

Final Development Concept Plan  
Abbreviated Final Environmental Impact Statement

---

Entrance Area and Road Corridor

**DENALI**

National Park and Preserve · Alaska



# Final Development Concept Plan Abbreviated Final Environmental Impact Statement

---

## Entrance Area and Road Corridor

# Denali

National Park and Preserve

Alaska

December 1996

This *Final Development Concept Plan / Abbreviated Final Environmental Impact Statement* (DCP/EIS) describes the proposed plan for providing for visitor use and resource protection and related facility development in the entrance area and road corridor or “frontcountry” of Denali National Park and Preserve. The frontcountry includes all nonwilderness areas along the George Parks Highway, the entrance/headquarters area, and the park road corridor to the Kantishna airstrip. The proposed action is based on the recommendations of the Denali Task Force, a committee formed at the request of the secretary of the interior in 1994, on proposals received during public scoping, on previous plans, and on planning team work and impact analysis. The proposed action (alternative D) would provide visitor facilities and services in the frontcountry to meet a wide range of visitor needs and interests. These developments would be limited to actions in which the National Park Service has traditionally specialized, such as interpretive centers, environmental education opportunities, trails, and campgrounds.

Five alternatives were evaluated in the draft document, which was available for public review from June 21 through August 19, 1996. A total of 262 comment letters were received and 40 people testified formally during the public review period. Based on these comments, the proposed action identified in the draft document, alternative D, has been selected as the proposed plan with several modifications. The changes to the proposed action include incorporating several elements of alternatives C and E that affect entrance area development, gravel acquisition, traffic on the park road, and guided activities in the Kantishna area.

An abbreviated final environmental impact statement (EIS) has been prepared since the modifications to the draft document did not include substantial changes to the proposed action or to the environmental analyses. This final EIS includes the introductory sections from the draft, the modified proposed action, and updates and factual corrections to the remaining sections of the draft document. It must be used as a companion document with the draft, which contains the full text of the affected environment section, the environmental analyses, and the appendixes.

The final DCP/EIS also includes a review and analysis of comments received. All comment letters from government agencies and organizations are reproduced. Selected letters from businesses and individuals have also been reproduced, with remaining letters from businesses and individuals that contain substantive comments referenced by name under responses to similar issues. This procedure has also been followed for testimony received during the public hearings. Sample testimony is reproduced, and additional testimony containing substantive comments is referenced by name under responses to similar issues.

No action will be taken until 30 days after the Environmental Protection Agency has accepted the document and published a notice of availability in the *Federal Register*. For further information contact the superintendent at the following address:

Denali National Park and Preserve  
P.O. Box 9  
Denali Park, Alaska 99755



## SUMMARY

This *Final Development Concept Plan/Abbreviated Final Environmental Impact Statement* amends the 1986 *General Management Plan* for the entrance area and road corridor or “frontcountry” of Denali National Park and Preserve to provide specific direction for road management and facility development proposals to meet the current and future needs of the public.

Over the last 10 to 15 years visitor use and administrative functions have increased the need for certain visitor and administrative facilities and services while decreasing the need for others in the frontcountry. Large commercial tour groups now dominate the visitor profile. Increasing numbers of independent travelers are also visiting the park. Growth and changes in the area outside the park have increased the capability of the local community to provide services that were historically located on park lands. These changes in visitor use and administrative functions are not adequately addressed in any existing planning documents for the frontcountry area.

Several issues were identified during scoping for the development concept plan: potential effects on air and water quality, vegetation, fish, wildlife, wilderness, cultural resources, socioeconomic environment, visitor use, park management, and transportation patterns. These issues form the basis for the environmental analysis in the development concept plan.

### **PROPOSED ACTION AND ALTERNATIVES**

The *Final Development Concept Plan/Environmental Impact Statement* includes five alternatives for providing for visitor use and resource protection and related facility development in the frontcountry of Denali National Park and Preserve. The frontcountry includes all nonwilderness areas along the

George Parks Highway, the entrance/headquarters areas, and the park road corridor to the Kantishna airstrip. The five alternatives analyzed in the draft document included a no-action alternative and four action alternatives. The proposed action is based on the recommendations of the Denali Task Force, a committee formed at the request of the secretary of the interior in 1994, on proposals received during public scoping, on previous plans, and on planning team work and impact analysis. It has been modified from the draft based on comments received from the public.

Facilities and services considered in the proposed action and in each alternative included visitor accommodations, campgrounds, camper conveniences, interpretive facilities, transportation, parking, bus tours, bicycle use, rest and picnic areas, concessions, road maintenance, trails, employee housing, administrative and support facilities, airstrips, and utility systems. The alternatives were different in construction costs, extent and location of visitor facilities, and corresponding environmental, social, and economic impacts.

**Alternative A – No Action (Continue Current Management Direction)** represents no change from current management direction. With the exception of development concepts not yet implemented, it continues the present course of action set forth in existing management plans and guidance documents including the *Statement for Management* (NPS 1995a) and the *General Management Plan/Land Protection Plan/Wilderness Suitability Review* (NPS 1986). This alternative represents the existing situation in the park, so existing facilities and services would remain. For example, the temporary park hotel would be rehabilitated as funds allowed, adaptive use of historic structures and overcrowding of administrative space would continue, campgrounds would not be expanded, and no new trail construction or additional trail maintenance would be done.

**Alternative B (Implement Previous Plans)**

would fully implement previous planning decisions and development concepts contained in approved plans such as the 1986 *General Management Plan* and the *Amendment to the 1983 Development Concept Plan/Environmental Assessment for the Park Road Corridor and 1987 Addendum for Riley Creek* (NPS 1992a). These documents not only propose additional facilities throughout the park to support NPS operations, but also propose increased visitor services and facilities within the park entrance area. Examples of proposed facilities include a new hotel and camper convenience center to replace existing temporary facilities, a hostel in the entrance area, a new interpretive center with additional administrative space, a 50-site expansion to Riley Creek campground, and upgraded trail maintenance in the entrance area.

**Alternative C (Reduce Facilities and Services in the Park)**

would reduce the level of development and visitor services inside the park and encourage the private sector to provide necessary new facilities such as overnight accommodations, campgrounds, and camper conveniences outside the park boundary. Major new park facilities such as an interpretive center and an environmental education center would be constructed outside the park as well. The park entrance area would function primarily as a staging area for a trip farther into the park rather than as a destination in itself. This alternative allows for minimizing resource impacts and therefore maximizing resource protection inside the park.

**Alternative D – Proposed Action (Emphasize Traditional NPS Programs)**

would provide visitor facilities and services in the frontcountry to meet a wide range of visitor needs and interests. Changes in the frontcountry would be limited to actions in which the National Park Service has traditionally specialized, including developments such as interpretive centers, environmental education opportunities, trails, and campgrounds, and resource protection programs. The park hotel would be closed, and

the Park Service would encourage the private sector to develop visitor service facilities (accommodations, food service, and other commercial services) outside the park. The existing visitor access center would be remodeled and expanded to serve as an interpretive and discovery center, with an expanded Alaska Natural History Association (ANHA) facility. A new visitor services building and parking lot would be constructed nearby. Camper convenience services would be provided in this same area, and the existing store and temporary shower building would be removed. Some buildings in the former hotel area would be adaptively used to provide an environmental education and science facility. New permanent rest areas would be constructed at Savage and Toklat. Additional trails would be constructed primarily in the Nenana River and Savage River areas. New campsites would be developed in the entrance area, the Nenana River corridor, and in the Kantishna area. Road maintenance and repair would be upgraded to address safety concerns and major structural failures along the park road.

