



WELCOME

Public Open House for
Grand Canyon National Park Telecommunications Plan /
Environmental Assessment



Introduction

Proposed Action

The National Park Service is proposing to implement a Telecommunications Plan that would provide a framework and guidance for the future construction and operation of telecommunications infrastructure within developed areas of Grand Canyon National Park.

Construction and operation of any new telecommunications infrastructure would require site-specific review and approval in accordance with current NPS policies.

The NPS is not proposing to directly develop new telecommunications infrastructure under this Plan, nor is this planning effort in response to a specific application from a telecommunications company for a right-of-way (ROW) permit within Grand Canyon National Park.

The NPS is seeking to develop guidance for the types and locations of this infrastructure that would be used to inform the park's review of future ROW permit applications.

Purpose and Need

The purpose of this Telecommunications Plan / Environmental Assessment is to identify appropriate types and locations of telecommunications infrastructure and services within Grand Canyon National Park, that, if installed, would provide sufficient and reliable wireless (including cellular—voice and data), data network capacity, and two-way radio communications to meet the needs of visitors, the National Park Service, and park partners within developed areas of the park.

The plan is needed to:

- Comprehensively address telecommunications deficiencies within developed areas of the park that currently inhibit National Park Service operations as well as the activities of visitors and park partners, and
- Ensure that telecommunications infrastructure is designed and located in a manner that minimizes impacts to park resources.



Photo: Existing telecommunications infrastructure near Hopi Fire Lookout. NPS Photo.



Alternative A

Telecommunications Services

Telecommunications coverage and capacity would increase as modifications to existing infrastructure are made and/or new infrastructure is installed but these changes in service would not be guided by a comprehensive plan and are unlikely to fully address existing deficiencies in telecommunications services within developed areas of Grand Canyon National Park.

Telecommunications Infrastructure

Existing telecommunications infrastructure that is either NPS-owned or authorized (via existing right-of-way permits) would remain for the duration of existing right-of-way permits or longer. This includes five existing NPS radio towers.

The NPS would also consider future renewals for existing telecommunications ROW permits on a case-by-case basis, with minor modifications and upgrades anticipated over time.

New, minor telecommunications equipment, such as small-cell sites on existing infrastructure, could be considered and approved.

No major telecommunications infrastructure, such as telecommunications towers, would be authorized within the park.

No comprehensive, park-specific guidance as to where such services should be provided would exist. Criteria for placement of associated infrastructure would be identified on a case-by-case basis with the goal of avoiding or minimizing impacts to resources.



Photo: Existing South Rim Village Tower. NPS Photo.



Alternative B – Telecommunications Towers

Location and Height

One additional tower could be considered in each of the five areas shown in pink in the map to the right, with maximum heights associated. Four of the five sites currently have NPS radio towers in close proximity.

The existing South Rim Village Tower could also be removed and/or relocated outside the national historic landmark district.

