.

As PPSS explores potential actions to take on its stated goals, how those actions engage key stakeholders and center collaborative processes should be a foremost consideration. The literature demonstrates that when stakeholders are bought in, the plans produced on their behalf are higher quality and more likely to be actioned upon (Laurian et al., 2004). PPSS should think of this as not only important for planners working with stakeholders at the park level, but



also for PPSS as it engages the planning community to align priorities and collectively work towards a planning program that reflects organizational realities.

Takeaway 3: Plan implementation is an important metric and there are concrete steps that planning communities can take to improve implementation trends.

Evidence from multiple other contexts supports PPSS' sentiment that reducing the number of funded plans that wind up on shelves rather than under enactment is a worthy goal. And while subsequent interview themes will suggest that defining and measuring plan implementation can be somewhat squishy, the literature demonstrates that there are still concrete ways to prevent a plan from being relegated to shelf life. Key among those mechanisms is the collaboration and stakeholder engagement called out in **Takeaway 2**. The literature suggests that these efforts are directly associated with producing higher quality plans, and in turn, the higher the quality of the plan, the more likely it is to be implemented in some fashion.

INTERVIEW KEY FINDINGS

Through a series of interviews and conversations with more than 30 individuals representing planning teams from 6 of the 7 NPS regional directorates and PPSS, several key themes arose around planning processes, policies, and approaches employed at the regional level. Many of these themes align closely with key takeaways from the examined literature, and they offer important considerations for PPSS both generally and as the division considers potential interventions.

The key findings outlined in the following sections focus largely on opportunities for planning processes and entities within the NPS to better align on priorities and tactics to add value to the planning program. However, it is important to note that interviews with regional planning teams resoundingly affirmed that the NPS planning community is aligned in many crucial ways. Foremost, interviews offered insight into an NPS planning community that is deeply mission driven and committed to the parks that they work with regularly, the NPS as an organization, and the public. Clearly motivated by a sense of service, many interviewees emphasized that their north star for planning work is helping parks meet their needs so that they can thrive and better serve the public. Representatives from most regions shared a desire for more ongoing engagement with the park units in their region. Some shared that they wished park units sought them out more frequently for planning services, while others discussed practices of proactively engaging parks about their needs to generate service provision. The underlying sentiment being that these interviewees know the value that planning can add for parks, and care deeply about creating *and* implementing solutions that help ensure the longevity of the parks system.



Another area of clear consistency was the widespread desire for more civic engagement and collaboration with the public throughout the planning process. Interviewees expressed this largely because they value their civil service roles and mandates, and input from the NPS' public constituents is important for upholding those commitments. Some interviewees suggested that the public might not have a good sense of the resource constraints that parks face because the NPS is not engaging them effectively or consistently inviting them into planning processes. External stakeholders and public opinion can

"Managing expectations starts with parks."

- Associate Regional Director

"NPS is a brand that has a certain set of expectations. All of our fund sources aren't for new stuff, and there is a lot of new stuff."

- Regional Facilities Management Division Director

have influence on the initiatives that parks pursue, and new park units are almost always established in response to political directives, not internal NPS ambitions. Bringing more awareness to those audiences around budget and staffing capacity constraints or NPS planning priorities strikes me as a great opportunity to build allies for pursuing more financially and operationally sustainable investments within the NPS.

Again, motivated by their deep sense of service and desire to help parks, most interviewees shared PPSS'

key concerns around too many funded plans being shelved indefinitely, plan requests that seem infeasible, and how to ensure that decisions are financially and operationally sustainable to support the longevity of the parks system. Many praised recent updates to SCC guidance for better incentivizing plans that meet parks' most critical needs, rather than prioritizing plans that were the most complex.

As PPSS and the larger planning community continue to think about how to best meet park needs, there are several notable opportunities for adopting more intentional practices to better align the planning program with current organizational realities. The findings below highlight some of these opportunities and inform the subsequently considered alternatives.

Key Finding 1: Interviewees agree that plan scoping is crucial, but there are notable differences in how PPSS and regions think about the core functions of scoping.

When parks identify a need at their unit, they often then engage their regional planning team to determine what type of plan and funding is needed to address the need. If engaged, it's typically the regional planning team who scopes and develops the plans that then compete for



“The first step is talking through and really understanding what the issue is and whether a plan is actually needed and working from there.”

- Planning Portfolio Manager

funding from PPSS managed sources. Each regional planning team therefore operates as a partial gatekeeper to PPSS-managed funding sources prior to the formal selection process, and they also play an invaluable role in guiding parks to develop the type of plan that best addresses their needs. In interviews, a majority of staff from PPSS and regional teams expressed the view that more intentional scoping conversations with parks before a plan type is selected would likely have a positive impact on the viability and quality of plans ultimately funded by PPSS. PPSS and regional interviewees overwhelmingly

agreed that early scoping plays a vital role in weeding out requests that might be better addressed outside of the planning process. According to interviewees, effective plan scoping improves plan quality, which evidence demonstrates also drives higher plan implementation (Laurian et al., 2004). When asked to think about common traits from implemented plans that they consider ‘successful’, interviewees from multiple regions identified ‘right-sizing’ a plan from the outset as crucial, and conversations with all regions interviewed suggested that NPS park planning is made better by effective scoping.

“The value of early scoping can’t be undersold.”

- Environmental Planning and Compliance Team Lead

While almost all interviewees conveyed the value of early scoping, different perspectives surfaced regarding the functions of that scoping. PPSS discusses effective scoping as a process that promotes a park’s financial and operational sustainability by assessing existing budget and staffing capacities and developing plans that only call for actions suited to those current resource realities. They are interested in seeing more plans scoped to fit existing resource constraints rather than assuming budget or staff growth in order to execute the plan.