**Alternative E (Emphasize Visitor Services and Recreational Opportunities)**

would significantly enhance the visitor experience by concentrating new development inside the park and providing a diversity of visitor facilities and services in the frontcountry to meet a wide range of visitor needs and interests. The National Park Service would take the lead role in providing new visitor services. A new hotel would replace the existing temporary building, and a hostel or similar low-cost accommodations would be constructed at a separate location. A new interpretive center, a camper conveniences center, and an environmental education facility would be constructed just north of the Riley Creek campground. Additional campsites would be developed throughout the frontcountry. New permanent rest areas would be constructed at Toklat and Savage, and trails would be upgraded and expanded at several locations. Road maintenance and repair along the park road would be upgraded to address documented

structural problems as well as safety concerns and actual structural failures.

## **ENVIRONMENTAL CONSEQUENCES**

### **Impacts of Alternative A – No Action: Continue Current Management Direction**

Considering the large amount of wilderness designated within the park and the establishment of the nonwilderness road corridor as a development zone, the total physical impacts on wilderness and related values would be of minor consequence.

Wildlife would continue to be occasionally disturbed by visitor and administrative use along the road corridor. Long-term effects on wildlife populations would be insignificant.

Most vegetation and soil impacts would occur on previously disturbed sites, with only about 1 acre of new ground disturbance within the frontcountry. Disturbed areas would be either landscaped with native species or restored to natural conditions to minimize vegetation losses.

By maintaining vehicle use limits and reducing dust levels along the road corridor, impacts on air quality and related values would remain short-term, localized, and insignificant.

Existing management practices would not result in permanent changes to floodplains, nor would adverse impacts on floodplain values or water quality be anticipated. There would also be no adverse effect on wetland functions or values.

There would be no new impacts on historic or archeological resources.

Continued increases in park visitation would result in additional pressure on facilities that are already inadequate, deteriorating, or both. The experience of most visitors to Denali would be affected by increased congestion and continued limited opportunities.

Park operations and management would continue to be hindered by inadequate facilities.

Deterioration of historic structures and inefficiency of operations because of inadequate administrative facilities would continue. Inadequate repair and maintenance on the park road would continue to result in inefficient use of personnel, equipment, and materials.

Inefficient transportation within the entrance area and between the park and facilities outside the boundary would continue, potentially affecting most park visitors. Visitor safety would continue to be threatened by congestion and pedestrian-vehicle conflicts in the entrance area and by inadequate road repair and maintenance in the park interior. Inadequate links among transportation systems and modes in the entrance area and outside the park would continue to affect visitors and resources.

The park would remain in competition with the private sector outside the park in providing lodging, food service, and retail sales of souvenirs. Some private sector enterprises would continue to have a competitive advantage based upon their location within the park. The short- and long-term economic effects due to construction would be significant for relatively few individuals.

### **Impacts of Alternative B: Implement Previous Plans**

Alternative B would result in impacts on wildlife habitat and vegetation in the entrance area, where development is proposed in areas that have not been previously disturbed or where such disturbance has been minimal. Similar impacts could be expected at development nodes in the park interior where new construction has been proposed in previous plans. Some improvements to the visitor experience could be expected from a new interpretive center, a replacement hotel, and upgraded trails in the entrance area. Alternative B would not include measures to improve resource protection in the park or to upgrade maintenance of the park road, and threats to

## SUMMARY

both the visitor experience and resource protection could be expected over the long term. New frontcountry construction would not have a direct impact on the Denali Wilderness. Indirect impacts, such as noise and viewshed impairment, may occur due to the proximity of some facilities and human activities to designated wilderness.

Impacts on wildlife would be minor and short-term, except around development nodes where avoidance of human activities could be expected by large mammals.

A total of 27.8 acres of new ground disturbance would occur throughout the park. Construction would be spread across development nodes with no one area experiencing a significant loss in botanical diversity. The largest vegetation losses would occur in the vicinity of the hotel where an additional 7.0 acres of spruce-aspen forest would be committed to development. Revegetation and landscaping would restore native vegetation on 9.8 acres, primarily in the entrance area.

By maintaining vehicle use limits and reducing dust levels along the road corridor, impacts on air quality and related values would remain short-term, localized, and insignificant.

New visitor facilities and support functions would not intrude on riparian or wetland communities and would not significantly impact surface or groundwater quality and flows. The effects of gravel extraction in the Toklat River floodplain would remain temporary and of minor consequence. Although construction of a new restroom facility at the dog kennels would adversely affect wetland functions and values near the site, in-kind mitigation would result in no net loss of palustrine scrub-shrub wetlands within the park.

The construction of a replacement hotel, a hostel, an interpretive center, campground sites, a camper convenience building and post office, parking and road expansion, and Eielson Visitor Center renovation or replacement may disturb previously unknown archeological resources.

Long-term economic benefits would occur due to additional permanent and seasonal hires by

Park visitors would have a greater range of services from which to choose in the entrance area, including a new hotel, hostel, and camper conveniences center. Indoor interpretive activities would be enhanced by a new interpretive center, and hiking opportunities in the entrance area would be expanded because of better-maintained trails. Hiking and camping opportunities elsewhere in the entrance area and along the first 15 miles of the park road would be limited, so the entrance area would remain primarily a staging location for a bus trip into the park interior rather than functioning as a destination.

The National Park Service would need to expand operations to provide visitor services and utility operations for new facilities in the entrance area. New administrative space would help alleviate headquarters overcrowding, but historic structures would continue to deteriorate without rehabilitation work. Incremental changes in road character, such as widening of the road alignment, could result along the park road because of inadequate maintenance and repair.

Inefficient transportation within the entrance area and between the park and facilities outside the boundary would continue, potentially affecting most park visitors. Visitor safety would continue to be threatened by congestion and pedestrian-vehicle conflicts in the entrance area, although re-configuring entrance roads to new facilities may help reduce this impact. Inadequate road repair and maintenance in the park interior would affect visitor comfort and safety. Inefficient links among transportation systems and modes in the entrance area and outside the park would continue to affect visitors and resources.

the park and an increased annual park budget to provide for additional staff and other expanded



park programs. Some short-term economic benefits would occur due to construction and development within the park. Approximately \$48 million would be spent to implement the high priority construction projects. Construction-related jobs in the park and nearby communities would increase as would other construction-related expenditures. The short- and long-term economic effects due to construction would be significant for some individuals.

### **Impacts of Alternative C: Reduce Facilities and Services in the Park**

This alternative would minimize resource impacts and therefore maximize resource protection inside the park. Many of the actions would result in positive effects to both natural resources and to the wilderness experience in Denali. This alternative generally does not include actions to provide more options for visitors in the front- country, especially those who are unable to take a bus into the interior because of limited time in the park.

Adherence to general management plan (GMP) traffic limits, maintenance of the road character, reliance on bus transportation, and a general lack of new development west of the Savage River bridge would help ensure that the park's wilderness qualities would be preserved. Maintaining only those visitor facilities or support functions that are either resource dependent, essential for efficient park operations, or offer a unique experience, would allow the frontcountry atmosphere to become more congruous with the park's overall wilderness character. Although new construction would not have a direct impact on the Denali Wilderness, the proliferation of social trails and associated resource damage would be incompatible with the wilderness setting.

Visitor and administrative use along the road corridor would not result in adverse impacts on wildlife and would not significantly affect animal behavior or habitat use. Areas of

concentrated human activity, conditions typical of development nodes, would continue to be avoided. Disturbance and habitat losses associated with new construction would not result in significant long-term impacts on wildlife due to the small acreages involved, the proximity to existing development, and the availability of undisturbed habitat nearby. Adherence to GMP seasonal traffic limits and reliance on bus travel as the primary means to view animals would decrease the opportunity for direct contact between wildlife and visitors and thus the potential for wildlife disturbance.