Type and Design

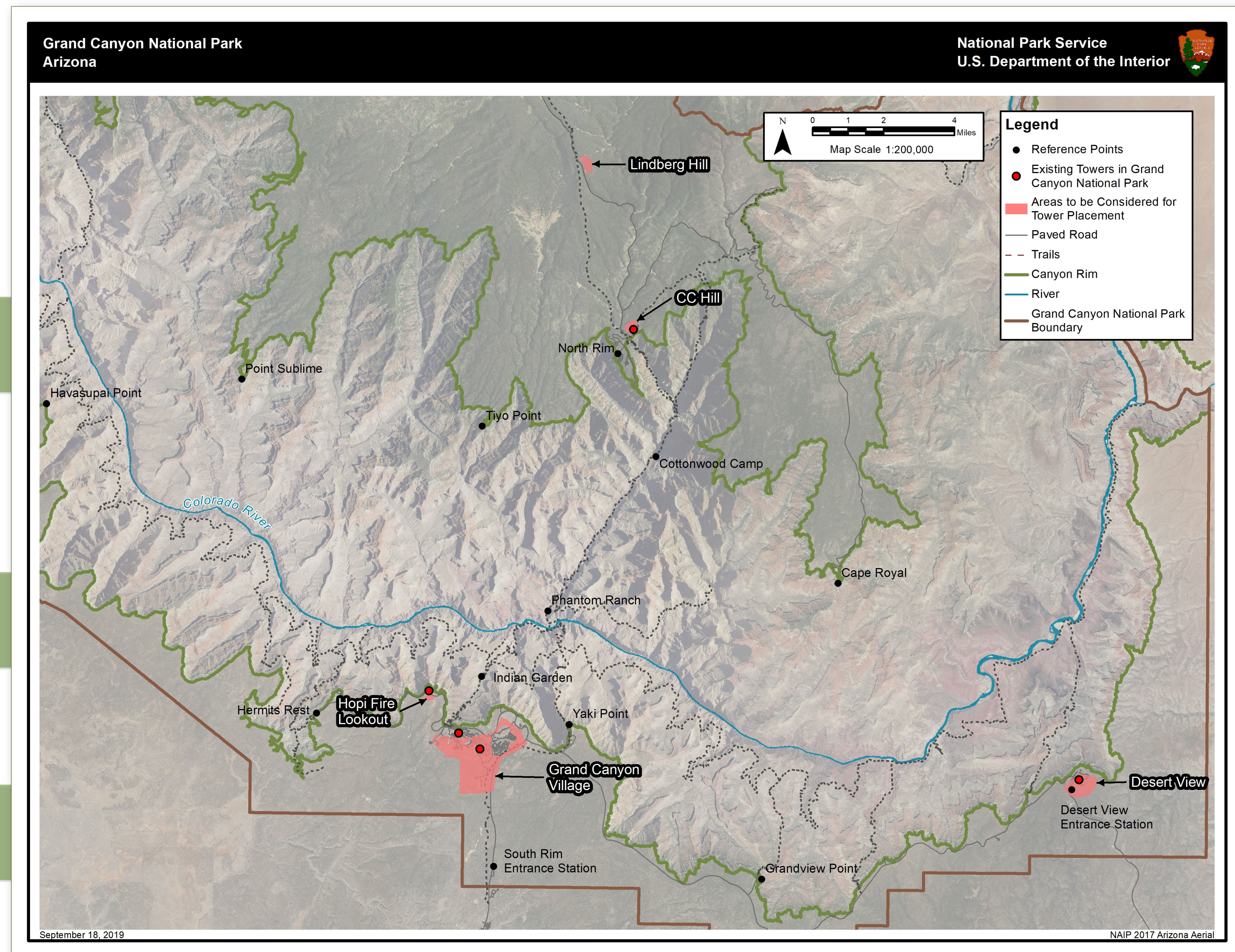
All tower designs would be self-supporting. Monopoles, lattice towers, and alternative designs could be considered; final tower design would be determined on a case-by-case basis.

Shared Equipment

All the equipment on and off a tower would be co-located and would utilize shared equipment.

Example Parameters

- Accommodate multiple carriers (co-location)
- Within or near disturbed areas
- Outside sensitive areas (historic districts, wetlands, etc.)
- Designed to blend into surroundings
- No tower lighting except in emergencies



Map of General Areas where Potential New Telecommunications Towers could be Sited under Alternative B.