However, some regional interviewees seemed to define a successfully scoped plan as one that is most likely to win funding because it broke an initial request into smaller parts that

“We try to figure out the easiest way to get money for the plan and line up on a source, and the level of scoping is dictated by the fund source.”

- Planning Portfolio Manager

historically compete well for funding. Several of these folks noted that when the region is only likely to get one UMP request funded per year, they feel that it is important to put forth things most likely to compete well for that single win. The idea of breaking planning requests into more bite-sized parts hinted at alignment with resource realities. However, interviews made clear that many regional teams think about ‘right-sizing’ as tailoring a plan to best meet a need, but not necessarily as tailoring a plan to best meet a need *with the park’s*

current resources. Several interviewees also discussed the importance of ensuring that parks have the capacity to engage in the planning process but noted that during scoping they don’t often discuss park capacities to take action on the plan produced by that process.



To be clear, ensuring that parks have the capacity to participate in the planning process and that plan requests are viable for funding are of apparent importance for successful planning. And yet, most interviews seemed to indicate that there is additional room in early scoping processes to assess the current state of park resources that might be leveraged for plan implementation, and further tailor planning requests to those constraints.

Interviews also revealed differences in what each region's current scoping approach entails. Some regions lean on existing formal processes for the bulk of their early scoping efforts while others prefer to pursue more informal and collaborative approaches alongside their park units. Those critical of formal scoping processes often cited their length and inflexibility as detractors and noted that tailored practices enabled faster plan delivery and more intentional relationships with park units being served.

These conversations around scoping impressed its importance in the planning process while also revealing opportunities for more consideration of key factors for financial and operational sustainability earlier in planning processes.

"I stand by a 'key indicator of success' as plans that are 'right sized' to the need and do not try to over promise solutions or try to answer all questions way too far in advance of actual implementation. If that means we need to break it down into discrete parts that are produced separately, but in coordination, that's fine with me."

- Planning Portfolio Manager

Key Finding 2: PPSS and regional planning teams think about plan implementation differently.

Conversations with PPSS staff revealed that they view plan implementation as a key measure of success for funded plans. As fund source managers, PPSS staff note their desire to fund plans that address the highest priority issues and needs across the service imminently. Funding plans that are ready to move forward promptly helps mitigate the likelihood that staff turnover or other organizational changes prevent plan implementation further down the line. Higher plan implementation rates can also indicate that plans put forth are scoped appropriately to facilitate action.

While the NPS does not currently track plan implementation statuses, interviewees from regions and PPSS claimed that many completed plans get shelved for various reasons including park staff or leadership turnover, lack of park budget capacity to implement, and parks never intending to implement in the first place but requesting a plan as a visioning exercise. Several regions agreed that reducing the number of funded plans that are relegated to a life on the shelf is important, but many more indicated that implementation cannot be measured in black-and-white terms and that implementation timelines and capacities are often not primary considerations in programmatic planning processes.



Several planners noted that plan implementation is difficult to measure and often occurs piecemeal. The term ‘implementation’ seemed unfitting for the way that many regional staff think about a plan being actioned upon because it suggests that a plan must always be taken as a whole. Rather, many regional planners considered parks taking steps to enact any component of a delivered plan as a good sign, even if that enactment didn’t occur for five, ten, or even twenty years after the plan was written. Further, ‘implementation plans’ are a formal planning category of their own designed to assess and prescribe mechanisms to action on previously developed programmatic or facility investment plans. This enforces the notion that considering a park’s capacity to act on a plan is a secondary and separate planning component, and so those considerations are not prioritized during high-level scoping and programmatic planning processes.

“In earlier years, we developed plans with sometimes detailed implementation actions. However, in the past few years with many new park units and revised D.O. #2, GMP 2.0s, etc., we are developing management direction documents at the ‘high level’, or highly programmatic, without prescriptive solutions.”

- Planning Portfolio Manager

“Parks use [planning] as a thought process for a direction they want to go... A lot of the response from the after action is that ‘we didn’t do this, but it brought us on the same page and gave us a direction.’”

- Program Manager

While many planners agreed that they want to see more funded plans actioned upon sooner rather than later, several also emphasized the view that there is value in planning for things that may not ever be implemented or may take years to come to fruition. Some interviewees were explicit that past planning guidance was too prescriptive and did not support plans that gave parks enough flexibility on implementation. These folks appreciate the newer trend towards planning high-level first, then moving forward with an implementation plan later when the park is ready. This again impresses the idea that considering implementation capacity is not a first-order

task in the comprehensive planning sequence, and it likely contributes to interviewee observations that funded programmatic plans are not being actioned upon as frequently or quickly as some may prefer.

“Implementation steps should be consistent with the NPS’ articulation of its management direction at the park as represented in management planning documents. Therefore, for ‘high level’ or a highly programmatic plan, the implementation schedule is not knowable and is up to the park’s discretion.”

- Planning Portfolio Manager



Key Finding 3: Planning environments that are highly collaborative and leverage influence from leadership are viewed as catalysts for effective planning.