Adaptive use of existing structures and facilities, together with the placement of many facilities outside the park, would limit the amount of new construction within park boundaries. Since most of the 21 acres to be committed to development would occur in the spruce forest and mixed forest communities, vegetation losses would not significantly affect the park's botanical diversity.

Although construction and road maintenance activities could cause an increase in airborne pollutants, these increases would be localized, short-term, and insignificant in relation to the park's overall air quality. They would not exceed national ambient air quality standards (NAAQS) or allowable class I increments. By maintaining vehicle use limits and reducing dust levels along the road corridor, impacts on air quality and related values would remain short-term, localized, and insignificant.

New visitor facilities and support functions would not intrude on riparian or wetland communities and would not significantly affect surface or groundwater quality or quantity. The effects of gravel extraction within the Toklat and Teklanika river floodplains would be temporary and of minor consequence. Relocation of the gravel crushing operation at Toklat would not adversely affect floodplain functions or values.

The historic integrity of the Wonder Lake ranger station and the Headquarters Historic District could be affected. New construction

## SUMMARY

such as trails, EMS/fire station, C-Camp upgrade, bus turnaround, and new parking areas

Park visitors would have fewer services from which to choose in the entrance area, although these services would continue to be available outside the park and would most likely continue to expand. Interpretive and environmental education opportunities would be expanded with new facilities outside the park. While hiking opportunities in the entrance area would be expanded, hiking and camping opportunities elsewhere in the frontcountry would not increase.

Park operations would change significantly because additional visitor opportunities (interpretive center and environmental education) would be provided for outside the park boundary. Most employee housing and administrative space needs could be met in the headquarters and entrance areas, but fragmentation of these functions as well as location of park operations outside the boundary could decrease efficiency. Expanded road maintenance and repair, including establishment of new gravel sources, would result in more effective use of personnel, equipment, and materials.

Entrance area traffic congestion would be reduced and overall efficiency increased through reduced facilities and additional parking, primarily because of hotel closing and adaptively using the airstrip for long-term parking and for access to a relocated railroad depot. Traffic on the paved section of the park road would likely continue to increase. While overall road traffic into the interior would decrease, more visitors could be accommodated by filling a higher percentage of the Denali Visitor Transportation System (VTS) bus seats.

Parks Highway traffic could be expected to increase significantly because of relocation of primary visitor services and facilities outside the park. This could compound existing safety concerns and result in the need for highway widening and construction of interchanges.

and entrance roads may disturb previously unknown archeological resources.

Long-term economic benefits would occur due to additional permanent and seasonal hires by the park and an increased annual park budget to provide for these additional staff and other expanded park programs. Short-term economic benefits would occur due to construction and development within the park. Construction-related jobs in the park and nearby communities would increase as would other construction-related expenditures. Approximately \$14 million would be spent to implement proposed high priority construction projects. The short- and long-term economic effects would be significant for some individuals. Some additional business opportunities would be created outside the park.

### **Impacts of Alternative D – Proposed Action: Emphasize Traditional NPS Programs**

The major impacts that could be expected upon implementing the proposed plan include long-term benefits to the visitor experience in Denali and short-term impacts on natural resources resulting from various developments.

Implementing the proposed action would also result in long-term benefits to both natural and cultural resources protection, although some loss of vegetation and wildlife habitat would result.

The proposed action would not only enhance protection of wilderness resources by minimizing human intrusions, it would also provide expanded opportunities for resource-based recreation and education, uses considered appropriate in wilderness areas. However, some visitors may view the development of formal trails along the road corridor as an unnecessary and undesirable erosion of the park's wilderness attributes, diminishing the uniqueness of the experience.

The long-term impact on recruitment to the local moose population due to a loss of calving habitat is unknown. Construction of a trail route

along the rocky slopes east of the Savage River could adversely affect park fauna, particularly a band of Dall sheep that inhabit this area. To mitigate the potential for adverse effects on Dall Disturbance and habitat losses associated with new construction would not result in significant long-term impacts on wildlife due to the small acreages involved, the proximity to existing development, and the availability of undisturbed habitat nearby. Adherence to GMP seasonal traffic limits and reliance on bus travel as the primary means to view animals would decrease the opportunity for direct contact between wildlife and visitors and thus the potential for wildlife disturbance.

Proposed actions would affect 42.3 acres, most of it involving expansion of existing developed areas in the frontcountry. Vegetation losses would occur primarily in the spruce and mixed forest communities and would not alter the park's botanical diversity. Removal of some facilities and site revegetation following construction would restore vegetation to 11 acres of park land, mostly in the entrance area.

Although construction and road maintenance activities could cause an increase in airborne pollutants over existing levels, these increases would be localized, short term, and insignificant in relation to the park's overall air quality. They would not exceed national ambient air quality standards (NAAQS) or allowable class I increments. By maintaining vehicle use limits and reducing dust levels along the road corridor, impacts on air quality and related values would remain localized, temporary, and insignificant.

Proposed actions would not have a significant effect on water quality and surface or groundwater flows. The effects of gravel extraction from within the Toklat and Teklanika river floodplains would remain temporary and minor and would not adversely impact floodplain functions or values. Placement of fill material may adversely affect some wetlands, but measures would be taken to mitigate these impacts, including acre-for-acre compensation at other park wetland sites.

sheep, the National Park Service would continue monitoring human-wildlife interactions along the road corridor.

The historic integrity of the Wonder Lake ranger station and the Headquarters Historic District could be affected. New developments such as trails, buildings, parking areas, rest areas, picnic areas, campgrounds, and utilities may disturb previously unknown archeological resources.

A wide variety of new opportunities would be available to visitors in the entrance area and along the road corridor. A large percentage of all visitors to Denali pass through the entrance area and would have access to a new interpretive center, additional trails and campsites, and expanded interpretive programs. Visitors choosing to ride the shuttle bus or drive as far as the Savage River would have access to the new trails and rest area as well as pullouts for mountain and wildlife viewing. Additional opportunities would also be available to visitors who choose to travel into the park interior, primarily a new visitor center at Eielson, a permanent rest area at Toklat, and several loop trails and interpretive exhibits. Trail and campground development along the Nenana River corridor would provide a new destination area near the park entrance.

Expanded park operations would be necessary to provide additional visitor services and support functions. Operational efficiency could be increased because of new, adequate facilities and more effective location of management and support functions. Expanded maintenance and repair projects along the park road would allow for more effective use of personnel, equipment, and gravel.

Overall entrance area traffic and congestion would decrease considerably upon full implementation of the proposed action because of relocation of facilities, realignment of access roads, removal of the airstrip, effective trail connections among facilities, and expanded shuttle bus service. Road improvements and new developments along the paved section of

## SUMMARY

the park road would increase visitor access to that part of the park. A greater number of visitors would also be able to travel into the Parks Highway traffic could be expected to increase because of continued growth in visitor services north and south of the park entrance and with trail and campground development in that section of the park. Proposed changes such as expanded shuttle service, moving the primary entrance sign, and a trail connecting the entrance area facilities with those north of the park entrance would help reduce traffic and would alleviate safety issues.

Improved visitor experiences, park facilities, and services would insure that Denali National Park and Preserve remains a mainstay of the local economy and the Alaskan tourism industry. This would lead to sustainable, long-term socioeconomic benefits for the local and Alaskan economies. Short-term economic benefits would occur due to construction and development within the park. Approximately \$19 million would be spent to implement the high priority construction projects. Park and nearby community construction-related jobs would increase as would other construction-related expenditures. The short- and long-term economic effects would be significant for some individuals and would have some significant impacts locally because of the relatively small size of the local economy. Some additional business opportunities would be created outside the park.