Alternative B – Small Cell Sites

Definition

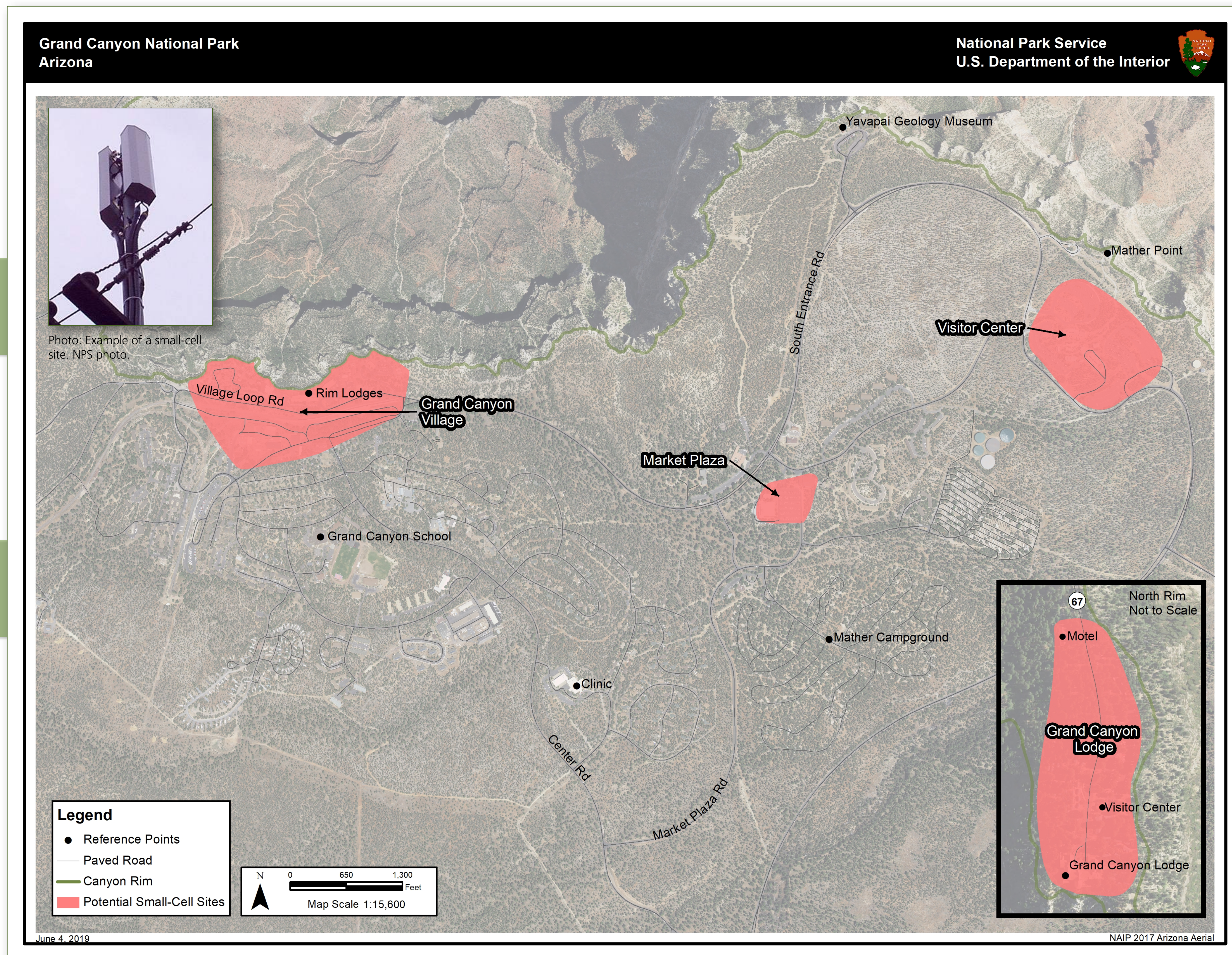
A small-cell site is a telecommunications site designed to enhance cellular system coverage and/or provide more capacity of users to a cellular system. A small-cell site consists of an antenna panel and associated equipment that is, within the context of this plan, mounted on or within existing infrastructure such as streetlights or buildings, generally at some elevation.

Location

Small-cell sites could be considered in particularly high visitor use areas (shown in pink in the map to the right) where capacity does not meet visitor demands in regards to speed and capacity.

Example Parameters

- Accommodate multiple carriers
- Mounted to existing structures
- Fiber backhaul
- Located out-of-sight in historic districts



Map of General Areas where Potential Small-Cell Sites could be Located under Alternative B.



Alternative B – Backhaul

Microwave Antenna

Location: On existing towers.

Parameters: Shared between equipment to reduce heights and profiles of towers.

Fiber Optic Communications Cable

Location: Park boundary to Grand Canyon Village and then dispersed from village out to developed areas in the park, including Hopi Fire Lookout and Desert View.

Parameters:

- All along existing corridors
- Primarily buried; hung only along existing lines when avoiding impacts to resources
- Path of least impact: sited to avoid archaeological resources, vegetation, and conflicts with existing utility lines

Note: Some microwave antennas would still be needed.

