



National Park Service
U.S. Department of the Interior
Bryce Canyon National Park
Bryce, Utah

FINDING OF NO SIGNIFICANT IMPACT

MULTI-USE VISITOR PATH

BACKGROUND

The National Park Service (NPS) and cooperating agencies—United States Forest Service (USFS), Federal Highway Administration, Utah Department of Transportation, Garfield County, and Bryce Canyon City—are proposing to develop a multi-use visitor path that would connect Bryce Canyon City, Dixie National Forest, and Bryce Canyon National Park. In compliance with the National Environmental Policy Act, NPS prepared an environmental assessment (EA) to examine various alternatives and environmental impacts associated with implementing the proposed multi-use visitor path project. Although the EA analyzed impacts for the entire project, this Finding of No Significant Impact (FONSI) document records decisions for the portion of the project on NPS lands. The primary purpose of the proposed project is to relieve safety issues for all visitors who choose to use nonmotorized transportation—such as walking, jogging, cycling, and cross-country skiing—to experience the park and adjacent USFS areas near Bryce Canyon City. The path is also intended to help manage congestion, improve visitor experience, and provide alternative means of accessing USFS and NPS lands. Doing so will enhance the park's transportation system by connecting the park's gateway communities with high visitor use areas along the canyon rim in the Bryce Amphitheater and other key features of the park. To facilitate easy transition between transportation modes, the proposed project will connect Bryce Canyon City to current and future multimodal transportation hubs in the park as identified in the Bryce Canyon National Park Multimodal Transportation Plan.

In 1992, the park recorded its first year with more than one million visitors and since that time has recorded only five years of visitation under one million. Park visitation exceeded 1.2 million in 1996 and in 2009 through 2013. The park has seen a continuous increase in annual visitation from 2005 to 2012. In 2010, the most recent year for which traffic data are available, over 436,500 vehicles entered the park, an increase of approximately 90,000 vehicles from 2005 (NPS unpublished data). With such increases in visitation and traffic congestion, cyclists and pedestrians need a way to travel to and within the park that is safer, provides a better visitor experience, and promotes pedestrian and cycling travel between nearby communities and the park. The increasing number of vehicles entering Bryce Canyon National Park bring with them increasing pressure on the park's transportation system and infrastructure.

Bryce Canyon National Park launched an alternative transportation system in 2000 to address congestion and traffic safety in the park and the adjacent community of Bryce Canyon City, improve safe access and visitor experience, and minimize impacts on park resources from transportation infrastructure. With increasing visitation over the past decade, however, the transit system is now at or near full capacity during peak visitation periods. In addition, State Route 63

provides the only paved, motor vehicle public access into the developed part of the park, which means vehicles, bicyclists, and pedestrians must all share the same access road. Traffic congestion complicates this problem, creating additional conflicts between vehicles, bicyclists, and pedestrians and increasing the potential for accidents, particularly along the main park road, near the park visitor center, and near rim locations in the Bryce Amphitheater area. At high visitor use areas, visitors are also negatively impacted when parking areas are full or shuttle service is over capacity. Resource damage from vehicle emissions, illegal roadside parking, and social trailing also results from this kind of traffic and parking congestion. The multi-use visitor path will provide a connection to the Red Canyon National Recreation Trail system and access to other recreation opportunities in nearby portions of Garfield County.

SELECTED ACTION

Alternative A is the preferred alternative and NPS's Selected Action because it best meets the purpose and need for the project and best achieves the following project goals:

Visitor Experience

- Reduce safety risks resulting from traffic and parking congestion by separating nonmotorized uses from State Route 63 and the main park road.
- Provide a safe, efficient, and family-friendly way to access the park, Dixie National Forest, and gateway community amenities.
- Increase and enhance the visitor experience by providing opportunities for interpretation of natural and cultural resources in Dixie National Forest, Bryce Canyon National Park, and Bryce Canyon City.
- Where feasible, maximize universal accessibility throughout the path alignment in the park, Bryce Canyon City, and Dixie National Forest to enhance opportunities for visitors with mobility impairments and other disabilities.
- Promote health and well-being by increasing opportunities for active transportation and recreation.

Access and Connectivity

- Provide bicycle and pedestrian connections between key destinations inside the park and Dixie National Forest, the existing shuttle staging area in Bryce Canyon City, and by making these connections available for integration with the eventual extension of the Red Canyon National Recreation Trail system in the surrounding area.
- Facilitate easy transition between various transportation modes, such as walking, cycling, driving, and taking the shuttle.
- Enhance opportunities for partnerships and economic development in surrounding communities.

Resource Protection

- Design and construct the path to avoid or minimize disturbance to sensitive resources.
- Incorporate design techniques to reduce the likelihood and presence of social trailing.
- Protect and enhance cultural resources by recognizing the values of cultural landscapes and historic features as part of the project in both path design and interpretation.
- Reduce greenhouse gas emissions resulting from increasing visitor motor traffic, parking congestion, construction activities, and other related transportation activities.

Asset Management

- Design and construct the path to minimize additional maintenance, equipment, and staff training needs.
- To the extent possible, achieve design consistency with the existing Red Canyon National Recreation Trail network.
- Efficiently construct the proposed multi-use visitor path project while minimizing impacts on visitors.
- Design and manage the path to allow adaptive management approaches such as phasing improvements over time, monitoring use, and reacting to lessons learned.

Sustainable Operations

- As feasible, construct the path and supporting elements using state-of-the-art, sustainable construction methods and materials.

Under Alternative Alignment A, the multi-use visitor path will be designed to fit into the natural topography to the greatest extent possible and will generally parallel State Route 63 and the main park road while providing separation between nonmotorized user groups and vehicles. The path will also provide maximum direct access to key visitor destinations in the park such as the General Store; the Lodge; and Sunrise, Sunset, Inspiration, and Bryce points. The path will begin at the shuttle staging area in Bryce Canyon City and continue for approximately 7.3 miles through Dixie National Forest and Bryce Canyon National Park.

Alternative Alignment A will help reduce safety risks resulting from traffic congestion and conflicts between motorists, bicyclists, and pedestrians by providing safe access to the park, forest, and gateway communities, as bicyclists and pedestrians will no longer share the road with motor vehicles. By providing access to Bryce Canyon City, Dixie National Forest, and the park, including direct access to key destinations and shuttle stops in the park, the Selected Action will facilitate transition between various transportation modes, integrate with the Red Canyon National Recreation Trail system, enhance opportunities for partnerships or economic development in nearby communities, and help reduce the likelihood of social trailing.

The multi-use visitor path will be designed, constructed, and managed to minimize impacts to visitors, allow adaptive management approaches, and help minimize maintenance (e.g., through choice of pavement materials), equipment, and staff training needs. The design and construction of the path will include opportunities to use sustainable materials and construction methods.

Measures to mitigate the effects of implementing the Selected Action are presented after the Conclusion section.

Designating the path as a route open to bicycle use requires the promulgation of a special regulation authorizing bicycle use of the new trail (36 CFR 4.30(e)). Bicycle use on the trail will not occur until such time as a final rule is promulgated allowing such use.

ALTERNATIVES CONSIDERED

In addition to the Selected Action, a no action and a second action alternative were considered in the EA. Alternative Alignment A, which is the Selected Action, is described in the previous section.

The No-action Alternative represents the park's and the forest's ongoing operations and implementation of approved plans. The No-action Alternative assumes that the multi-use visitor path would not be constructed. Existing conditions such as congestion, user conflicts, and multimodal safety issues would continue and possibly worsen as visitation increases in the future.