Interviewees from regional planning teams repeatedly emphasized that having collegial and engaged relationships with the park units in their region facilitated better planning. This sentiment is also supported by the literature, as noted in **Takeaway 2** from the **Evidence Key Findings** section. Multiple regions commented that in decades past, park units didn't always come to regional planning teams for professional planning assistance, but rather took efforts in house or went around the regional planning team because they perceived it as a bureaucratic process that could be skipped. However, these regions have noticed increases in parks utilizing their services and attribute that shift to intentional relationship-building efforts, advocacy by Regional Directors, and demonstrated value-add by the regional planning teams. In one interview, an Associate Regional Director for Facilities paid direct compliment to the Associate Regional Director for Lands and Planning for improving regional planning relationships with park units saying, "I think you have gone a long way to help people understand that you want to be part of the team and you want them to be successful, and so I think that we don't have situations where people try to avoid the planning team anymore."

"I've been with the Park Service about 15 years and probably the first few years it was more of an us versus them in the regional office, but I think in the last decade we all have collaborated really, really well ..."

- Associate Regional Director

"Even with robust facilitation and project management assistance from region and support offices, the park staff capacity is typically the key inhibiting factor to moving planning projects forward."

- Planning Portfolio Manager

Interviewees from several regions emphasized that the best planning processes are those where the park and its leadership are actively engaged throughout. One noted that at the outset of a planning partnership, their region explicitly asks the park if it has staff with the capacity and intention to be engaged and involved with the upcoming process. If that answer is no, the region may advise pursuing the plan at a time when that capacity to engage is available. It is important to note here that the staff capacity constraints which

may hinder plan implementation also impact engagement in the planning process up front. Several interviewees noted that while it is ideal to have dedicated park staff participating in the planning process, that is not commonly available.

Park engagement in the planning process offers another prime opportunity to instill practices that promote decision-making that regularly features financial and operational sustainability considerations.



Key Finding 4: There are different views on whether it is the role of planning to prominently consider a park's financial and operational sustainability in the plan development process.

Conversations with PPSS staff indicate that many view the planning community as being on the front lines for improving the longevity of park operations and ensuring that the NPS operates in a manner consistent with its current financial and operational realities. Most regional staff expressed their view of planning primarily as a means for helping parks to satisfy statutory requirements and explore all options for addressing an identified need. Interviews did not suggest that regional planners do not value the financial and operational sustainability of park units, but rather that it is the responsibility of park leadership and plan recipients to account for those things as they decide how to action upon a delivered plan.

A small group of interviewees indicated a strong belief that accounting for implementation capacity and impacts on long-term financial and operational sustainability is not a function that planning should serve. They view the role of planning as exclusively working to craft the best approaches for meeting identified park needs. This view holds that accounting for resource constraints and financial impacts hinders the development of the truly 'best' planning approaches and is instead the role of unit leadership to consider after plan development.

While only a few interviewees were adamant in those beliefs, many more suggested that regardless of what should be happening, assessing sustainability implications and implementation capacity are not priorities in their current development processes for plans that are not explicitly implementation plans. These perspectives suggest that there are opportunities for the planning community to incorporate more resource and capacity constraint evaluations into early phases of planning, and more importantly, opportunities for internal alignment around if, or how much, planning should engage these considerations.

Key Finding 5: Both PPSS and regional planning teams suggested that park units might benefit from more strategic planning, and there is literature to support this perspective.

Many interviewees also suggested that an increase in 5-year strategic planning may spur parks to make more financially and operationally sustainable decisions. PPSS and regional planning teams sense that parks most frequently request narrow, project-specific plans or broad, long-term plans, though actual request shares are not clearly tracked. While all parks are required to maintain high-level general management plans (GMPs), some regions sense a trend toward substituting small updates to those long-standing plans for enacting strategic plans that include concrete next steps along a designated time horizon. Multiple interviewees suggested that strategic plans can enable specific projects while also aligning decisions under time-bound priorities and goals. PPSS decision-makers noted that they would consider an increase in funding requests for strategic plans as an indicator of progress on the identified problem statement.



Q: Is there a plan type or planning activity that could help teams improve the park's financial and operational sustainability?

A: "Strategic planning! Looking ahead in the next 5 years and having the short-term plans for how they will make progress over the next 5 years.

- Planning Portfolio Manager

A: "I agree, this need for the 5-year plan is it. Not [planning] with the ifs. We need the resource-bound 5-year plan."

- Associate Regional Director

It is also important to note that some PPSS staff expressed concern that promoting strategic planning does not go deep enough toward the root of the problem. My research suggests that this is a valid concern that should not be overlooked. The sentiment continues to underscore the behavioral drivers of this challenge and need for collaboration and alignment as suggested by the key findings detailed above.

"Strategic plans could be an excellent tool if they align with the culture shift to find solutions that we can afford... I'm concerned that without that culture shift the would be just another type of aspirational plan.

- PPSS Program Analyst

Working to shape the foundational thinking that informs the outcomes of current planning processes is where PPSS and regional planners have the largest opportunities to make progress on NPS financial and operational sustainability. Continuing to apply technical requirements or issue formal policy updates aiming to drive desired outcomes are likely to only go so far without a unified culture that is committed to advancing those outcomes at every step of the planning process. The following sections propose alternatives that target the areas of opportunity identified in interviews and evaluate those alternatives according to criteria informed by interviews, PPSS goals, and the literature.