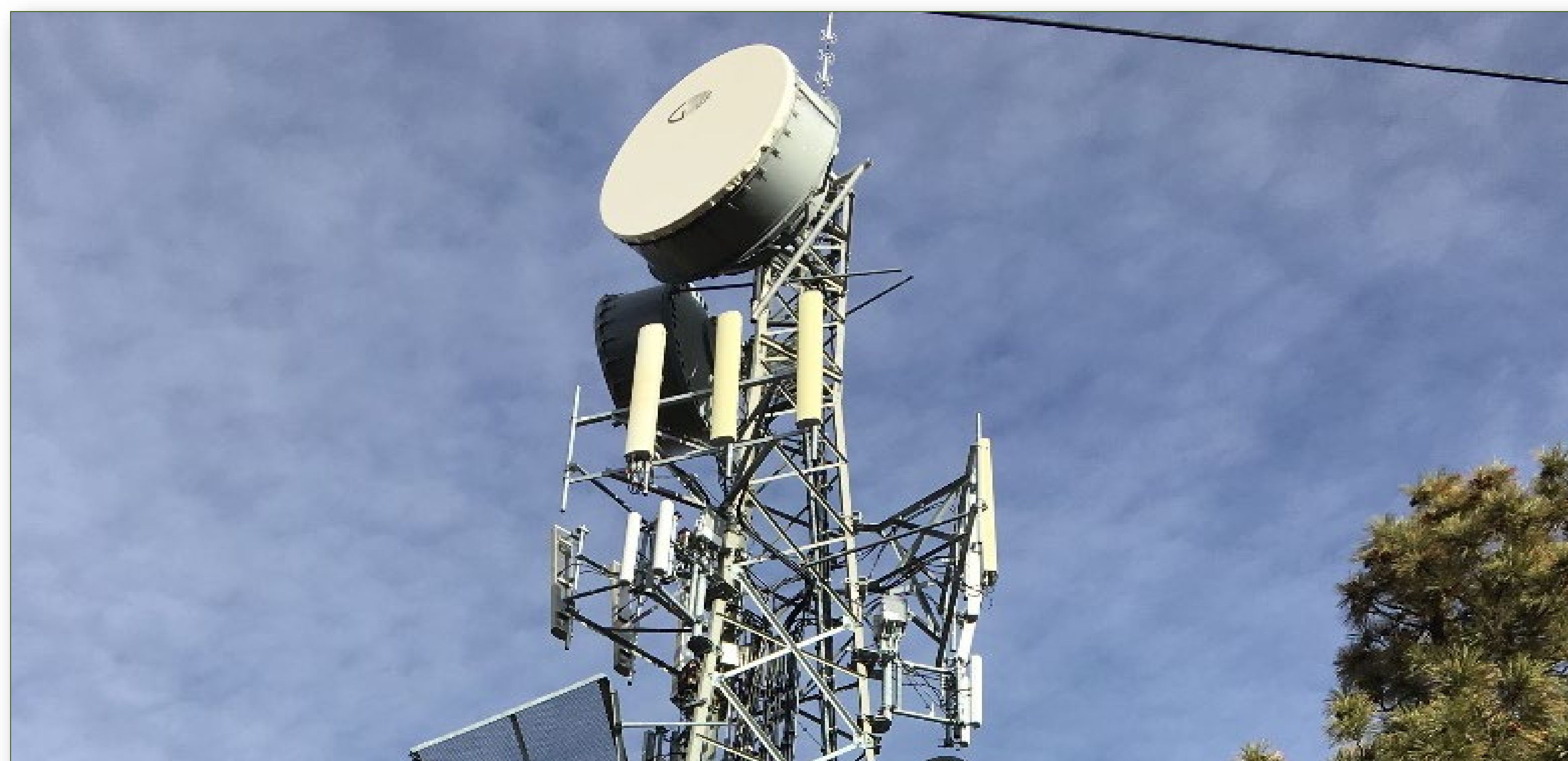