Under Alternative Alignment B, the multi-use visitor path would be designed as a separated path, distinct from park roads; however it would remain as close to existing roads as possible. It would begin at the shuttle staging area and continue for roughly 7.2 miles through Dixie National Forest and Bryce Canyon National Park. This alignment for the proposed path would not connect directly to visitor destinations such as the Lodge and Sunrise, Sunset, Inspiration, and Bryce points. Instead, it would largely rely on visitors making connections via low-speed existing park roads to provide access to these destinations.

ENVIRONMENTALLY PREFERABLE ALTERNATIVE

NPS has determined that Alternative Alignment A (the Selected Action) is the environmentally preferable alternative for this project. According to the Council on Environmental Quality regulations implementing National Environmental Protection Act (43 Code of Federal Regulations [CFR] 46.30), the environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources.

Alternative Alignment A (Selected Action) will generally parallel State Route 63 and the main park road to provide a more aesthetically and culturally pleasing surrounding while at the same time providing separation from motor vehicles on the highway and the safest possible travel corridor for nonmotorized transportation. The path is also intended to improve visitor experience and provide alternative means of accessing key forest and park resources. The construction of Alternative Alignment A will result in soil and vegetation disturbance and loss, as well as wildlife habitat fragmentation. Alternative Alignment A will avoid direct impacts on Utah prairie dog (*Cynomys parvidens*) habitat and may lead to a reduction in impacts on air quality from visitor vehicles. Alternative Alignment A follows old road beds and an existing, recently disturbed utility corridor from the park visitor center to the General Store. From the Lodge to Sunset Campground Alternative Alignment A follows existing roads, trails, and utilities for most of its length, reducing the area of new disturbance in the park compared to Alternative Alignment B. For these reasons, Alternative Alignment A will cause the least damage to the cultural, biological, and physical environment and would best protect, preserve, and enhance natural and cultural resources, thereby making it the environmentally preferable alternative.

WHY THE SELECTED ACTION WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

Implementation of the Selected Action will result in some adverse impacts; however, the overall benefit of the project outweighs these negative effects. The Selected Action will not result in any significant adverse impacts. The adverse effects are summarized as follows.

Construction and maintenance of the multi-use visitor path will result in minor adverse impacts from increased mobile emissions and fugitive dust. Construction activities will also result in short- and long-term minor adverse impacts from the temporary soil compaction and exposure within the construction limits and the permanent disturbance to 11.3 acres of soils and 10.5 acres of vegetation communities within the path footprint.

Construction and maintenance of the multi-use visitor path will result in short- and long-term minor adverse impacts on Dixie National Forest Management Indicator Species, USFS Sensitive Species, and wildlife from noise, increased human presence, and construction activities. Visitor use of the path will result in short- and long-term minor adverse impacts on Dixie National Forest Management Indicator Species, USFS Sensitive Species, and wildlife from noise, increased human presence, and recreation activities. Impacts may include wildlife habitat fragmentation; interruption of species movement (travel corridors); disturbance in foraging, nesting, and roosting / resting activities; and edge effects such as displacement of species due to increased habitat disturbance, increase in generalist species, decreased nesting near open areas, and increased nest predation. Recreational use of the path could also result in mortality of individual species from collisions with cyclists.

Some trees may need to be removed between the Lodge and Sunrise Motel, which may adversely impact the Bryce Canyon Lodge Historic District. In addition, construction and maintenance activities will likely result in a temporary disruption of the historic scene and feeling in the Bryce Canyon Lodge Historic District cultural landscape. These impacts are slight and would not affect the integrity of the historic district or rise to the level of an adverse effect under Section 106 of the National Historic Preservation Act.

Construction and maintenance of the path may result in decreased visitation and tourist-related spending during construction periods, which will have an adverse impact on the social and economic condition. Although construction and maintenance activities may also temporarily disrupt recreation opportunities and visitor use and experience in the park as well as affect visitors' and local residents' traveling convenience, these adverse impacts will be negligible. In addition, these activities will also increase operating costs and staffing needs in the park, resulting in minor adverse impacts.

Although construction and visitor use of the path will not directly impact suitable or occupied Utah prairie dog habitat, active colonies are near several areas along the path corridor and overlap with the one-half-mile buffer zone for mapped habitat. A segment of the path will bisect mapped habitat through the Dave's Hollow East colony. This segment will utilize a previously disturbed area, and the habitat between this area and the meadow consists of ponderosa pines. A U.S. Fish and Wildlife Service (USFWS) biologist visited the site on June 3, 2014 and determined the area of the proposed path, as well as the forested area between the meadow and the path, to be unsuitable habitat. The remainder of the path overlaps with the buffer zone in high visitor use areas and ponderosa pine forests.

Construction of the multi-use visitor path may result in short-term minor adverse impacts on individual Utah prairie dogs from noise, dust, and ground vibration, and increased human presence disturbances. Noise and increased human activity may also result in reduced prairie dog foraging or temporary displacement and stress. General conservation measures included in the park's Utah Prairie Dog Stewardship Plan (currently in progress) will be incorporated into best management practices to reduce and mitigate any associated impacts on colonies during and following construction. These measures will be implemented in a proactive manner to address road mortality, habitat fragmentation, impacts from noise disturbance, and human habituation. Management actions could include, but are not limited to, installation of vegetative and physical

barriers, enhanced movement corridors via clearing / addition / expansion of underground culverts, temporary road closures, interpretive material such as wayside exhibits, and speed-calming measures.

Visitor use of the path will result in short- and long-term negligible to minor adverse impacts from potential user conflicts and safety issues between bicyclists and pedestrians using the path, as well as between path users, motorized vehicles, and pedestrians in parking lots, at popular locations such as the General Store, or where the path intersects with park road. Because the path will provide improved access to the forest and the park, adverse impacts from increased visitation and crowding in parking lots and at popular viewpoints could result. Operating costs and staffing needs may increase slightly to manage increased visitation over the long term. A change in financial balance between revenue sources and operating costs will also occur.

The overall benefit of the Selected Action will result from providing visitors an accessible (5% slope or less), family-friendly, and safer route for accessing recreation opportunities on forest and park lands by separating these users from State Route 63 and the main park road and other areas (e.g., Sunset Point) with high levels of motorized vehicle activity, potential user conflicts, and motorized vehicle- and human-caused sounds. Signs and striping along the path in these high activity and user conflict areas will help create a safer visitor experience. Connections to existing shuttle stops will help link visitors to recreation opportunities and key locations such as the visitor center and viewpoints in the Bryce Amphitheater area. In addition, the multi-use visitor path will provide a connection to the Red Canyon National Recreation Trail system and access to other recreation opportunities in nearby portions of Garfield County. The incorporation of rest areas along the path will provide opportunities for interpretation (e.g., the history and significance of the Great Western Trail) and other signs describing recreation opportunities available to visitors.

Visitors who park in Bryce Canyon City and use the path to access the forest, the park, or shuttle system in the park will generate lower levels of mobile source emissions and fugitive dust than visitors who use private vehicles, which will have a beneficial impact on local air quality. The reduction in private vehicles in the park will in turn lead to less vehicle congestion and fewer traffic and parking delays at key locations such as the viewpoints in the Bryce Amphitheater area, which could enhance recreation opportunities while increasing the ability of visitors to participate in recreational activities. In addition, the reduction in traffic and parking delays will reduce the staffing needed in these areas.

Improvement in visitor access and experience as well as a reduction in private vehicles traveling in the park may lead to increased visitor traveling convenience and decreased travel time for local residents traveling to, from, and in the park area. There may also be an increase in visitor stays and expenditures in local communities, particularly if new businesses were developed to cater to path users. Visitors may decide to spend more time in the park and nearby communities, resulting in increased tourist-related spending, and there may be a demand for new enterprises such as a business offering bike rentals.

Visitor use of the path will help reduce social trailing in the park, the numbers of motorized vehicles that may park inappropriately adjacent to roads and parking areas during peak seasons, and visitor use of roadway shoulders, which will have a beneficial impact on soils and vegetation.