EVALUATION CRITERIA

PPSS and regional planning teams lack sufficient formal data to support quantitative evaluation measures for considering interventions. Therefore, I employ criteria that evaluate alternatives relative to one another and measure expected outcomes according to interview data, literature evidence, and client feedback. The criteria utilized are informed by PPSS' stated outcomes of interest and supported by interview and literature evidence. The criteria include:



1. **Effectiveness** – The effectiveness of each alternative will consider the option’s ability to make progress on outcomes of interest to PPSS, and its likely magnitude of progress relative to other options. The outcomes considered key for an alternative’s effectiveness include improvements in funded plan implementation trends, increases in requested plan actions that align with current ONPS funding and staffing levels/trends, and increased interest in strategic planning.
2. **Cost** – An alternative’s cost primarily accounts for labor and materials likely required to develop and implement its proposed actions. However, I also account for anticipated time and opportunity costs. Relational costs are not included in the scope of this criteria, but instead considered as a component of the fourth criteria evaluating impact to organizational culture.
3. **Feasibility** – The feasibility of each alternative accounts for not only PPSS’ capacity to implement, but also the readiness of other stakeholders to engage the option. Political will may also be an important component of an option’s feasibility, but the alternatives proposed largely avoid engaging any processes or stakeholders that are substantially political.
4. **Impact on Organizational Culture** – As highlighted in the **Background & Problem Orientation** section, the challenge that proposed alternatives seek to address is heavily influenced by organizational culture and relationships up and down the NPS. This criterion evaluates the type of impact that an alternative is expected to have on culture, stakeholder engagement, and working relationships in the NPS planning ecosystem. Measuring these impacts includes considering the level of internal collaboration an alternative prompts, assessing the adaptiveness of the option, and accounting for civic and public engagement likely to be conducted as part of the alternative’s execution.

The following sections detail alternatives and evaluate each according to these criteria.

ALTERNATIVES

My research to date strongly suggests that organizational culture and behavioral patterns are driving the issues observed by my client. The NPS planning ecosystem contains numerous policies and processes that aim to guide funds to planning efforts aligned with strategic priorities, highest order needs, and organizational realities. Yet despite these efforts, funded plans continue to collect dust on shelves, projects fail to achieve full implementation, and implemented plans increase strain on staffing capacities. At the heart of this challenge are longstanding behavioral norms that hinder effective adoption of technical interventions and are better addressed through adaptive mechanisms. Therefore, I propose alternatives that address the adaptive, human-centered drivers of this problem rather than pose additional policy or process injections into an already crowded ecosystem.



The following sections evaluate the below alternatives, and recommends alternative 1 as the highest scoring option across all criteria:

1. **PPSS issues a plan scoping guide** for regional planning teams and park-level planners to reference and follow in the early phases of the planning process.
2. **PPSS develops an implementation readiness assessment** for entities competing for UMP funding to complete prior to requesting funds.
3. **PPSS publicizes the benefits of strategic planning** to drive cultural shifts in how parks and planning entities think about strategic planning and the role it plays in comprehensive planning efforts.

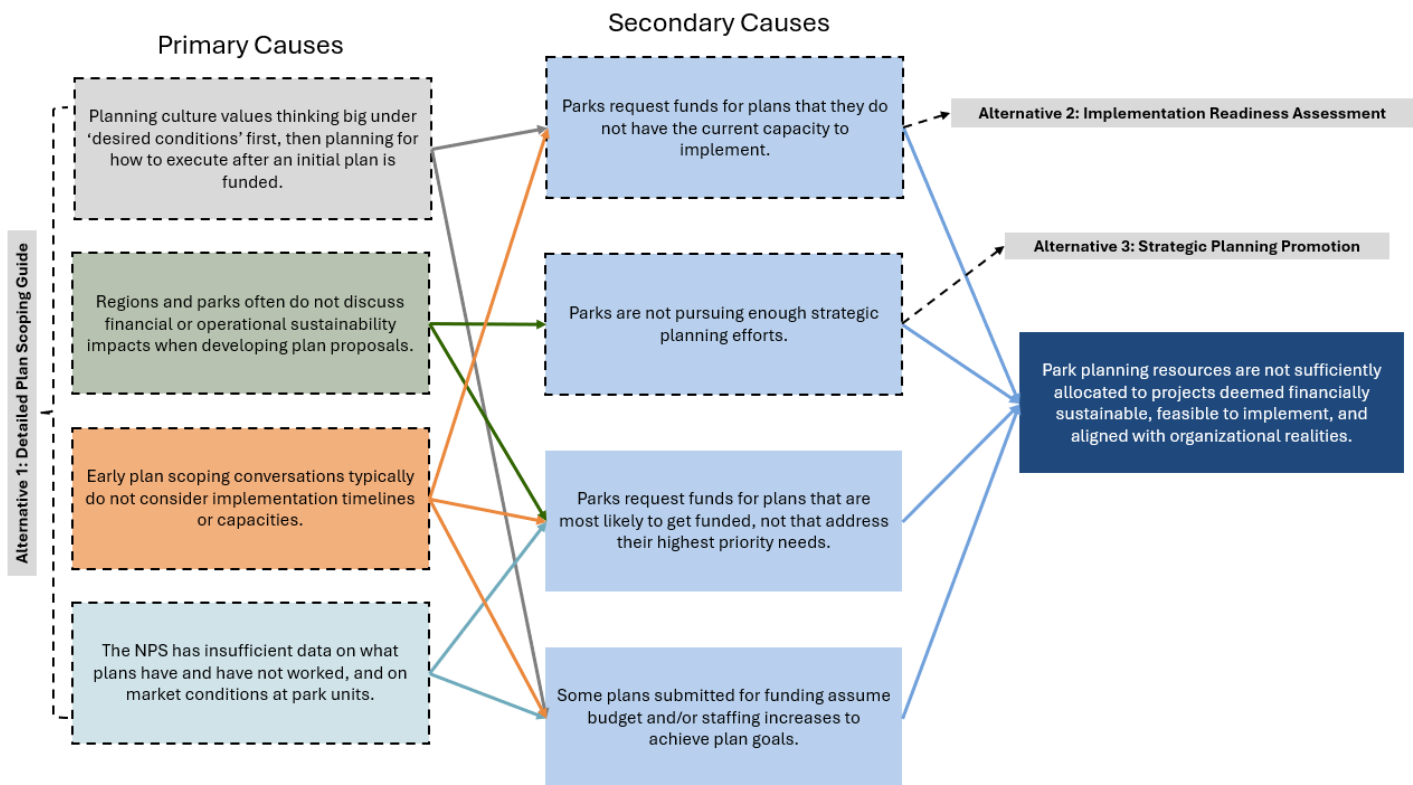


Figure 10 – A root cause map highlighting key influences on the problem statement and indicating where each alternative targets intervention.