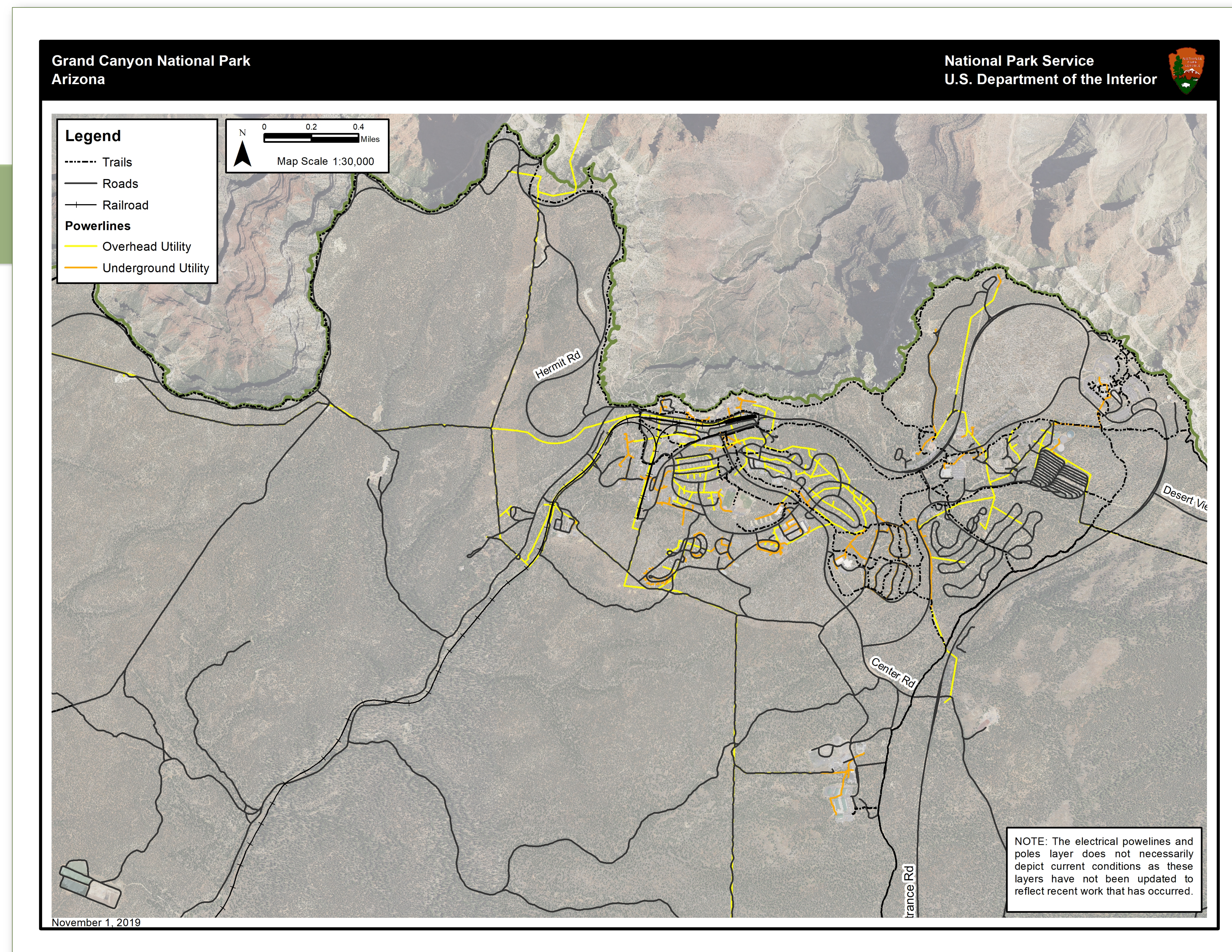