The degree to which the proposed action affects public health or safety

The Selected Action will have an overall beneficial effect on public health and safety. The Selected Action will promote health and well-being in support of national initiatives such as America's Great Outdoors and Let's Move Outside, as well as NPS efforts such as A Call to Action, Healthy

Parks–Healthy People, and Hike the Hoodoos. The path will provide the opportunity for a variety of nonmotorized activities for visitors and residents of nearby communities, including walking, jogging, cycling, and cross-country skiing. It will also provide options for visitors with mobility impairments. The Selected Action will provide bicyclists and pedestrians an accessible (5% slope or less) and safer route for visiting forest and park land by separating these users from State Route 63 and the main park road and other areas with high levels of motorized vehicle activity, potential user conflicts, and motorized vehicle- and human-caused sounds. Signs and striping along the path in these high activity and user conflict areas will help create a safer visitor experience. Connections to existing shuttle stops will help link visitors to key locations such as the visitor center and viewpoints in the Bryce Amphitheater area. Visitor use of the path will lead to fewer private vehicles, less vehicle congestion, and fewer traffic and parking delays in these areas, which will increase visitor safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

The Selected Action will not impact unique characteristics of the area including park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas because these resources do not exist in the project area. The Selected Action will impact the Bryce Canyon Lodge Historic District cultural landscape as discussed later in this document.

The degree to which the effects on the quality of the human environment are likely to be highly controversial

Throughout the environmental process, the proposed multi-use visitor path was not highly controversial. Fifteen comments were received during scoping and 15 additional comments were received during the public review of the EA. Most comments were highly favorable to the project. The project is not expected to generate future controversy.

The degree to which the possible effects on the quality on the human environment are highly uncertain or involve unique or unknown risks

The effects of implementing the multi-use visitor path project do not pose uncertainties. The environmental process has not identified effects that may involve unique or unknown risks.

The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The Selected Action is not expected to set a precedent for future actions with significant effects, nor does it represent a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Cumulative effects were analyzed in the EA and included effects from implementation of the park's Multimodal Transportation Plan. No significant cumulative impacts were identified.

The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The Selected Action may result in long-term minor adverse effects on the Bryce Canyon Lodge National Historic Landmark district along the portion of the visitor path crossing through the center of the district boundary. Some trees between the Lodge and Sunrise Motel may need to be removed during construction. Mitigation measures—such as those outlined in the Treatment Guidelines provided in the Lodge Cultural Landscape Report—will help minimize impacts to native vegetation near cultural landscapes. Construction of the visitor path will have short-term negligible adverse effect on the Bryce Canyon Lodge Historic District cultural landscape. Construction and maintenance associated with these activities will likely result in a temporary disruption of the historic scene and feeling in the cultural landscape during construction. Following construction, visual impacts on the landscape within the historic district will be removed with the removal of construction equipment. These impacts are slight and would not affect the integrity of the historic district or rise to the level of an adverse effect under Section 106 of the National Historic Preservation Act. The Utah State Historic Preservation Office (SHPO) concurred with the NPS's Section 106 finding of No Adverse Effect on November 13, 2014.

The multi-use visitor path does not represent a change in land use. There are existing paths within the historic district boundary. The addition of another path with appropriate design features and the removal of some trees will not affect the overall integrity and eligibility of the cultural landscape for listing in the National Register of Historic Places (NRHP). The appearance of the path, including any ramps, curbs, gutters, and sidewalks should match existing design and materials within the Bryce Canyon Lodge Historic Landmark district as stated in the mitigation measures.

The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

Other than the potential effects on Utah prairie dog, the Selected Action will not affect any federally listed species. Potential impacts on state-listed species will be negligible and there will be no impacts on rare plant species.

Construction and visitor use of the path will not directly impact suitable or occupied Utah prairie dog habitat. Segments of the path that overlap with the buffer zone for mapped habitat occur in high visitor use areas and ponderosa pine forests that are not considered suitable habitat. Conservation measures developed in consultation with the USFWS for the park's Utah Prairie Dog Stewardship Plan will be implemented to reduce and mitigate any associated impacts on colonies during and following construction. Consequently, the Selected Action is not likely to adversely affect the Utah prairie dog. The USFWS concurred with this determination in a letter dated August 6, 2014.

Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment

The Selected Action will not violate any federal, state, or local laws or environmental protection laws.

PUBLIC INVOLVEMENT AND NATIVE AMERICAN CONSULTATION

The EA was made available for public review and comment during a 47-day period ending November 16, 2014. To notify the public of this review period, a letter was mailed to stakeholders, Native American tribes, interested parties, and newspapers. Copies of the document were sent to certain agencies, interested parties; made available in local repositories; and posted on the NPS Planning, Environment, and Public Comment website at <http://parkplanning.nps.gov/>. In addition, the USFS published a public legal notice in *The Spectrum*, the paper of record, on October 18, 2014. Fifteen comment letters were received during this review period from the Chemehuevi Tribe, the Hopi Tribe, the Navajo Tribe, the National Parks Conservation Association, Dixie Mountain Bike Trails Association, and 10 unaffiliated individuals. In addition to these comment letters, the Utah SHPO submitted a letter dated November 13, 2014, concurring with the finding of No Adverse Effect for the multi-use visitor path project.

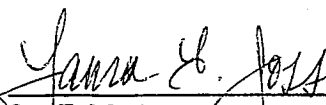
According to NPS policy, substantive comments are those that (1) question the accuracy of the information in the EA, (2) question the adequacy of the environmental analysis, (3) present reasonable alternatives that were not presented in the EA, or (4) cause changes or revisions in the proposal. One substantive comment was received during public review of the EA. NPS also elected to respond to several comments received during the comment period. These have been addressed in Attachment A. Overall, the majority of comments were supportive of the project. One comment resulted in a change to the EA and is addressed in the Errata. The FONSI will be sent to all organizations and individuals that commented on the EA.


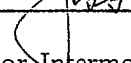
CONCLUSION

As described above, the Selected Action does not constitute an action meeting the criteria that normally require preparation of an environmental impact statement. The Selected Action will not have a significant effect on the human environment. Environmental impacts that could occur are limited in context and intensity, with generally adverse impacts that range from localized to widespread, short- to long-term, and negligible to moderate. There are no unmitigated adverse effects on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the NRHP, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law. An impairment analysis for the Selected Action can be found in Appendix B.

Based on the foregoing, the NPS has determined that an environmental impact statement is not required for this project and thus will not be prepared.

Approved:


Sue E. Masica
Regional Director, Intermountain Region, National Park Service

12/23/14
Date

MITIGATION MEASURES

General Measures

- All active construction areas will be appropriately marked and fenced to ensure visitor and worker safety.
- Impact areas and buffer zones will be flagged prior to construction to ensure that resource damage (as determined by the project footprint and buffer zone surrounding construction areas) will not be exceeded during construction.
- Staging areas for the construction office (a trailer), construction equipment, and material storage will either be located in previously disturbed areas near project sites (such as at existing parking areas), other disturbed areas that best meet project needs and minimize new ground disturbance, or areas identified for future development. All staging areas will be returned to pre-construction conditions or better once construction has been completed. Gravel surfaces are to remain in staging areas used at future hub parking areas. Standards for this, and methods for determining when the standards are met, will be developed in consultation with the forest's and park's vegetation program manager.
- Before construction, the contractor(s) for individual projects will work with park staff to develop a construction traffic management plan. The plan will include information on construction phases and duration, traffic scheduling, proposed haul routes, staging area management, visitor safety, detour routes, and pedestrian and bicyclist movements on adjacent routes. The NPS will limit the transport of debris, construction equipment, and materials to periods of off-peak traffic whenever possible.
- Garbage, trash, and other solid waste associated with construction operations will be disposed of in trash bins and disposed of weekly, or sooner if warranted, outside the park at an approved facility.
- All tools, equipment, barricades, signs, surplus materials, and rubbish will be removed from the project work limits upon project completion. Any asphalt surfaces damaged during construction of the project will be repaired to original conditions. All demolition debris except felled trees will be removed from the project site. This material will be disposed of outside the park at an approved facility or recycled as appropriate.
- All equipment on projects will be maintained in a clean and well-functioning state to avoid or minimize contamination from mechanical fluids. All equipment will be checked daily. Spill remediation kits will be available on-site every day, and contractor staff will be trained in their use.
- A hazardous spill plan will be in place, stating what actions would be taken in case of a spill, and what notification measures and preventive measures would be implemented, such as the placement of refueling facilities, storage, and handling of hazardous materials.
- Construction vehicles will not be allowed to park within meadows or other specified sensitive habitats.