ALTERNATIVE 1 – PPSS ISSUES A PLAN SCOPING GUIDE

When asked what he would like to see more of in the planning process, one PPSS member said, “more critical thinking, questions asked, and creativity” to try and meet a park’s stated need. This alternative aims to achieve that end by proposing that PPSS issue a plan scoping guide complete with best practices learned from peer regions, a list of questions and goals to direct conversations, and frameworks for mapping anticipated outcomes and network effects of plan components (Bielenberg et al., 2020). The guide will steer the scoping process to identify root



issues to be addressed through planning, barriers to plan implementation, plans requiring unsustainable cost and staffing levels, and requests misaligned with strategic planning priorities. While implementation is only one metric of interest, this alternative emphasizes a collaborative process that can uncover implementer capacity while improving plan quality.

The guide should be considered a supplement to the updated Reference Manual – 2 (RM-2), and a more informal precursor to the P3 process. While P3 gathers information on expected costs and capacity needs for a project, it does not explicitly go the step further to assess whether those requirements align with current capacities. It should act as a practical tool to carry out existing policies while inserting more capacity alignment conversation and evaluation into early planning processes.

EFFECTIVENESS

A PPSS-issued plan scoping guide is likely to be the most effective of the considered alternatives because it most directly targets the root causes of the challenges facing PPSS, is derived from – and facilitates – collaborative efforts, and supports the early scoping measures advocated for by a majority of interviewees. Alternatives 2 and 3 propose interventions on key outcomes that PPSS is interested in improving, but they do not address the underlying drivers of those outcomes. Scoping is one of the earliest touchpoints in the planning process and shapes the type of plan, actions within a plan, and overall quality of a plan that may be put forward to compete for PPSS funding. This alternative interjects additional thought, best practices, guidance, and metrics into the foundation of planning processes which we can expect to have a greater impact on key outcomes than interventions targeting challenge symptoms later in the process.

In addition to offering technical assistance for scoping plans appropriately, this alternative proposes a guide intended to provoke substantive dialogue and collaboration between park stakeholders and planners. This generates the stakeholder engagement and alignment between planners and end users that studies also suggest improve plan quality and increase the likelihood of plan implementation (Leone, 2009).

A comprehensive plan scoping guide provides a wholistic approach that addresses all key effectiveness measures. PPSS staff also stated that they foresee this alternative as having a high impact on their outcomes of interest. For these reasons, I expect this alternative to have the highest effectiveness of all considered options.

COST

I believe that this guide could be developed by 1 to 2 full-time staff at the GS-09 or GS 11 levels over the course of 3 to 6-months. Assuming that this is accurate, the labor costs associated with this alternative could range from around \$20,000 to nearly \$200,000. If PPSS chooses to implement this alternative, I would recommend either employing two GS-09 staff for 3 months or one GS-11 for 6 months as middle ground options with labor costs of around \$41,000 or \$49,000 respectively.



	GS-09	GS-11
Step 5 Salary x 1.4 Benefit Multiplier (non-locality pay)	\$81,446	\$98,542
Pro-rated for 3 months	\$20,362	\$24,636
Pro-rated for 6 months	\$40,723	\$49,318

I expect the opportunity costs of implementing this alternative to be relatively low. If PPSS is hiring dedicated staff to implement this alternative, progress on other ongoing initiatives is unlikely to be hindered, and if PPSS diverts 1 to 2 resources from other initiatives for a 3 to 6-month period, this is still a relatively small amount of time and likely to have minimal impact. Further, the comprehensive nature of this alternative means that it achieves many of the same outcomes as the more narrow proposals in Alternatives 2 and 3. Therefore, pursuing alternative 1 does not have a high opportunity cost of forgoing other options.

FEASIBILITY

PPSS staff directly stated that this alternative “seems likely to have a pretty significant impact and be relatively easy to execute.” This comment along with key interview findings indicate that this alternative is likely to enjoy substantial buy-in and face few barriers to implementation. Administratively, the guide produced would be a single digital resource delivered to planning teams and housed on a SharePoint site available to all NPS staff. PPSS may choose to supplement this resource with a limited number of training sessions, increasing the administrative commitment of this alternative slightly. PPSS’ sentiments that executing this alternative seems doable and pervasive interviewee support for intentional scoping efforts lead me to assess this alternative as having very high feasibility relative to other options.

IMPACT TO ORGANIZATIONAL CULTURE

As mentioned, this alternative is designed to be collaborative, comprehensive, and reflective of stakeholder feedback. It provides a resource that pointedly engages planners with the parks that they serve. In addition to having a high expected buy-in, the intentional engagement channeled in this alternative indicates a likely positive impact on organizational culture and collaboration, and this expected impact is supported by interview **Key Finding #3**.