### **Impacts of Alternative E: Emphasize Visitor Services and Recreational Opportunities**

The impacts from alternative E would be similar to those described for the proposed action but on a larger scale. Major new developments proposed for the entrance and Nenana River areas, including a new interpretive center, environmental education facility, camper conveniences, economy lodging, and a new vehicle-access campground would all be located in undisturbed areas. This would affect wildlife habitat and vegetation in these areas. At the

park interior based on replacing some private automobiles with buses.

same time, a greater diversity of visitor experiences would be available.

Although there would be increased opportunities for resource-based recreation and education, along with enhanced protection of wilderness resources through the reduction of visitor-related impacts, these benefits may be overshadowed by the negative consequences associated with increased commercial development within park boundaries. Not only would this development sharpen the distinction between the entrance area and park interior, but it also may strengthen the impression that to truly experience Denali's wilderness qualities, one must travel beyond Savage River, more than 14 miles into the park.

Construction of the Primrose Ridge trail could adversely affect park fauna, particularly bands of Dall sheep that inhabit the area. Increased visitor use could cause some sheep to seek out less suitable habitat, possibly increasing their susceptibility to predation or causing a decline in their nutritional status or reproductive fitness. Disturbance and habitat losses associated with new construction would not result in significant long-term impacts on most wildlife species due to the small acreages involved, the proximity to existing development, and the availability of undisturbed habitat nearby. However, the level of development and activity in the entrance area could affect long-term recruitment to the moose population. Adherence to GMP seasonal traffic limits and reliance on bus travel as the primary means to view animals would decrease the opportunity for direct contact between wildlife and visitors and thus the potential for wildlife disturbance.

This alternative would commit the greatest amount of park land to development, the majority of which would be in the entrance area. Total acreage to be affected by actions in this alternative would be 86.4 acres. Vegetation losses would occur primarily in the spruce and mixed forest communities and would not alter

the park's botanical diversity. Approximately 12.6 acres would be revegetated and either landscaped or restored to natural conditions.

Although construction and road maintenance activities could cause an increase in airborne pollutants, these increases would be localized, short-term, and insignificant in relation to the Proposed actions would not have a significant effect on surface or groundwater quality or quantity. The effects of gravel extraction from within the Toklat and Teklanika river floodplains would remain temporary and minor and would not adversely affect floodplain functions or values. Relocating the gravel crushing operation at Toklat to a site within the floodplain would place the operation at significant risk from high water flooding and would contradict NPS guidelines governing floodplain management. Placement of fill material may adversely affect some wetlands, but measures would be taken to mitigate these impacts, including acre-for-acre compensation at other park wetland sites. Expansion of the C-Camp housing area along with the construction of additional overnight lodging in the park would cause an increase in water consumption over existing levels, although these impacts would not be expected to be significant.

The historic integrity of the Wonder Lake ranger station and the Headquarters Historic District could be affected. New developments such as trails, buildings, parking areas, rest areas, picnic areas, campgrounds, and utilities may disturb previously unknown archeological resources.

A wide variety of new opportunities and services in the frontcountry would be available to a large percentage of park visitors. The higher activity level would be apparent throughout the frontcountry. In the entrance area, location of additional overnight accommodations inside the park would result in more traffic and congestion. Along the park road, increased road maintenance and repair projects would mean additional truck and heavy equipment traffic. In the Wonder Lake and Kantishna areas, increased commercial development and

park's overall air quality. They would not exceed national ambient air quality standards (NAAQS) or allowable class I increments. By maintaining vehicle use limits and reducing dust levels along the road corridor, impacts on air quality and related values would remain localized, temporary, and insignificant.

expanded guiding services would result in greater use of the area with a focus on group activities.

Expanded park operations would be necessary to provide additional visitor services and support functions, but at an even higher level than the proposed action because of more development within the park. Operational efficiency could be increased because of new, adequate facilities. Expanded maintenance and repair projects along the park road would allow for more effective use of personnel, equipment, and gravel over the long term than alternatives C or D, although the activity level in the short term would be much higher.

Overall entrance area traffic and congestion would increase slightly because of expanded facilities and services in three different areas and because of five separate bus loading and unloading locations. Road improvements and new developments along the paved section of the park road would increase visitor access. The trend in overall number of visitors who could travel into the park interior cannot be determined because of uncertainty over the types of traffic running to Kantishna. Parks Highway traffic could be expected to increase because of continued growth in visitor services north and south of the park entrance and with park development in the Nenana River corridor.

The park would continue to compete with the private sector for providing services such as lodging and food service. This competition could negatively affect some of the smaller businesses in the local area. Long-term economic benefits could occur because of the possibility of additional NPS permanent and seasonal hires and an increased annual park budget to provide for expanded programs.

## SUMMARY

Short-term economic benefits would occur due to construction and development within the park. Construction-related jobs in the park and nearby communities would increase as would other construction-related expenditures.

Approximately \$52 million would be spent to implement high priority construction projects.

The short- and long-term economic effects would be significant for some individuals. Local tourism-related businesses would continue to depend upon their proximity to Denali National Park and Preserve and the hundreds of thousands of visitors it attracts every year.

Expanded park visitor facilities would result in an expected increase in the average length-of-stay of visitors within the park. This result may have some positive economic benefits for the local economy.



## CONTENTS

Introduction	1
Purpose of and Need for the Plan	5
Purpose and Need	5
Background	5
Park Purpose	5
Park Significance	9
History of Planning in the Denali Entrance Area and Road Corridor	11
Management Objectives	14
National Environmental Policy Act Process	15
Issues and Impact Topics	16
Planning Issues Considered in Developing the Alternatives	16
Impact Issues and Topics Considered in this Document	18
Impact Issues and Alternatives Considered but Not Addressed in this Document	19
Proposed Action (Alternative D): Emphasize Traditional NPS Programs	23
Introduction	23
General Planning Concepts	23
Visitor Use	24
Road Management	27
General Development	31
Park Operations	43
Visitor Experience and Resource Protection	44
Plan Implementation and Phasing	46
Implementation Priorities	47
Table 5: Summary of Environmental Consequences of the Alternatives – Errata Sheet	57
Affected Environment – Errata Sheet	59
Environmental Consequences – Errata Sheet	62
Consultation and Coordination for the Draft Development Concept Plan/Environmental Impact Statement	73
Appendixes – Errata Sheet	76
Comments and Responses	81
Review and Analysis of Comments Received on the Draft Development Concept Plan/Environmental Impact Statement for the Entrance Area and Road Corridor	83
Introduction	83
Written Comments and Responses	85
Public Hearing Comments and Responses	89
Responses to Written Comments	91
Responses to Comments on the Professional Photography Permit Program	319
Arguments Against the Proposal	320
Arguments in Favor of the Proposal	324



Suggested Changes to the Proposal 326  
List of Organizations, Businesses, and Individuals Who Commented on  
Proposed Changes to the Professional Photography Permit Program 331  
Representative Sample of Letters and Testimony Regarding Proposed  
Changes to the Professional Photography Permit Program 333

## MAPS

Region 6  
Existing Conditions – Entrance Area and Road Corridor 7  
Proposed Action: Alternative D – Entrance Area and Road  
Corridor 25  
Proposed Action: Alternative D – Entrance Area 32  
Proposed Action: Alternative D – Savage River Area 36  
Proposed Action: Alternative D – Toklat Area 37  
Proposed Trails – Entrance Area and Road Corridor 39  
Proposed Action: Alternative D – Park Headquarters/C-Camp 42  
Key to Management Subzone Maps – Entrance Area and Road Corridor 49  
Management Subzones, Proposed Action: Alternative D – Entrance Area/Nenana River Corridor 51  
Management Subzones, Proposed Action: Alternative D – Headquarters/C-Camp Area 52  
Management Subzones, Proposed Action: Alternative D – Savage Campground to Primrose Rest Area  
53  
Management Subzones, Proposed Action: Alternative D – Teklanika Area 54  
Management Subzones, Proposed Action: Alternative D – Toklat to Eielson Visitor Center Area 55  
Management Subzones, Proposed Action: Alternative D – Wonder Lake Area 56



## INTRODUCTION

Five alternatives were evaluated in the draft document, which was available for public review from June 21 through August 19, 1996. A total of 262 comment letters were received and 40 people testified formally during the public review period. Based on these comments, the proposed action identified in the draft document, alternative D, has been selected as the proposed plan with several minor modifications. The changes to the proposed action include incorporating several elements of alternatives C and E and are listed below by topic as presented in the draft document.