Air Quality

- Fugitive dust generated by construction will be controlled by spraying water on the construction site, if necessary.
- To reduce dust from hauling material, loose material loads (aggregate, soils, etc.) will be covered with tarps.
- To reduce burning of fossil fuels, construction equipment will not be permitted to idle for longer than 5 minutes following initial engine warm-up, unless specifically authorized by park management.

Water Quality

- Erosion will be minimized to the extent possible by designing paved or hardened surfaces to direct water flows away from sensitive areas. Existing roads and paved surfaces will be used as much as possible for construction activities and for keeping heavy equipment off undesignated paths and trails.
- The requirements for a storm water pollution prevention plan will be addressed by the contractor during the construction contract and will meet all statutory USFS and NPS standards. All National Pollutant Discharge Elimination System requirements will be met.
- Standard erosion control measures—such as sand bags or equivalent control methods—will be used to minimize any potential sediment delivery to ephemeral streams.

Soundscapes

- To reduce noise, construction equipment will not be permitted to idle for longer than 5 minutes following initial engine warm-up, unless specifically authorized by park management.
- Construction foremen will include briefings to crews on vehicle use as a part of pre-construction conferences.
- Contractors will be required to properly maintain construction equipment (e.g., mufflers) to minimize noise from equipment use.
- Work will be restricted to 8 a.m.–6 p.m., unless pre-approved by the park superintendent, forest district ranger, or city manager (as appropriate) to reduce noise impacts on guests in the campgrounds and lodging areas, as well as reduce impacts on wildlife active from dusk to dawn.

Night Sky

- Construction activities will occur only during daylight hours, from dawn to dusk, to avoid the need for night work or night lighting unless specifically authorized by park management.
- Lighting will only be provided where necessary for the mobility or safety of visitors and workers.

Soils

- Before path construction begins, the path alignment will be clearly marked to minimize the amount of disturbance.
- Only those areas necessary for construction will be cleared and grubbed.
- Because disturbed soils are susceptible to erosion until revegetation takes place, standard erosion control measures such as straw wattles (must be certified weed free) and / or sand bags will be used to minimize any potential soil erosion.
- The amount of disturbed earth area will be minimized, and the duration of soil exposure to rainfall limited.
- Topsoil will be removed and stockpiled separately from deeper excavations and used to assist native plant revegetation in disturbance corridors that are not converted to pavement, asphalt, or gravel surfaces, including buffer areas and path shoulders.

Vegetation

- To reduce the spread of noxious invasive species, surveys of the project area will be completed prior to any ground-disturbing activities and will include inventories of existing populations of nonnative species. If noxious invasive species are found, a pre- and post-

construction treatment of the area will be conducted using species-specific targeted herbicides as approved in the park's Vegetation Management Plan. As design plans develop, they will be cross-referenced with existing vegetation survey information to ensure that no new survey is necessary before work starts.

- A pre-construction survey for rare plants will be conducted in any areas suspected of containing populations of these species. Salvage via transplant will be conducted when feasible.
- Vegetation program staff at the park will provide input on salvage potential and tree avoidance at project sites where necessary. A supervisory biologist will also spot-check work in progress.
- Revegetation and recontouring of disturbed areas in the alignment corridor will take place following construction and will be designed to minimize impacts on native vegetation and deter the possible spread of invasive species. Revegetation efforts will strive to reconstruct the natural spacing, abundance, and diversity of native plant species found in similar vegetated landscapes of the park. All disturbed areas surrounding newly constructed / improved areas will be restored as close as possible to pre-construction or better conditions shortly after construction activities are completed.
- All revegetation efforts will use site-adapted native species and / or site-adapted native seed, and park policies regarding revegetation and site restoration will be incorporated. These efforts will consider, among other things, use of native species, plant salvage potential, nonnative vegetation management, and pedestrian barriers. Policies related to revegetation will be referenced from the 2010 Bryce Canyon National Park Vegetation Management Plan and 2006 NPS Management Policies.
- Social trails created by construction activities will be obliterated, revegetated, and protected from pedestrian impact upon the completion of the project in each individual area to reduce further resource damage.
- Weed control methods will be implemented to minimize the introduction of noxious weeds including power-washing of all earth-moving equipment and project-related vehicles prior to being brought into the park. The location selected for vehicle washing will be approved by a supervisory biologist and power washing will be approved by the Contracting Officer's Representative or park-approved Contracting Officer's Technical Representative.
- Staging area locations for construction equipment will be approved by the park, and the need to treat nonnative vegetation will be considered.
- Nonnative species encroachment and distribution will be monitored for 2–3 years after construction.
- Revegetation efforts will be initiated as soon as possible following construction to minimize the competition of native species with nonnative species.
- The impact of tree removal will be minimized by salvaging as many suitable trees as possible for use in revegetating disturbed areas in each project segment following construction. Salvage will be limited to small trees and will not constitute a one-to-one tree loss because of slow growth patterns and high percentage of transplant die-off.
- Vehicle parking will be limited to existing roads or the staging areas.
- Any fill, rock, or additional topsoil needed will be obtained from a park-approved source. Topsoil from the project area will be retained and used for site restoration whenever feasible.

Special Status Species, Including Utah Prairie Dog

- General conservation measures included in the park's Utah Prairie Dog Stewardship Plan (currently in progress) will be incorporated into best management practices to reduce and mitigate any associated impacts on colonies during and following construction. These measures will be implemented in a proactive manner to address road mortality, habitat fragmentation, impacts from noise disturbance, and human habituation. Management actions

could include, but are not limited to, installation of vegetative and physical barriers, enhanced movement corridors via clearing / addition / expansion of underground culverts, temporary road closures, interpretive material such as wayside exhibits, and speed-calming measures.

- During construction in areas adjacent to active Utah prairie dog colonies, the park will install a visual barrier surrounding a Utah prairie dog colony to deter road crossings and reduce the impacts of construction traffic and activity on the colony. Movement between colonies that are bisected by roads will be enhanced via clearing out underground drainage culverts prior to installation of visual barriers. Visual barriers may be removed following construction, or a more permanent barrier (e.g., metal fence or rock wall with an underground barrier) may be constructed depending on monitoring results.
- The park will monitor Utah prairie dog behavior during and following construction activities in areas within 350 feet of active colonies. If roadkill mortalities increase from baseline conditions (at a level >10% or other increase percentage as determined in consultation with the USFWS), the park will implement conservation measures to further protect colonies. Mitigation measures will be determined through consultation with the USFWS and follow recommendations as outlined in park's Utah Prairie Dog Stewardship Plan.
- Construction activities within 350 feet of an occupied Utah prairie dog colony will be monitored by the park's biologist or qualified staff. Monitoring will occur no less than 8 hours per colony in 2-hour (or greater) observation increments. A monitoring plan will be developed by the park and submitted for approval by the USFWS prior to implementation of any proposed improvements. Activities that have an observably detrimental impact on Utah prairie dog colonies and which extend beyond acceptable impacts as outlined in the biological opinion for this project will cause cessation of construction and result in reconsultation with the USFWS.
- Construction workers and supervisors will be informed about the status of the Utah prairie dog and appropriate activities around active colonies. Contract provisions will require the cessation of construction activities that have a detectably detrimental effect on Utah prairie dogs in the project area, until the park's biologist re-evaluates the project and its impact on the prairie dog. This may include modification of the contract for any determined protection measures, which may include timing or equipment restrictions.
- No construction equipment will be stored within 500 feet of an occupied colony or within mapped Utah prairie dog habitat in the park.
- Path construction within mapped habitat will occur between June 15 and August 31 to reduce impacts on Utah prairie dogs pre-hibernation.
- The park will conduct nesting surveys for flammulated owl (*Psilosops flammeolus*) and northern goshawk (*Accipiter gentilis*) to minimize impacts on these species. If a nest is found, then construction would not occur within a one-half-mile radius until the birds have fledged or the path alignment would be relocated outside of this radius.