ALTERNATIVE 2 – PPSS DEVELOPS AN IMPLEMENTATION READINESS ASSESSMENT

This alternative requires PPSS develop a targeted assessment for regions to conduct before requesting planning funds. The assessment should be a standard form developed by PPSS that regions and park units complete together prior to the P3 process. Unlike the more comprehensive guidance proposed as a strongly recommended resource in Alternative 1, this option should be a new requirement in the funding request process. Ideally, regions will be able to determine when a park’s implementation capacity is not sufficient to move forward with a plan. However, PPSS should also have a mechanism in place to use assessment results as a formal funding decision factor in the event that plans with low implementation prospects still pursue funding. PPSS may want to consider an option by which successful completion of this form allows parks to forgo the P3 process if they are deemed to have completed sufficient scoping and capacity assessments on their own.



Assessing implementation readiness can inform PPSS funding decisions to funnel limited resources into viable plans, but it also poses risks and challenges that make this alternative less appealing than others. This option also targets only one outcome of interest, implementation. Evidence identifies the capacity of implementing parties as a key determinant of plan implementation, and this alternative directly works to uncover park unit capacities, though implementation is still a symptom of the more central issues facing the NPS (Government Accountability Office, 2000; Laurian et al., 2004).

EFFECTIVENESS

This alternative gives PPSS a mechanism for funneling plans to the most implementation-ready plans. Therefore, it is reasonable to expect that implementation increases substantially for PPSS-funded plans. Key characteristics of implementation readiness include a plan's alignment with current funding and staffing levels. This suggests that the alternative will likely have a positive effect on implementation trends and funded plan alignment with ONPS levels. However, this alternative risks incentivizing plan requests for things that are implementation-ready, but not actually a park's highest priority need. So, while we can expect this alternative to effectively improve some outcomes of interest, it does not target the root causes of the issue and may promote band-aid style planning rather than the strategic, sustainability focused efforts that PPSS is ultimately interested in.

Alternative 1 addresses implementation readiness while also guiding planners to think strategically and consider long-term sustainability. It also offers a middle ground that balances planner perspectives that there is value in planning for things that may be further from enactment while nudging folks to consider implementation readiness. Therefore, Alternative 2 is likely to be a less effective approach by providing another technical intervention that does not directly target the root causes of PPSS' primary issue of concern.

COST

Similar to Alternative 1, I expect that this option could be completed by 1 to 2 GS-09 to GS-11 level staff over the course of 3 to 6-months and would recommend a team of either two GS-09 staff for 3 months or one GS-11 for 6. The technical aspects of developing the assessment will likely take less time than developing the scoping guide proposed in Alternative 1, but time saved when developing the resource will be offset by the additional time needed to get approval for this guide to become a mandatory component of plan selection. Therefore, we can expect the labor costs associated with this alternative to be equal to those expected from Alternative 1.

	GS-09	GS-11
Step 5 Salary x 1.4 Benefit Multiplier (non-locality pay)	\$81,446	\$98,542
Pro-rated for 3 months	\$20,362	\$24,636
Pro-rated for 6 months	\$40,723	\$49,318



However, this alternative presents high opportunity costs relative to the others because it expends political capital to implement an intervention that targets only one symptom of the larger challenge. PPSS could choose to implement this alternative in partnership with others, but I expect that the most likely and feasible path is to move forward with one on its own. Therefore, implementing this alternative is a direct tradeoff to implementing others and forgoes opportunities to target the root causes of this issue. Considering PPSS' historical attempts to address other symptomatic phases of the planning process without substantially improving the financial and operational sustainability of funded plans, I consider the opportunity costs of not intervening at the source to be quite high and unappealing. This option therefore has the highest overall costs of the three considered alternatives.

FEASIBILITY

PPSS also commented that this alternative seems like one that they are readily able to pursue. While internal capacity for creating the assessment is relatively high, this alternative will likely require approval from higher-level organization leaders in order to become a mandatory part of the funding process. This introduces additional hurdles to implementation that other considered alternatives will not face. Further, while PPSS stakeholders may be enthusiastic about this alternative, the varying perspectives from regional planning teams who would ultimately be the end users of this product suggest lower willingness and readiness to engage from key stakeholders at the regional level. While the technical components of this option may be highly feasible to implement, additional steps to get this alternative approved as a requirement paired with lower enthusiasm from end users suggests that this alternative is less feasible than Alternatives 1 and 3.

IMPACT TO ORGANIZATIONAL CULTURE

Considering the difference in PPSS and regional planning team perspectives on implementation, were PPSS to move forward with this alternative, there would likely be some backlash. One way to minimize that backlash is to issue this readiness assessment as a suggested exercise rather than a requirement, but I believe that would substantially dilute the effectiveness potential of this alternative, which is why it is proposed as a requirement. Completing a readiness assessment would still engage regional planners with park units, but PPSS may expect less receptiveness for this alternative. Interviewees also noted that the current process for competing for UMP funding is challenging and sometimes arduous. This alternative only adds a technical step to these existing processes without meaningfully prompting culture and mentality shifts. For these reasons, this alternative is unlikely to have a positive impact on organizational relationships and culture.

ALTERNATIVE 3 – PUBLICIZE STRATEGIC PLANNING BENEFITS

This alternative targets the strategies supported by **Key Finding #5** in order to elevate strategic planning within the park service. It suggests an intentional advocacy effort led by PPSS that leverages relationships to recruit allies and advocates. PPSS should develop concise messaging materials about the benefits of strategic planning to share with regions, parks, and senior NPS leadership. The messaging should emphasize how strategic plans complement park GMPs and substantiate project-driven planning requests. This alternative should take the form of real-



time conversations with regional directors and planning teams, but also include written materials with key points, data-driven evidence of strategic planning benefits, and target outcomes desired by PPSS. Take-up will likely be driven by interpersonal engagement.