### Road Management:

- Changes in road use would be phased in, so that proposed reallocations of vehicles would depend on establishment of special regulations for NPS management of the park road.
- Specific seasonal limits have been added for both tour and visitor transportation bus systems.
- Language has been added to the document referring to the direction in the 1986 *General Management Plan* to reduce private vehicle traffic on the park road by decreasing vehicle use by campers, professional photographers, NPS employees, and people traveling to Kantishna.
- The final DCP/EIS specifies that reallocation of available permits from the professional photography permit system would be done as an annual operating decision to retain flexibility between bus systems. This annual allocation of bus trips would be retained as a separate category within the overall traffic limits established in the 1986 *General Management Plan*.
- Language has been added to the document to specify that the National Park Service would

continue to work with professional photographers to improve the efficiency and effectiveness of the permit program. Administrative changes such as peer review of permit applications, more stringent standards and enforcement, and implementing a system of reallocating permits when photographers either did not show up or left the park early could be made to improve the system.

- The final version of the proposed action calls for redistributing professional photographer permits during the season to better match demand.
- The section on Kantishna business traffic has been revised to clarify that a new business in Kantishna could be allocated road travel permits based on the criteria in 43 CFR Part 36 for implementing ANILCA requirements. This would require the National Park Service to apply the provisions of NEPA.
- A bicycle permit system as described in alternative C has been added to the proposed action.
- Gravel acquisition sources for the western section of the park road have been modified: previously disturbed lands in Kantishna would be used as a gravel source, with the proposed Moose Creek upland pit developed later if necessary.
- Proposed relocation of the Toklat gravel crushing operation has been changed to a previously disturbed area at the north end of the Toklat road camp as proposed in alternative C.

### General Development:

- The location of the proposed Yanert Overlook campground has been moved approximately 1 mile north.

## INTRODUCTION

- Additional details have been added for the proposed interpretive and discovery center and the environmental education and science facility to clarify the functions of these buildings.
- Language has been added to clarify that the entrance area parking lot for the interpretive and discovery center and visitor services building would be about 250 spaces, with additional spaces phased in later only if necessary.
- Chemical toilets at the Primrose pullout would be removed after construction of the Savage River bus turnaround.
- Additional details of trail development and rehabilitation at the north end of Wonder Lake, including designation of a no parking zone, have been added.
- Some additional details for proposed administrative space, utility development, and alternative energy use have been added.
- The McKinley Park airstrip would be closed to provide for potential expansion of the Alaska Railroad depot and to reduce resource impacts in the entrance area.

### Park Operations:

- The proposal for a canoe concession on Wonder Lake has been removed.
- Guided hiking by the two Kantishna limited concessions permit holders would be allowed in designated areas along the park road west of mile 84, the Wonder Lake campground access road, and the McKinley Bar trail. These guided activities would be available only for overnight guests of the two permit holders. A maximum of two permits would therefore be available for guided hiking. These restrictions would not apply to the historic operator in Kantishna.

An abbreviated final EIS has been prepared since modifications to the draft document did not include substantial changes to the alternatives or to the environmental analyses. This final EIS includes a new introduction to the document, the purpose of and need for the plan sections from the draft, the modified proposed action, and updates and factual corrections to the remaining sections of the draft document. Where applicable, all corrections and revisions to the draft DCP/EIS are noted by section, page number, column and paragraph in the errata sheets. The phrase “change to read” means that words have been added or deleted. Underlined text indicates text to be added (except in the case of lengthy additions), while strikeouts show deleted text. The word “replace” or “rewrite” means substitute new language for an existing sentence or paragraph.

This final document must be used as a companion document with the draft DCP/EIS, which contains the full text of the description of the proposed action and the alternatives, the affected environment section, the environmental analyses, and the appendixes.

The final document also includes a review and analysis of comments received (refer to the “Comments and Responses” section at the end of the document). All comment letters from government agencies and organizations are reproduced. Selected letters from businesses and individuals have also been reproduced, with remaining letters from businesses and individuals that contain substantive comments referenced by name under responses to similar issues. A comparable procedure was followed for testimony received during the public hearings: sample testimony is reproduced, and additional testimony containing substantive comments is referenced by name under responses to similar issues.

A record of decision on the final DCP/EIS will be issued 30 days after the document has been accepted by the Environmental Protection Agency and a notice of availability has been published in the *Federal Register*.

The shortened format for a final environmental impact statement is in accordance with the *Code of Federal Regulations*, title 40, part 1503.4. The “Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act” state that if changes in response to comments are minor and are confined to factual corrections or explanations of why comments do not warrant further agency response, then they may be written on errata sheets and attached to the draft statement instead of rewriting the draft statement. This has been done for the “Affected Environment” and “Environmental Consequences” sections and the appendixes of the draft document.

The regulations also allow substantive comments to be summarized when the response has been exceptionally voluminous. There were 262 comment letters received. In an effort to reduce paperwork, to streamline the planning process, and to reduce printing costs, most substantive comments from businesses and individuals have been summarized. The original comments are on file at the National Park Service Alaska Field Office in Anchorage, Alaska, and at headquarters at Denali National Park and Preserve.



## PURPOSE OF AND NEED FOR THE PLAN

### PURPOSE AND NEED

This *Development Concept Plan/Environmental Impact Statement* serves as a general management plan amendment for the entrance area and road corridor of Denali National Park and Preserve. This “frontcountry” consists primarily of the entrance area and a 300-foot-wide corridor with wider development nodes along the park road that extends approximately 90 miles to Kantishna. The frontcountry includes facilities such as the visitor access center, airstrips, a hotel, employee housing, maintenance facilities, trails, campgrounds, gravel source sites, administrative facilities, and utilities. The entrance area and the road corridor with development nodes form the current park development zone. The study area includes all nonwilderness areas along the Parks Highway, the entrance/headquarters areas, and the park road corridor to the Kantishna airstrip (see the Region and Existing Conditions maps).

Over the last 10 to 15 years the type and level of visitor use and administrative functions in the park have changed. This has increased the need for certain frontcountry visitor and administrative facilities and services while decreasing the need for others. Growth and changes in the area outside the park have increased the capability of the local community to provide services that were historically on park lands for purely practical reasons. These changes in visitor use and administrative functions are not adequately addressed in any existing planning documents for the frontcountry area.

The development concept plan provides specific direction for road management and specific development proposals to meet the current and future needs of individuals and commercial tour groups who visit the park. The environmental impact statement evaluates the impacts of the proposal and a range of alternatives. This document forms the basis for National Park

Service (NPS) decisions on management of the frontcountry of Denali National Park and Preserve and has been prepared according to the National Environmental Policy Act of 1969 and regulations of the Council of Environmental Quality (90 CFR 1508.9).

### BACKGROUND

#### Park Purpose

Denali National Park and Preserve is a vast area that provides visitors of all abilities with opportunities for superlative, inspirational experiences in keeping with its legislative mandates. Over the long term, preservation of the wilderness and its continually evolving natural processes is essential to providing the opportunity for outstanding resource-based visitor experiences.