Wildlife

- To minimize effects on wildlife, construction activities will be restricted to daylight hours, from dawn to dusk.
- Construction and staging in areas of unique or ecologically important wildlife habitat will be avoided or minimized. This will include meadow ecosystems, assemblages of structurally diverse vegetation, mature tree stands, known wildlife movement corridors, known nesting sites for raptors, and habitat known to be significant for foraging or breeding.
- To minimize negative impacts on nesting birds, trees needing removal will not be cut during nesting season for northern goshawk or any birds protected under the Migratory Bird Treaty Act, generally from April 1 through July 31. If construction activities or tree cutting is required during this time, pre-construction / pre-tree cutting bird surveys would be conducted for nests. Consultation with the park's wildlife biologist will be required prior to any tree

removal. Pre-tree cutting bird surveys may also be required outside this timeframe. No construction activities will be conducted in identified nesting areas until the young have fledged.

- To minimize negative impacts on bats, any large trees (over 24 inches diameter at breast height) needing removal will be removed between mid-October and April, and / or the path will be designed to avoid such trees.

Historic Properties

- If previously unknown archeological resources are discovered during the project, a forest or park archeologist will be contacted immediately. All work in the immediate vicinity of the discovery will be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with the SHPO and tribes traditionally associated with the project area. If the site is adversely affected, a treatment plan will also be prepared as needed. Treatment plans will fully evaluate avoidance, project redesign, and data recovery alternatives.
- All workers will be informed of appropriate site etiquette and the penalties for illegally collecting artifacts or for intentionally damaging any archeological or historic property. Workers will also be informed of correct procedures if previously unknown resources were uncovered during construction activities.
- Staging areas for construction equipment and materials storage will be in designated areas where there is no potential for archeological resource disturbance. If the sites selected for these activities changed during later design phases for any alternative, additional archeological surveys would be conducted to ensure that the staging areas are clear of archeological resources.
- The Selected Action avoids known sites, and sensitive areas will be marked to prevent incidental impacts to those areas during any construction activities associated with the project.
- Contractor-selected, noncommercial areas outside the project limits including, but not limited to, material sources, disposal sites, waste areas, haul roads, and staging areas will not encroach upon sites listed or eligible for listing in the NRHP. Written proof satisfactory to the NPS and the Utah SHPO will document, for compliance with section 106, that no historic properties would be affected because:
 - there are no historic resources present, or
 - there is no effect on historic properties.
- In compliance with Native American Graves Protection and Repatriation Act, the NPS will also notify and consult concerned American Indian tribal representatives for the proper treatment of human remains and funerary and sacred objects if these were discovered during project construction.
- Impacts on native vegetation in and near cultural landscapes and historic districts will be minimized. Degraded vegetation will receive an appropriate vegetation treatment based on the results of the vegetation study (i.e., post-construction revegetation).
- Existing design and materials and physical appearance for ramp, curbs, gutters, and sidewalks within cultural landscapes and historic districts will be matched. Color treatments may be necessary to ensure that new materials blend with the existing features.
- All work, including new construction, will be done in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Visitor Experience and Health and Safety

- The contractor will develop and implement a visitor protection / safety plan for park review and approval that will:
 - provide procedures for managing staging areas to restrict public access and maintain site safety,
 - ensure that visitors are safely and efficiently routed around construction areas, and
 - outline measures to protect the safety of visitors by providing established and maintained walkways across the site, as well as barrier fencing along trails and paths.
- To the extent practicable, work will be scheduled to avoid construction activity and construction-related delays during peak visitation times. In general, no holiday or nighttime work will be allowed. Unless otherwise approved by the park, operation of heavy construction equipment will be restricted to dawn to dusk, year-round. Weekend work (Saturday and Sunday) will not be allowed unless authorized by park staff overseeing the construction.
- As allowed by time and funding, information about this transportation project will be shared with the public through park publications and other appropriate means during construction periods. This could take the form of an informational brochure or flyer distributed at the gate and sent to those with reservations at park facilities, postings on the park's website, press releases, and other methods. The purpose will be to minimize the potential for negative impacts on visitor experience during project implementation during the construction season.
- NPS employees, residents, and concessioners will be notified about project implementation and road delays or road closures, as appropriate.
- The contractor will provide a weekly construction schedule with daily updates to the NPS field supervisor to assist the park in managing visitation and park operations during construction.
- A traffic control plan will be developed in conjunction with the construction documents for use during the construction period(s) associated with project implementation. The plan will be provided by the contractor to the park superintendent for review and approval before implementation. Traffic delays could be possible; however, emergency vehicle access will be provided immediately.
- If required, flaggers, signs, or other new technology, as appropriate, will be used to manage traffic around work areas.

Gateway Communities

- To coordinate with gateway communities during project implementation, the NPS will develop and maintain a constructive dialogue and outreach effort with public and private organizations and businesses, including state and local tourism and travel offices and establish positive and effective working relationships with park concessioners and others in the tourism industry to ensure a high quality of service to park visitors.
- NPS will consider installing signs on construction fences and elsewhere that advertise the partnership aspect of the proposed project (e.g., "brought to you by" or "thanks to our partners").

ERRATA SHEET

MULTIMODAL TRANSPORTATION PLAN

BRYCE CANYON NATIONAL PARK

According to NPS policy, substantive comments are those that 1) question the accuracy of the information in the EA, 2) question the adequacy of the environmental analysis, 3) present reasonable alternatives that were not presented in the EA, or 4) cause changes or revisions in the proposal.

Of the comments that were received during public review of the EA, one is considered substantive. The substantive comment for this EA presented an additional design option not discussed in the EA. This comment resulted in a minor change to the text of the EA and is also explained more thoroughly in the *Response to Comments* section.

TEXT CHANGES

Add to page 47, *Alternatives Considered but Dismissed* –

Smaller Path Width Design Option

A design option to develop a path less than 12 feet wide (10 foot paved with 1 foot shoulders) was considered. This design option was dismissed because it did not meet the primary objective of the project to provide safe access. The path dimensions are based on guidelines for bicycle facilities issued by the American Association of State Highway and Transportation Officials. These guidelines address the construction of safe shared-use paths.

ATTACHMENT A

RESPONSE TO COMMENTS

Comment: I object to the use of the term "multi-use" in application to the proposed trail within Bryce Canyon National Park. This term has commonly been applied to the variety of uses found within lands managed by the National Forest Service and Bureau of Land Management. That common use, which frequently includes uses not allowed within a National Park, will create misunderstanding and confusion among the public. Since this title is also applied to the trail both within Dixie National Forest and Bryce Canyon NP, it will lead to further confusion. Furthermore, "multi-use" is a term that has not been used to refer to human activities within a National Park. I recommend the National Park Service find another title to apply to the proposed trail.