EFFECTIVENESS

Based on the findings outlined in **Key Finding #5**, I believe that promoting the benefits of strategic planning will serve as a nudge for parks and regional teams to engage with this type of planning and generally think more about the strategy and sustainability the comes with this type of planning. These promotional efforts should, like Alternative 1, push parks and planners to consider ONPS budget trends as they think strategically about what a park needs and what it is able to do on a strategic level. I expect that promoting this type of planning will result in more strategic planning, greater implementation for completed plans, and parks aligning their priorities with their capacities giving this alternative the potential for high effectiveness.

This alternative leverages regional leaders as allies and advocates for additional strategic planning, which also suggests a higher likelihood of adoption and effectiveness.

COST

Another PPSS-owned intervention, this alternative requires more stakeholder engagement and facilitation than options 1 and 2. PPSS could likely still utilize 2 to 3 GS-09 or GS-11 staff to own the messaging development, but recurring sessions with regional partners will be critical to gain buy-in and ensure take-up lengthening the timeline required to effectively integrate this alternative. Assuming a team of 3 GS-09 staff develop and launch this effort over the course of 6 months, expected labor costs for this alternative total just over \$122,000.

	GS-09	GS-11
Step 5 Salary x 1.4 Benefit Multiplier (non-locality pay)	\$81,446	\$98,542
Pro-rated for 3 months	\$20,362	\$24,636
Pro-rated for 6 months	\$40,723	\$49,318

Similar to Alternative 2, this option comes with high opportunity costs due to its targeting second tier causes rather than the roots. While strategic planning itself would likely positively impact root causes of this challenge, merely boosting the quantity of strategic plans requested does not ensure that the underlying considerations of those plans are better aligned with organizational realities. PPSS is likely better targeting the reasons *why* more strategic plans are not currently requested through Alternative 1, rather than simply targeting an increase in requests.

FEASIBILITY

Relative to the other alternatives, this option may have lower feasibility due to its dependence on more ongoing and thorough stakeholder engagement. Success for this intervention would be dependent upon developing trust in relationships with regional leaders and getting their buy-in as advocates for the culture shift and practice shift that this alternative calls for. Bringing



7 regions of highly variant size, scope, and culture into alignment presents a challenge for adoption and effectiveness of this alternative. PPSS likely has the technical capacity to employ a team dedicated to this initiative, but the time commitment required by this alternative makes it less feasible than other alternatives.

IMPACT TO ORGANIZATIONAL CULTURE

This alternative has the potential to have a high impact on organizational culture due to its deeply collaborative components. My research suggests that the implementation of this alternative and the level of depth and collaboration engaged by the stakeholders will be crucial for having a culture impact in addition to being an effective intervention.

While PPSS and regional planning leaders hold regular meetings at present, this alternative intentionally facilitates conversations that avoid prescription and promote collaboration. This alternative suggests an ongoing series of open, collaboration sessions where members of the planning community come together to get aligned about how strategic planning can best serve parks and the NPS. If structured and guided effectively, I expect that these conversations can improve transparency across planning entities while generating buy-in for an effort that directly addresses NPS' need for more strategic planning. This alternative has the potential to positively impact organizational culture and relationships if implemented properly.

OUTCOMES MATRIX

	Effectiveness	Cost	Feasibility	Impact to Organizational Culture
1 – Plan Scoping Guide	High	Expected: <\$50,000	High	Positive and Expansive
2 – Implementation Readiness Assessment	Low	Expected: <\$50,000	Low	Potentially Negative
3 – Promoting Strategic Planning	Medium	Expected: >\$120,000	Medium	Positive

RECOMMENDATION

Alternative 1 outperforms both other considered alternatives across all evaluative criteria. It is also the alternative that has received the most positive reactions from PPSS stakeholders in conversations, and the alternative that most directly targets the root causes driving the challenge at hand. For this reason, I recommend PPSS move forward with implementing Alternative 1 in accordance with steps outlined below if the division is prepared to move forward with concrete action.

Outside of implementing a concrete Alternative, I recommend that PPSS use the evidence and interview findings outlined in this report as a baseline for pursuing more and better data



collection on its outcomes of interest, and for aligning stakeholders throughout the planning community and beyond on how they will work toward generating and funding plans that contribute to financial and operational sustainability across the NPS. Achieving the level of impact that PPSS desires cannot be done in a vacuum or with prescriptive action alone. It must center communication and collaboration to develop a shared vision for the role that planning will play in shaping organizational realities, and a shared understanding of what must be done to make that vision a reality. The resounding passion for and dedication to serving parks and the public that I heard in interviews is a powerful asset for the planning community. Uniting those sentiments under a data-informed approach for advancing the longevity of the NPS and its missions is a worthy and possible pursuit.

IMPLEMENTATION

I envision the comprehensive scoping guide delivered as a roughly 3-page document that regional planning teams can reference regularly. To reiterate, this guide should serve as an informal precursor to the P3 process, and ideally seek to fill current gaps in the P3 by addressing resource capacities rather than expected resource needs, or desired resource conditions. The guide's anticipated success relies on its development process being collaborative and transparent, so guide developers should regularly socialize progress on the resource with regional teams and other PPSS staff. Administratively, the guide produced would be a single digital resource housed on a SharePoint site available to all NPS staff. To maximize the guide's effectiveness and promote adoption, PPSS should host a brief training session with regional teams upon release. Concrete steps outlined in Appendix 1 serve as a suggested plan for PPSS to implement Alternative 1.