In 1917 Congress established Mount McKinley National Park to “set apart as a public park for the benefit and enjoyment of the people . . . for recreation purposes by the public and for the preservation of animals, birds, and fish and for the preservation of the natural curiosities and scenic beauties thereof . . . said park shall be, and is hereby established as a game refuge” (39 Stat. 938).

In 1980 Congress passed the Alaska National Interest Lands Conservation Act (ANILCA) and enlarged the park. Section 101 describes the broad purposes of the new and enlarged national parks and preserves. These include the following:

- Preserve lands and waters for the benefit, use, education, and inspiration of present and future generations.
- Preserve unrivaled scenic and geological values associated with natural landscapes.

Region map



Existing Conditions map

back of map

- Maintain sound populations of, and habitat for, wildlife species.
- Preserve extensive, unaltered ecosystems in their natural state.
- Protect resources related to subsistence needs.
- Protect historic and archeological sites.
- Preserve wilderness resource values and related recreational opportunities.
- Maintain opportunities for scientific research in undisturbed ecosystems.
- Provide the opportunity for rural residents to engage in a subsistence way of life.

Congress renamed and enlarged Denali National Park and Preserve under ANILCA, section 202, to be managed for the following purposes, among others:

- To protect and interpret the entire mountain massif and the additional scenic mountain peaks and formations.
- To protect habitat for, and populations of fish and wildlife including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans, and other waterfowl.
- To provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities.

The purpose of Denali is also tied to the traditions of the other parks and preserves added to the system through ANILCA. The park includes several administrative subsets with different legislative histories and legal mandates (original national park, national park additions, national preserve, and designated and proposed wilderness). It is a place where special uses

related to subsistence and a frontier-type way of life continue, subject to regulation to ensure they do not jeopardize the integrity of park resources.

The park's administrative history also clarifies the park purpose. The park's origins are loosely linked to the "old-line," large, western parks established during the first two decades of this century. Because of its early designation within the national park system, Denali has evolved to become one of the most well-established national parks. Outstanding natural resources and accessible wilderness have resulted in Denali becoming the most heavily visited of the national parks in Alaska. Still, development and use have been limited because of the park's remote location (compared with the lower 48 states) and by park plans and management decisions aimed at achieving its legislative purposes.

Denali's legislative mandates and administrative history places the park toward one end of that spectrum with parks that can be characterized as wild, rustic, and expansive. Denali rests somewhere between the extremely remote, lightly used Alaskan national park units and the large, wilderness parks of the lower 48 states that are highly accessible and more developed. This blend of largely pristine conditions and an intense focus for use and access in a relatively small but critical portion of the park, coupled with the unique provisions of ANILCA, creates unusual management challenges and is often the core of most controversial issues.

### **Park Significance**

**International Significance.** Denali National Park and Preserve is a park of international significance. The United Nations proclaimed it a biosphere reserve under its Man and the Biosphere program, significant for its potential for subarctic ecosystems research.

**Large Protected Area.** The vast protected area of Denali, more than 6 million acres or about the size of the state of Vermont, enables a spectacular array of flora and fauna to live together in a healthy natural system, more than 2 million acres of which has been in a protected status since 1917. This is the largest continuously protected area in the world. The park offers excellent opportunities to study large area natural systems in settings that are primarily undisturbed by humans.

**Mountains.** The park contains a major portion of the Alaska Range, which is one of the great mountain uplifts in North America. The Denali fault is North America's largest crustal break. The Alaskan Range is dominated by North America's highest peak, Mount McKinley, with its summit at 20,320 feet above sea level. Towering 18,000 feet above the adjacent lowlands, the mountain's dramatic vertical relief rivals any other mountain range in the world, and it exceeds the vertical relief of Mount Everest.

**Glaciers.** The park contains a number of large, active glaciers and major glacier-fed rivers and streams. Its glaciers are some of the longest in North America, up to 45 miles long and 4 miles wide.

**Wildlife.** The park was originally established in 1917 as a refuge for large mammals. Dall sheep, caribou, wolves, grizzly bear, moose, and fox are often observed in the park, especially along the park road on the north side of the Alaska Range. While populations fluctuate, nowhere else in America can such concentrations of these large species of wildlife be observed in a natural setting in so readily accessible a place. The park is also significant for its waterfowl habitat.

**Plant Life.** Denali contains outstanding examples of subarctic plant communities. Only plants that have adapted to long, bitterly cold winters can survive in the various plant communities in the park. Even with these extreme conditions, more than 650 species of flowering plants inhabit the slopes and valleys of the park. Denali offers extensive

opportunities to observe tundra plant life in a natural setting.

**Air Quality and Scenic Resources.** The exceptional air quality in Alaska and the lack of city lights near the park provide the conditions for outstanding daytime views and excellent night sky visibility in fall and winter. On a clear day, Mount McKinley can be seen from Anchorage, more than 130 air miles to the south. Denali National Park and Preserve is a designated class I airshed. Outstanding views of natural features, including mountains, glaciers, faulting, and other geological processes dominate the park landscape.

**Cultural Resources.** There are more than 180 known cultural sites and complexes within Denali's boundaries, many of which are listed on the National Register of Historic Places. Because cultural resource inventories have been limited to date, this number most likely represents a fraction of the total sites contained in the park. Known resources include archeological and historic sites associated with Athabascan Indian groups, early explorers, mining history, and the early days of the park. Major prehistoric sites in the park include the Teklanika Archeological District, a property listed on the national register. Many historic structures are found in the park headquarters area (a national historic district), along the main park road, and on the boundaries of the Denali Wilderness (along the original park boundary). These are mainly patrol cabins and other structures dating back to early years of park management, mines, and related mining structures. Historic mining activity dates back to the early 1900s in the Kantishna Hills (which includes the Kantishna Historic District), the Stampede area, and the Dunkle Hills near Cantwell.

**Access and Tourism.** A convergence of factors puts Denali among the most popular visitor destinations in Alaska, and makes it a symbol of what Alaska offers. The Alaska Railroad links the park with Anchorage, Fairbanks, and the ports of Whittier and Seward, a direct access route that is available to only two national parks in Alaska (Denali and Kenai Fjords). The railroad also links Denali to major international package tours that carry visitors by ship, bus, rail, and air in a route generally running from Seattle, through interior Alaska, and back. The George Parks Highway roughly parallels the railroad, and provides similar access for both out-of-state visitors and Alaska residents. Most visitors to Denali want to travel all or part of the 90-mile road into the heart of the park. The mountain, wildlife viewing, and park road experience are broadly marketed as a “must do” adventure. The park road is, therefore, a significant visitor use resource, offering an experience distinctively different from that found in typical national parks in the lower 48. It offers a unique bus trip that is rustic and that transports people through a narrow corridor into the wilderness, containing prime wildlife viewing areas unlike any other.

**Mountaineering.** Because it is the highest peak in North America, has a high northern latitude location, and is relatively accessible, Mount McKinley is considered one of the world's premier mountaineering destinations, drawing climbers from all over the world. It is touted as one of the “seven summits of the world.” Many other peaks in the park, including Mount Foraker, also offer outstanding climbing opportunities.

**Wilderness Recreation Opportunities.** Denali offers superlative opportunities for primitive wilderness recreation. Outstanding cross-country hiking, backcountry camping, and winter touring possibilities are available for one willing to approach the area in its natural condition. This huge park contains large areas with almost no trails where evidence of human use is minimal to nonexistent. These conditions are in contrast to most lower 48 wilderness

areas where maintained trails, designated campsites, footbridges, and signs are standard.