NPS Response: The phrase "multi-use" was used throughout the Multi-use Visitor Path Environmental Assessment (the EA) to assist with communicating to the public that the trail would be for more than just hiking and/or bicycling: "The proposed project would be designed as a multi-use path intended for primary use by bicyclists and pedestrians, including pedestrians with disabilities, to provide safe alternative transportation and access to recreation uses in the project area. Other nonmotorized uses, exclusive of equestrians, would also be accommodated if deemed to not threaten safety of other users." The park is currently in the process of identifying a suitable name for the new path and will take the commenter's suggestion under advisement. In addition, trail signage will clearly state what types of transportation modalities are permitted.

Comment: . . . this proposal is occurring at the same time Bryce Canyon NP has a "Multimodal Transportation Plan" underway. The two efforts include activity within the same transportation corridor and completion of one plan independent of the other plan will impact the uncompleted effort. I saw nothing within the "multi-use" trail plan that included the Multimodal effort. Since there are interconnections or at least impacts from one to the other, the planning effort should consider this reality and alternatives should address these considerations. If planners see no interrelationship between the plans and believe the "multi-use" trail can proceed without influencing the Multimodal Plan, this should be stated somewhere and the rationale explained. If on the other hand, the preferred alternative for the "multi-use" trail will impact or limit the alternatives offered under the Multimodal plan, this too should be explained and justified.

NPS Response: The EA includes multiple references to the Multimodal Transportation Plan. As identified in the EA, the path has several primary goals that would also help meet the planning goals established under the separate but associated plan. The path project would be closely coordinated with the implementation projects included in the plan. The EA states: "To facilitate easy transition between transportation modes, the proposed project would connect Bryce Canyon City to current and future multimodal transportation hubs in the park as identified in the Bryce Canyon National Park Multimodal Transportation Plan." The EA notes this connection where appropriate under the description of the alternatives.

Comment: . . . the two plans, since they may impact almost the same resources on the ground, there is also the issue of plans addressing the cumulative impacts. Addressing them individually fails to consider the reality of cumulative impacts. This needs to be addressed.

NPS Response: Included in the EA under the cumulative impact scenario was the development and implementation of the Multimodal Transportation Plan, including construction staging areas for the multi-use visitor path project that would be located in areas previously assessed in the

2014 EA for the plan. The assessment of cumulative impacts in the EA included combining the impacts of each of the alternatives with the impacts from the Multimodal Transportation Plan as well as the other identified past, present, and reasonably foreseeable future actions.

Comment: A path away from conflicts by the main road is ideal, and one readily wide enough for bicyclists to pass pedestrians safely.

NPS Response: A variety of considerations were taken into account during the design and layout of the path, including such things as topography, existing vegetation, wildlife concentrations, proximity to the road, focal points of the park, grades, slopes, and drainage. Safety of all path users is a primary concern for the NPS and mitigation measures such as speed limits, sight distances, and signage will all be utilized to help meet this end.

Comment: ...evaluate from a cyclist's perspective the risk of leaving the trail to avoid a trail hazard. The most common trail hazards that can require an emergency departure from the trail are dogs and small children.

NPS Response: Aspects related to the safety of all path users will be implemented into the design of the trail, including speed limits, sight distances, and signage. Responsibility for the safe operation of a bicycle on the multi-use trail ultimately rests with the bicycle operator.

Comment: A unique opportunity will be present for the creation of view point between Inspiration and Bryce Point accessible by trail only. This would give these users a unique viewing opportunity.

NPS Response: The Rim Trail currently provides trail access only along the rim between Inspiration Point and Bryce Point and affords visitors outstanding views into the canyon. The development of additional spur trails in this area and the associated resource impacts was not considered necessary or desirable to meet the project goals.

Comment: ...we had asked in our scoping comments for data that assessed expected visitor demand for the path, particularly for each anticipated use (bicycling, walking, running, skateboarding, skating, rollerblading, skiing, snowshoeing and the use of mobility impairment devices). With the wide variety of uses expected on the trail, information on the amount of each use, motivations for participation, size of groups and contact points between uses are critical for minimizing future visitor use conflicts and ensuring safety for each path user, especially in the most congested areas linking visitor destinations.

NPS Response: The NPS has very limited data related to trail use at the park on which to base projections for visitor use of the new path. However, the park currently experiences high levels of visitation and with expected increases additional management strategies are needed to complement the park shuttle system, to reduce congestion and improve safety conditions, as well as maintain visitor experience and protect park resources. The adaptive management strategy and performance measure framework identified in the Multimodal Transportation Plan would provide park managers the ability to improve and manage all aspects of the transportation system including use of the path. Adaptive management will allow flexible decision-making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood.

Comment: We do have concerns, however, that a ten foot wide paved path with twelve rest areas is a larger footprint than necessary to meet the path goals. We ask that in construction of the path, all attempts are made to reduce the footprint of the project, particularly the permanent footprint.

NPS Response: The path dimensions are based on American Association of State Highway and Transportation Officials guidelines for bicycle facilities which address shared-use paths. The rest areas will be located adjacent to the trail and will be relatively small, averaging approximately 250 square feet. The two largest rest areas include one at the Forest / Park boundary that will be approximately 1,250 square feet to include a boundary monument and photo opportunity and the second will be approximately 750 square feet to include an interpretive opportunity at Dave's Hollow prairie dog colony. Visitors will be able to periodically stop and enjoy the environment from these rest stops that will provide modest amenities such as bike racks, signs, benches, and interpretive material.

***Comment:** I recommend that you articulate whether long boarders have access to the trail you propose.*

NPS Response: As described in the purpose and need for the EA, the multi-use path is intended for primary use by bicyclists and pedestrians. Other nonmotorized uses, exclusive of equestrians, would also be accommodated if deemed to not threaten the safety of others.

ATTACHMENT B**NON-IMPAIRMENT DETERMINATION****NON-IMPAIRMENT OF PARK RESOURCES OR VALUES**

The NPS 2006 Management Policies require analysis of potential effects to determine whether or not actions would impair park resources. The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values.

However, the laws do give the NPS the management discretion to allow impacts on park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of these resources or values. An impact to any park resource or value may, but does not necessarily, constitute an impairment; an impact would be more likely to constitute an impairment when there is a major or severe adverse effect upon a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the park; or
- identified as a goal in the park's general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

NPS's 2006 Management Policies requires analysis of potential effects to determine whether or not actions would impair park resources. The park resources and values that are subject to the no-impairment standard include:

- the park's scenery, natural and historic objects, wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;
- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;

- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

Based on the Presidential Proclamation No. 1664 of June 8, 1923, the park purpose was stated in part:

Whereas certain lands within the Powell National Forest in the State of Utah, known as Bryce Canyon, are of unusual scenic beauty, scientific interest and importance, and it appears that the public interest will be promoted by reserving these areas with as much land as may be necessary for the proper protection thereof as a national monument.

On June 7, 1924, Bryce Canyon National Monument was established as the Utah National Park "for the benefit and enjoyment of the people" and renamed Bryce Canyon National Park by Congress in 1928.