Photo: Existing microwave dish on South Rim Village Tower. NPS photo.



Map of Existing Utility and Transportation Corridors that could be used for Fiber under Alternative B.



Resource Concerns



Photo: Expansive view of the Grand Canyon. NPS Photo.



Photo: Lookout Studio, National Historic Landmark and within the Grand Canyon Village National Historic Landmark District. NPS Photo.



Photo: Visitors watching the sunset at Yaki Point. NPS Photo.



Planning Process

Public Review

Please review and comment on the Telecommunications Plan / Environmental Assessment.

Comments that question, with reasonable basis, the accuracy or adequacy of the information within the EA; present reasonable alternatives than those considered within the EA; or cause changes or revisions in the proposal are particularly helpful.

Next Steps

Comments will be accepted until midnight on January 6, 2020.

Following the public review period, the planning team will evaluate public comments and prepare a decision document.

The NPS intends to make a decision on this planning effort in early 2020.

How to Submit Comments

- ✓ On the Internet at parkplanning.nps.gov/GCTelecommunications
- ✓ At an open house
- ✓ Mail to Superintendent, Attn: Telecommunications Plan EA, Grand Canyon National Park, P.O. Box 129, Grand Canyon, AZ 86023

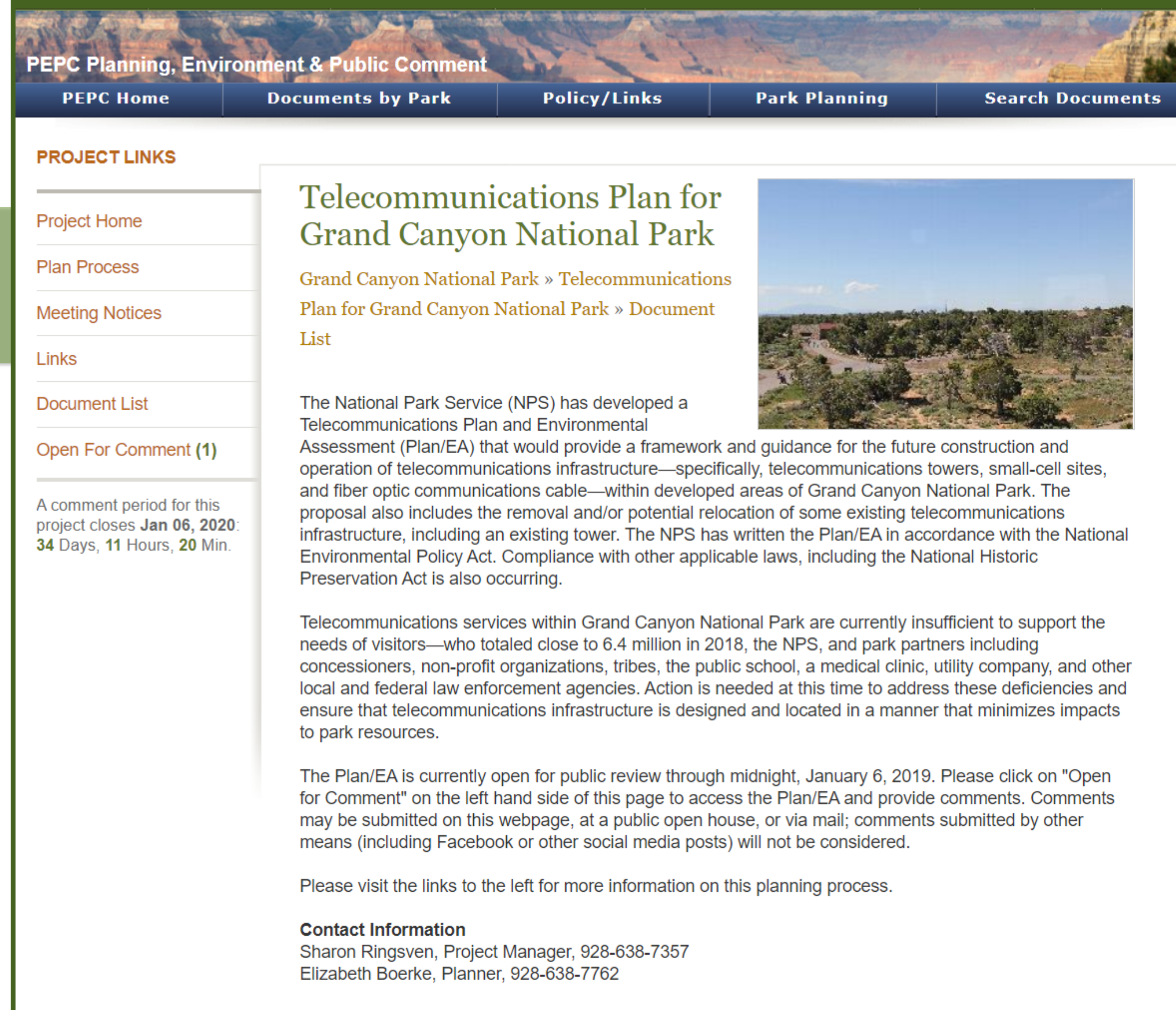


Image: Screenshot of the project webpage prior to initiating public review of the EA.

[https://parkplanning.nps.gov/
GCTelecommunications](https://parkplanning.nps.gov/GCTelecommunications)

Planning Schedule