### **History of Planning in the Denali Entrance Area and Road Corridor**

During the past 30 years, Denali National Park and Preserve has had a complex, controversial planning history. In three decades it has gone from a lightly visited, “old-line” railroad park to a prime international visitor destination. Denali’s planning history includes master plans in 1965 and 1973, a general management plan in 1986, and several development concept plans or amendments to those plans during the last 15 years. Each plan tried to offer an orderly vision of how the park would meet needs in a society that held rapidly changing and often contradictory expectations of what national parks should offer.

Since 1965 the park has tripled in size and seen the arrival of highway access, neighboring Native corporation landowners, selection by the state of Statehood Act entitlement lands, development of Alaska as an international visitor destination, and more than doubling of the state’s population. The following is a chronological list of completed planning efforts and studies concerning the frontcountry of the park.

**Environmental Assessment on the Park Road Rehabilitation Program (NPS 1982).** This document evaluated a plan to rehabilitate deteriorated sections of the park road within five years, upgrade maintenance levels along the whole road, and identify gravel pits to support those operations. Some authorized borrow sources of gravel were found to have poor quality material, and maintenance activities exhausted the better authorized sources partially by working on projects unanticipated in the environmental assessment.

**Development Concept Plan/Environmental Assessment for the Park Road Corridor (NPS 1983).** This plan presented alternatives for upgrades of visitor and management facilities in the entrance area and along the park road corridor. In addition to the increasing visitation resulting from completion of the George Parks Highway and the attention Denali was getting from the package tour industry, a new 20-year concessions contract was signed in 1981. The contract promised a new bus maintenance facility, a new concession's employee dining facility, a 270-seat auditorium, and other concessions operation changes. The passage of ANILCA 18 months earlier had also allowed funding for a number of long-awaited improvements to become available. A long list of proposed projects was approved, including a decision to build a visitor orientation center at the present visitor access center site. A decision was made to renovate the existing park hotel, a collection of railroad cars and modular units assembled on site after the September 1972 fire that destroyed most of the original building.

**General Management Plan/Land Protection Plan/Wilderness Suitability Review (NPS 1986).** This plan provides comprehensive guidance for all aspects of park management. It creates park zones, identifies resource management needs, summarizes interpretive objectives and the desired visitor experience, identifies incompatible uses on inholdings, and determines the need and general locations for park development. The general management plan is still largely up-to-date. Major concepts in the plan confirm the use of a limited access transportation system for the park road, set a goal to reduce private vehicular traffic, establish a maximum limit on vehicles, enact a "no formal trails" policy for the wilderness units, and create an objective to allow as many people as possible to view wildlife in the park.

The plan generally adopted the development proposals of the preferred alternative in the 1983 development concept plan, although it did remove some roadside trails and campground expansion from the previous plan. The general management plan remained consistent with the

previous plan in not advocating any overnight accommodations in the Wonder Lake area other than the campground. A proposal was accepted to prevent additional lodging in Kantishna, and evaluation of alternatives for the park hotel was reserved for a public process in 1987.

**Addendum to the 1983 Development Concept Plan/Environmental Assessment for the Park Road Corridor (NPS 1987a).** This addendum proposed a new park hotel near the existing site within an "activity center" concept. Many structures and functions, such as visitor center, general store, post office, activity expeditors, and sled dog demonstrations were to be given space surrounding the hotel. All tour and shuttle bus operations would be consolidated in the existing tour bus barn area behind the hotel.

**Environmental Assessment for the Visitor Access Center - Use of Unconsolidated Materials Plan (NPS 1987b).** One of the pieces of the entrance area puzzle left unevaluated was the source of the 40,000 cubic yards of borrow (gravel) material estimated to be necessary to build the visitor center and associated parking lot. This environmental assessment was published to explore this question. A decision was made to procure gravel from outside the park. That resulted in a gravel pit and crusher operation being established within the Village View community. Future gravel acquisition required increased community participation.

**Environmental Assessment for the Repair of the Denali Park Road and Associated Visitor Use Areas from Park Entrance to Savage River Bridge (NPS 1988a).** This environmental assessment evaluated repairing subgrade problems and repaving the first 15 miles of the park road (first paved in 1968), constructing an entrance feature and pullout, creating a parking area for bus parking near the kennels, and paving such areas as the new visitor center parking lot, park headquarters parking area, and the auto shop access road.

**Newsletter #1 (NPS 1990a).** This newsletter announced location changes for facilities proposed in the 1983 development concept plan

and 1987 addendum. The shuttle bus operations and maintenance were proposed for relocation to the sewage treatment lagoons area. The post office, general store and other camper conveniences were to be located near a new hostel close to a new loop in the Riley Creek. Provisions of the general management plan instituted through this process included removing private vehicle access to Sanctuary Campground and from Teklanika Campground, except for minimum three-night stays. The Savage River check station was to move from the Savage Campground to the Savage River. The newsletter process also originated the idea of a lottery to select the private vehicles allowed past Savage River during the September park road opening. The concessioner was authorized to begin a new tour, the Denali natural history tour, to mile 17.5 on the park road.

**Draft Amendment to the 1983 Development Concept Plan/Environmental Assessment for the Park Road Corridor and 1987**

**Addendum for Riley Creek (NPS 1992a).** A fiscal year 1992 congressional appropriation of \$7 million for site work and utilities in the hotel area led to this amendment that changed the layout of facilities in the entrance area. A visitor center would still be attached to the hotel auditorium, but an administrative wing to house park headquarters would also be attached to the auditorium. A new concessioner's employee dining facility was to be built, but no site was finalized for shuttle bus driver housing.

**Quick Reaction Audit Report on the Proposed Replacement of the Denali National Park Hotel (USDI 1992).** Reacting to citizen complaints about the high cost of the proposed new park hotel, the Inspector General office of the Department of the Interior issued this audit in September 1992. The audit found that the proposed \$39 million hotel was not needed because sufficient accommodations were available immediately outside the park boundary and that the hotel was not justified because the construction cost per square foot would be 325% higher than the standard for hotels outside the park entrance. This report halted spending on site work, utility upgrades,

campground. Shuttle drivers were to be provided housing at C-Camp. Other campground changes were also proposed but not adopted.

and changes for visitor facilities in the entrance area.

**Borrow Source Inventory (NPS 1988b) and Environmental Assessment for a Gravel Acquisition Plan (NPS 1992b).** Maintenance of the gravel section of the park road was limited after 1985 due to closure of most of the gravel sources within the park. Potential borrow areas were investigated in 1988 and the criteria for selecting sources were set in 1992. The proposal identified two borrow sources along the Denali park road corridor and keyed development to long-term road maintenance needs.

Approximately 7,500 cubic yards of gravel per year would be available for removal from the Toklat River floodplain near the Toklat road camp. One hundred thousand cubic yards of material would be available from an expanded Teklanika pit with a 30-year life expectancy. The plan did not include provisions for individual road repair and rehabilitation.

**Road System Evaluation (NPS 1994a).** To help conduct a prioritized road repair and maintenance program, a study was begun in 1986 by the Federal Highway Administration and was completed by the National Park Service in 1994. This study evaluated the condition of the park road, summarized statements on road character, and proposed treatment alternatives ranging from status quo to creating a road of uniform width and improved condition. Decisions regarding changes to road maintenance and rehabilitation were left to the present document.

**Environmental Assessment on the Proposed Construction of Visitor Transportation System Facilities (NPS 1994b).** A decision was made to contract the operation of the shuttle bus system to the concessioner and allow them to set a fee schedule so the system would pay for itself. Pursuant to a June 1994 amendment to the

1981 concession contract, an environmental assessment was prepared to evaluate the siting of facilities needed to house the shuttle maintenance and operations in the park. The proposal included a 4-acre parking lot, doubling the size of the bus maintenance facility, a 24-room employee dormitory, a new employee **Denali National Park and Preserve Statement for Management (NPS 1995a)**. The statement for management provides an overview of the park's condition, a refined park vision, and an analysis of major management issues. It is a comprehensive strategy for the park, identifying critical steps needed to manage the area for the next two to four years. The statement for management does not prescribe specific solutions to significant resource protection, visitor use management, or facility development problems. It specifies potential plans and actions needed and indicates cases in which environmental compliance is necessary before implementation.