Bryce Canyon National Park objectives, as stated in the 1987 General Management Plan, are as follows:

- To secure, through research or other means, adequate information to increase management efficiency and to ensure conservation of park resources.
- To cooperate with outside agencies, organizations, and members of the public in (1) assuring, to the greatest extent possible, that nearby lands are developed and managed in ways that are compatible with preserving the park's air and water quality, geological resources, ecological communities, solitude, extreme quiet, and the scenery for which the park is famous; (2) minimizing the adverse effects of public use on the park's resources through the provision of recreational lodging, and other visitor service facilities in the park's vicinity; and (3) disseminating information about the park to the general public, with particular emphasis on the regional community.
- To protect and enhance the natural and scenic values of the park by maintaining an adequate land base to permit achievement of the park's purpose and acquiring outstanding mineral interests on the lands providing culinary water supply for the park.
- To protect park resources and the safety of park visitors through enforcement of applicable laws, rules, and regulations.
- Provide for the visitor's enjoyment and appreciation of park resources through primary interpretive emphasis on the park's geomorphology, but provide also for an understanding of the park's geology, natural history, history, archeology, night skies, and air quality.
- Develop a fire management program for the park to facilitate the protection and maintenance of the natural environment including, as necessary, research on fire burns to determine the need for, the effectiveness and desirability of, and the problems associated with implementing a prescribed fire management program for the park.
- Retain those facilities necessary for visitor use and park management at acceptable standards for health, safety, and comfort, and maintain historic structures as near as practicable to their original exterior appearance consistent with the adaptive use of these buildings.
- Provide the visiting public, through concession-operated facilities, the highest quality of accommodations, food service, and visitor needs consistent with reasonable pricing and comparability with local business.
- Ensure a representative proportion of minority and female employees, both seasonal and permanent.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessioners, contractors, and others operating in the park. The NPS's threshold for considering whether there could be an impairment is based on whether an action would have major (or significant) effects.

Impairment findings are not necessary for visitor use and experience, socioeconomics, public health and safety, environmental justice, land use, and park operations, because impairment findings relate back to park resources and values, and these impact areas are not generally considered park resources or values according to the Organic Act, and cannot be impaired in the same way that an action can impair park resources and values. Topics dismissed from further analysis in the EA include: greenhouse gases and climate change; soundscapes; night sky; wetlands; floodplains; livestock grazing; timber harvest; historic structures; archeological resources; paleontological resources; wilderness; visual resources / scenic resources; resources, including energy, conservation potential, and sustainability; prime and unique farmlands; and Indian trust resources.

After dismissing the above topics, topics remaining to be evaluated for impairment include: air quality, geology and soils, vegetation, special status species, and cultural landscapes.

Fundamental resources and values for Bryce Canyon National Park are identified in the 1987 General Management Plan. Impairment determinations are included for all impact topics analyzed in the EA, unless dismissed in the preceding paragraph.

Impairment Determinations

Air Quality. Bryce Canyon National Park is in Garfield and Kane counties in Utah. Both counties are in attainment areas of the state. Bryce Canyon National Park is designated a Class 1 area under the Clean Air Act. Air quality in Bryce Canyon National Park is generally excellent. Vistas in the park are occasionally obscured by pollution-caused haze, which typically consists of fine particulates and gases in the atmosphere. Pollutants affecting the park come primarily from sources outside the park boundaries, including the large urban source of Las Vegas and nearby sources. Local fires, both prescribed and wild, also create occasional air quality disturbances.

Impacts on air quality from implementing the Selected Action include the following:

- Mobile source emissions and fugitive dust generated from visitor vehicles are typically temporary and dissipate rapidly. Visitors who park in Bryce Canyon City and use the path to access the forest, the park, or shuttle system in the park will generate lower levels of mobile source emissions and fugitive dust than visitors who use private vehicles. As a result, impacts on local air quality will be short-term, minor, and beneficial.
- Temporary increases in local air pollution will occur during project construction, primarily from construction equipment operation. Emissions are expected to rapidly dissipate by air drainage. Emissions from idling visitor vehicles caused by construction-related traffic delays will be limited and temporary. Therefore, mobile emissions and fugitive dust generated from construction activities and vehicles and visitor vehicles will be short-term, minor, adverse, and local.

The Selected Action includes mitigation measures and best management practices that will be implemented to minimize pollutant emissions. The Selected Action will not result in impairment of the park air quality because adverse impacts will be short-term minor and mitigation measures will reduce impacts. In addition, short-term minor beneficial impacts are anticipated.

Geology and Soils. The project area lies within the Colorado Plateau geographic province on the eastern edge of the Paunsaugunt Plateau. In general, the top of the Paunsaugunt Plateau is covered with gravelly loam-type soils derived from the weathering of limestone parent material. These shallow, well-drained soils are typically low in nutrients and moisture availability. A substantial portion of the project area is classified as badlands or rock outcrops rather than as developed soils. The geological formations in the area are the primary attraction to visitors. Soils along drainages (both above and below the rim) that are formed in limestone alluvium can be deeper and well developed.

Impacts on geology and soils from implementing the Selected Action include the following:

- The total permanent disturbance to soils within the footprint of the path, including rest areas and spurs, will be approximately 11.3 acres. Construction activities will also temporarily compact and expose additional soils within the construction limits adjacent to the path and increase the potential for erosion. Construction of the path will have short- and long-term, minor, adverse, and local impacts on soils.
- Over the long term, soils may be disturbed due to visitors leaving the paved path (social trailing), resulting in compaction and erosion potential.
- The path design is intended to consolidate existing social trails into one designated trail alignment to reach destinations and to clarify circulation and wayfinding, which is expected to reduce the extent of existing social trails and the creation of new social trails. In addition to potentially reducing social trails in some areas, the Selected Action will help reduce the number of motorized vehicles that may park inappropriately adjacent to roads and parking areas during peak seasons and reduced visitor use of roadway shoulders, which will reduce soil disturbance in these areas. Thus, the Selected Action will have negligible beneficial impacts.

The Selected Action includes mitigation measures and best management practices that will be implemented to minimize impacts on soils. The Selected Action will affect a small portion of soils in the park. The Selected Action will not result in impairment of the park's soils because adverse impacts will be short- and long-term minor and mitigation measures will reduce these impacts. In addition, negligible beneficial impacts are anticipated.

Vegetation. The elevation of Bryce Canyon National Park ranges from 6,850 feet above sea level on the eastern side of the park to 9,115 feet at its southern end. The vegetation in the park reflects the change in elevation and topography, as well as the geology, soils, and water availability. The two dominant vegetation communities in the park segments of the project area are ponderosa pine with a mixed herbaceous woodland complex and ponderosa pine (Douglas fir) with a manzanita woodland complex.

Exotic plant species exist throughout the project area, but are concentrated along the road corridor and areas heavily impacted by motorized use (including off-highway vehicles), park operations, visitor use, and horse / mule corrals and trails. Common invasive species include whitetop (*Cardaria draba*), yellow salsify (*Tragopogon dubius*), yellow sweet-clover (*Melilotus officinalis*), black medic (*Medicago lupulina*), smooth brome (*Bromus inermis*), cheatgrass (*Bromus tectorum*), and several species of knapweed and thistle. Smooth brome is the most common invasive species in the project area.

Impacts on vegetation from implementing the Selected Action include the following:

- Approximately 10.5 acres of vegetation communities will be permanently disturbed within the proposed path footprint, rest areas, and spurs. The majority of the path impact area will affect ponderosa pine communities (8.22 acres). Ponderosa pine vegetation communities, as well as other community types, are common and widespread throughout the project area and vicinity. Consequently, only a small portion of any of these vegetation communities will be affected. Construction activities will also remove additional vegetation within the construction limits adjacent to the path. Over the long term, vegetation may be trampled, disturbed, and killed due to visitors leaving the paved path area (i.e., social trailing). Impacts on vegetation communities resulting from implementing the Selected Action will be short- and long-term, minor, adverse, and local.
- Invasive species are known to occur throughout the project area, primarily along roadways and areas with high visitor use. Construction-related disturbance to vegetation communities will increase the opportunity for the spread of invasive species. Invasive species reduce habitat quality and compete with native vegetation. The potential increase in invasive species along the path will result in short- and long-term minor adverse impacts on vegetation communities.
- The path design is intended to consolidate existing social trails into one designated trail alignment to reach destinations and to clarify circulation and wayfinding. Development of the path is expected to reduce the extent of existing social trails and the creation of new social trails. In addition to potentially reducing social trails in some areas, the Selected Action will help reduce the number of motorized vehicles that may park inappropriately adjacent to roads and parking areas during peak seasons and reduced visitor use of roadway shoulders, which will reduce vegetation disturbance in these areas. Thus, the Selected Action will have negligible beneficial impacts.