CONCLUSION

PPSS is clear about their desire to align planning functions in the NPS with the resource constraints and organizational realities facing the NPS. Effectively accounting for these conditions presents a substantial opportunity for the NPS planning program to not only avoid exacerbating negative trends, but also make progress towards improving them. Dynamic conversations about current planning practices suggest several areas where stakeholders throughout the NPS planning community can promote a culture that plans efficiently, effectively, and creatively, but within affordable and sustainable means. Striving towards a planning culture characterized by those traits is sure to sustain America's greatest treasures and the service that stewards them for generations to come.



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APPENDIX 1 – IMPLEMENTATION PLAN

Stand up guide development team

- PPSS leaders should identify the GS-11 or two GS-09 staff to lead scoping guide development.
- The staff selected to lead this effort should be well-versed in NPS planning policy, processes, and players.

Conduct comprehensive review of existing analyses to inform guide development

- Guide developers should use the findings from this project, the planning programmatic review conducted by a prior SES candidate, investment concept materials, and RM-2 rewrite research to identify critical components of the guide.
- The team should focus on the key findings and takeaways from all of these completed initiatives to understand what gaps the guide should aim to fill, but my work suggests that injecting more consideration of financial and operational capacities and projections should be a primary focal point.

Draft scoping guide

- The scoping guide should include two primary components: 1) questions that planners should ask and consider during scoping conversations, and 2) specific best practices and key themes that should be kept in mind during the scoping process.
- The guide should be formatted in a digestible, visibly appealing manner that guides users' eyes through a logical flow of questions and steps to address.

Workshop scoping guide according to intentional feedback

- PPSS leaders should have opportunity to weigh in on the scoping guide content, and some feedback from end-users on accessibility and content should be considered. However, it will be important that guide developers regulate the amount of feedback incorporated into the guide, as its development will be based on existing research findings and some audiences may have biases and motivations that would adversely affect the guide's impact.



Develop supplementary training materials (if desired)

- Scoping guide adoption and reception are likely to benefit from introductory training by the guide developers.
- Training should be held virtually and focus on transparently explaining the motivations for releasing a guide, the evidence used to support its content, and suggested use cases.
- Training should frame the guide as a resource intended to foster collaboration between planners and the parks they serve and alignment within the planning community. Anticipated benefits should be emphasized to encourage take-up and buy-in.

Release guide and training materials on SharePoint

- The scoping guide and supplementary materials should be made available in a SharePoint folder that planners can access at will.
- Released materials should include contact information for the development team who should remain available as thought and support partners for regional planning teams in the immediate time after rollout.

Follow-up with guide users at regular intervals

- PPSS must remain in touch with this guide's intention to be a beneficial resource for the NPS planning community.
- Checking in with users at regular intervals to understand how they are using the guide and what is and is not helpful should be a priority.
- PPSS should be willing to revise the guide at regular intervals according to on-the-ground experiences.



APPENDIX 2 – INTERVIEW QUESTIONS

Interview Questions for Regional Planners, PPMs, & ADs

1. Introduce yourself by sharing your current role and a brief summary of your day-to-day job functions.
2. **Describe the high-level planning process in your region. What are the main steps between a park raising a need and the region delivering a plan?**
 - a. Are there instances where plans get started, but not completed? If so, why?
 - b. Are there common occurrences of plans being delayed? If so, what drives those delays?
3. What happens after the plan is delivered to the park? Is there any follow-up with the park down the line?
4. **Does the region track plan implementation rates, or the implementation of specific actions called for in a plan?**
 - a. If so:
 - i. Please provide examples.
 - ii. Do you do it for particular types of plans (ex. comprehensive management plans, development concept plans, visitor use management plans, etc.)?
 - iii. Do you track what impact implementation has on park fund usage and staffing capacities?
 - b. If not:
 - i. What percentage of actions (particularly those that call for large dollar facility investment) do you think are implemented?
 - ii. What is the typical timeline for implementation?
 - iii. What actions should be taken to improve plan implementation rates?
 1. More/different policies? More training? Different processes?
5. **Does the region conduct any effectiveness measures after a plan is delivered and implemented?**
6. **Give me some examples of plans that you've worked on in the last 10 years that you'd consider successful? What about plans that you'd consider unsuccessful?**
 - a. What would you consider the key indicators of success for a completed plan? Are certain types of plans more likely to achieve their intended purposes (e.g. visitor use management plans vs. resource stewardship strategies vs. General management plans vs. transportation plans, etc.)?
 - b. Are there commonalities among those you'd consider unsuccessful?
7. Does the region encounter scenarios where plans are re-done due to original versions getting shelved by the park? If so, how often?
8. Do you feel that the highest priority planning projects (in your region/program) are being funded, and implemented?
 - a. If no, why not?
9. **Can you think of specific examples where investments called for in a plan were not implemented because they were too costly to construct or too costly for the park to staff and maintain?**



- a. Please provide examples. What do you think contributed to that outcome?
 - b. Did this require a revision to the plan, or was it a 'want' investment that could be moved past without affecting other key plan components?
 - c. What could have been done to improve the actions likelihood of being implemented and of reducing the park's funding or staffing burdens?
10. Are there examples where those large dollar investments were implemented, addressed the intended issue(s), and **reduced** a park's funding or staffing burdens?
- 11. Is there a plan type or planning activity that could help teams improve the park's financial and operational sustainability?**
- a. How should we be measuring financial and operational sustainability? What metrics should be used? Do those metrics currently exist?

Are there other questions that I haven't asked that would be helpful for better understanding the planning landscape?