The Selected Action includes mitigation measures and best management practices that will be implemented to minimize impacts on vegetation. The Selected Action will affect a small portion of vegetation communities in the park. The Selected Action will not result in impairment of the park's vegetation communities because adverse impacts will be short- and long-term minor and mitigation measures will reduce these impacts. In addition, negligible beneficial impacts are anticipated.

Special Status Species. The only federally listed, proposed, or candidate species that may be affected by the project is the Utah prairie dog. Construction and visitor use of the path will not directly impact suitable or occupied Utah prairie dog habitat. Segments of the path that overlap with the buffer zone for mapped habitat occur in high visitor use areas and ponderosa pine forests that are not considered suitable habitat. Conservation measures developed in consultation with the USFWS for the park's Utah Prairie Dog Stewardship Plan will be implemented to reduce and mitigate any associated impacts on colonies during and following construction. Consequently, the Selected Action is not likely to adversely affect the Utah prairie dog. The USFWS concurred with this determination in a letter dated August 6, 2014.

Other special status species (i.e., state-listed species, USFS sensitive species, Dixie National Forest Management indicator species) may occur near the multi-use visitor path. Potential adverse impacts to these species will be negligible to minor based on the fact that 1) many of these species are rarely found or are only seasonal visitors to the project area, 2) species are less likely to use habitat or are habituated to human presence in proximity to the path, and 3) any loss of habitat will be an incrementally small decrease in the extent of available habitat. In addition, if nests for raptor species are found during surveys or construction, activities will be restricted until the young have fledged.

The path alignment has been adjusted to avoid known populations of rare and sensitive plants. Corrective actions based on pre-construction surveys and monitoring of social trailing will be implemented if needed to protect plant populations near the path.

The Selected Action includes mitigation measures and best management practices that will be implemented to minimize impacts to special status species, including the Utah prairie dog. The Selected Action will result in potential indirect impacts to Utah prairie dog, particularly during construction activities. The Selected Action will not result in impairment of special status species, because adverse impacts will be short- and long-term, negligible to minor adverse and mitigation measures will reduce these impacts.

Wildlife or Wildlife Habitat and Introduction of Native and Nonnative Wildlife Species.

Ponderosa pine and mixed mountain shrub woodland complex is the dominant vegetation community in the project area. A variety of wildlife is supported by this vegetation community. There are several species of birds and some mammals, several of which are migratory and not year-round residents in the project area. Common mammals found in the park include: least chipmunk (*Neotamias minimus*), Uinta chipmunk (*Neotamias umbrinus*), golden-mantled ground squirrel (*Ammospermophilus leucurus*), deer mouse (*Peromyscus maniculatus*), mule deer, and pronghorn (*Antilocapra americana*). Common birds include: Cooper's hawk (*Accipiter cooperii*), red-tailed hawk (*Buteo jamaicensis*), white-throated swift (*Aeronautes saxatalis*), several species of hummingbirds, Say's phoebe (*Sayornis saya*), Stellar's jay (*Cyanocitta stelleri*), Clark's nuthatch (*Nucifraga columbiana*), common raven (*Corvus corax*), and several species of swallows. In addition, a variety of migratory birds use the project area. Raptor species have been observed using meadow habitat as foraging grounds and possibly nest in trees along the edge of meadows.

Impacts on wildlife from implementing the Selected Action include the following:

- Approximately 10.5 acres of vegetation communities will be permanently disturbed, with the majority of the disturbance occurring in ponderosa pine communities (8.22 acres).
- Path construction may indirectly impact individual wildlife from noise, dust, ground vibration, and increased human presence disturbances. Noise and increased human activity may result in reduced foraging or possible temporary displacement and cause stress to wildlife in the area. Construction-related effects on wildlife will be short- and long-term, minor, adverse and local.
- Once constructed, visitor use (pedestrians, dogs and bicyclists) and presence of the path will likely result in adverse impacts on wildlife species. Impacts will include fragmentation of wildlife habitat, an increase in invasive species, diminished habitat quality, edge effects, affects to dispersal or migration, and alterations that could lead to increased predation for some species. The presence of visitors and their dogs may cause avoidance behavior in wildlife, attraction to human-provided food sources, and possibly affect foraging, nesting, and roosting / resting activities. Recreational use of the path may also result in mortality of individual species from collisions with cyclists. Vegetation disturbance and visitor use of the path may also result in an increase of invasive wildlife species in the vicinity. Effects on wildlife will be short- and long-term, minor, adverse, and local.
- Portions of the path within the park on the south end of the alignment (Segment IIIc) are near meadow habitat and wildlife movement corridors, including an important fawning area for pronghorn. Vegetation surrounding areas used for fawning, such as ponderosa pine-forested areas, provide screening and reduce potential impacts. A portion of Segment IIIc departs approximately 800 feet from Bryce Point Road to avoid sensitive plant habitat. As a result, some wildlife habitat will be isolated between the road and the multi-use path alignment.
- Wildlife near high visitor use areas (such as the shuttle hub, roadways, and off-highway vehicle trails) are likely acclimatized to vehicle traffic, human presence, and related noises due

to their proximity to the existing roadways and parking lots. Adverse impacts will be small and of little consequence to the species' population. Impacts on wildlife will be short-term and minor adverse.

The Selected Action includes mitigation measures and best management practices that will be implemented to minimize impacts on wildlife. The Selected Action will result in potential impacts on wildlife from construction and recreational use of the path. The Selected Action will not result in impairment of wildlife, because adverse impacts will be short- and long-term minor and mitigation measures will reduce these impacts.

Cultural Landscapes. Five cultural landscapes have been identified in the park, including Bryce Canyon Lodge and Deluxe Cabins area, Bryce Inn (Sunrise Camper Store, now known as the General Store), NPS Historic Housing area, Rim Road, and Bryce Canyon National Park Scenic Trails Historic District. The latter one falls outside the proposed visitor path alignment and will not be discussed further. Cultural landscape inventories have been completed for Bryce Inn and Rim Road. A cultural landscape report has been completed for the Bryce Canyon Lodge and Deluxe Cabins Historic District, and the Old NPS Housing Historic District

Impacts on cultural landscapes from implementing the Selected Action include the following:

- Segment III of the visitor path crosses through the center of the Bryce Canyon Lodge Historic District boundary. Some trees between the Lodge and Sunrise Motel may need to be removed for the construction of the alignment, resulting in long-term minor adverse effects on the district.
- Construction and maintenance activities will likely result in a temporary disruption of the historic scene and feeling in the cultural landscape during construction and have short-term minor adverse effects on the Bryce Canyon Lodge Historic District. Following construction, visual impacts on the landscape within the historic district will be removed with the removal of construction equipment.
- Development of the Selected Action will lead to fewer private vehicles, less vehicle congestion, and fewer traffic and parking delays in cultural landscapes in the park. The reduction of vehicle traffic and increased pedestrians and bicyclists will likely result in beneficial effects on cultural landscapes by reducing inappropriate parking and social trails that causes damage to resources.

The Selected Action includes mitigation measures and best management practices that will be implemented to minimize impacts on the cultural landscapes of the park. The Selected Action will not result in impairment of the park's cultural landscapes, because adverse impacts will be short- and long-term negligible to minor and mitigation measures will reduce these impacts. In addition, negligible beneficial impacts are anticipated.

Summary

As described above, adverse impacts anticipated as a result of implementing the Selected Action on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or identified as significant in the park's general management plan or other relevant NPS planning documents, would not rise to levels that would constitute impairment.