**Environmental Assessment on the Proposed Reconfiguration of the Historic Sled Dog Kennels (NPS 1995b)**. This document evaluated modifications to the dog kennels. Visitor safety was enhanced by clustering the dogs on one side of the kennels building, and visitor circulation around the dogs was also improved. Awaiting completion is an inclined viewing area east of the kennels building.

## MANAGEMENT OBJECTIVES

### General Vision

The general vision for the frontcountry of Denali National Park and Preserve is for an area that, 15–20 years from now, still offers the nation's premier opportunities to observe large wildlife species and the highest peak in North America in a primitive, natural setting. The frontcountry area services and facilities would allow as many visitors as possible to view and experience these resources without degrading the resources or the premier visitor experience. The park's main entrance area would offer greater opportunities for more diverse visitor

dining facility, a new leachfield for shoulder season operations, moving the recreation courts, and expanding the road network. By terms of the contract amendment, this work was to be completed by September 1996.

activities than at present. Visitors of all ages would have access to Denali and feel at the end of their stay that they truly experienced one of the finest national parks in the world. Transportation in the park would be provided on safe, comfortable vehicles that provide efficient movement through the area, an outstanding interpretive experience, and convenient connections to nearby service facilities. Existing temporary and substandard facilities would be gone and, in their place, well-designed, permanent facilities would enhance the visitor experience and help protect park resources. Visitors would also have a greater understanding of the cultural resource values of Denali.

### Specific Management Objectives

- Provide a range of opportunities for park visitors consistent with park purposes.
- Determine whether visitor use in the entrance area and along the park road can be increased while improving resource protection and the quality of the visitor experience.
- Provide the type, number, and location of facilities and necessary infrastructure to adequately serve park visitor and administrative needs.
- Provide visitor and administrative facilities that are necessary and appropriate for user enjoyment and effective park management.
- Identify resource protection needs in the entrance area and along the road corridor. Integrate resource protection programs with all new development and operational changes, and execute mitigation measures required to implement the plan fully.



- Implement proposals that are consistent with the visitor experience and resource protection goals outlined in the 1986 *General Management Plan* and considering the 1994 Denali Task Force recommendations. Retain existing limits for the road corridor beyond the Savage River.
- Provide a comprehensive transportation system management program considering the necessary modes of transportation within the park and coordinating with external transportation systems.
- Provide a variety in length and type of bus tour opportunities.
- Undertake maintenance and safety improvements that maintain the park road and its future reliability.
- Provide adequate maintenance support facilities, administrative offices, and housing.

## **NATIONAL ENVIRONMENTAL POLICY ACT PROCESS**

The National Environmental Policy Act is a national charter for the protection of the environment. It applies to all federal projects or projects that require federal involvement. The purpose of the National Environmental Policy Act is to help public officials make decisions that are based on an objective understanding of environmental consequences and to take actions that protect, restore, and enhance the environment. To ensure compliance with the National Environmental Policy Act, a specified process for proposed projects must be followed. The steps in this process are presented below.

### **Scoping**

Scoping is designed to be an early, open, public process for determining the scope and

- Provide public environmental education opportunities with facilities that are aesthetically pleasing and environmentally sustainable.
- Provide appropriate balance in level, type, and location of overnight accommodations and associated visitor services inside and outside the park.

significance of issues to be addressed in an environmental document for a proposed action. The scoping process for this development concept plan/environmental impact statement was initiated on July 20, 1995, with publication of the *Notice of Intent* to prepare an environmental impact statement in the *Federal Register* (60 FR 37470). Subsequent scoping efforts included distribution of a newsletter to the public and public agencies soliciting input regarding issues and concerns about the proposed action. Scoping for the entrance area and road corridor development concept plan included open houses held at Fairbanks, Denali National Park, Cantwell, Talkeetna/Trapper Creek, Wasilla, and Anchorage during the last week of August 1995. Scoping concluded with a public meeting in Healy, Alaska, in October 1995. Written public comments were accepted through November 22, 1995. Additional details about the scoping process are contained in the following “Issues and Impact Topics” section and in the “Consultation and Coordination” section.

### **Draft Environmental Impact Statement**

An environmental impact statement is a document that evaluates all the important environmental and social/economic impacts that may result from a proposed action. It should include a full and fair discussion of significant environmental impacts and inform decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or that would enhance the quality of the human environment.

## **Public Comment on the Draft Environmental Impact Statement**

The draft environmental impact statement was released to the public on June 21, 1996, with a 60-day public comment period extending through August 19, 1996. Public meetings were conducted in the Alaskan communities of Anchorage, Talkeetna/Trapper Creek, Healy, Fairbanks, Cantwell, and Denali Park. Specific dates and locations for public hearings were This final DCP/EIS includes review and analysis of public comments received. Changes to the draft document are outlined along with the responses to public comments. An abbreviated final EIS has been prepared because modifications to the draft document did not include substantial changes to the alternatives or to the environmental analyses.

At least 30 days after publication of this final environmental impact statement, a decision would be made and documented in a record of decision. The record of decision for this final document will be signed by the Alaska Field Director, National Park Service. The record of decision is anticipated in February 1997.

In instances where resource conditions may have changed or more detailed site design is required, the National Park Service would ensure that the necessary level of impact assessment has been completed prior to implementing any actions identified in the record of decision. This may include preparation of project-specific environmental assessments tiered from this EIS, obtaining additional clearances and permits from regulatory agencies, or development of further mitigation strategies. Environmental assessments and other clearances and permits that may be required to fully implement the proposed action are identified in the "Consultation and Coordination" section of this document.

## **ISSUES AND IMPACT TOPICS**

The issues and impact topics identified during the scoping process, together with local, state,

announced in the *Federal Register* and in area newspapers (see the "Consultation and Coordination" section). All verbal and written comments received were considered in revising the draft document.

## **Final Environmental Impact Statement and Record of Decision**

and federal laws, orders, regulations, and policies, form the basis for the alternatives and environmental analysis in this document. A brief rationale is presented for each issue and topic. Issues and topics considered but not addressed in this document are also identified and discussed.

## **Planning Issues Considered in Developing the Alternatives**

### Visitor Services

Accommodations (food, lodging, and camping):

- The level and type of overnight accommodations necessary and appropriate inside the park should be determined.
- The demand for camping in the park is greater than can be accommodated with existing facilities.
- Camping occurs in pullouts along the Parks Highway that are not designed for that type of use.
- Services such as a convenience store and showers are critical to campers traveling via public transportation.

Information (visitor centers, museums, and wayside exhibits):

- The need for and potential location of visitor center(s), museum(s), auditorium(s), and wayside exhibits to provide for both visitor orientation and visitor information and education should be determined.

#### Surface Transportation and Bus Tours:

- The appropriate level and type of parking areas in the frontcountry should be determined.
- Existing transportation systems inside the park do not coordinate well with external systems.
- Visitor dependence on private vehicles should be reduced and facilities and transportation systems must be fully accessible.

#### Bicycle Use:

- Opportunities for bicycle use within the frontcountry and road corridor should be evaluated.

#### Rest Areas and Picnic Areas:

- Rest areas and picnic areas in the entrance area and along the road corridor are inadequate to serve current and projected future needs.

#### Other Concessions Operations, Commercial Uses, and Special Uses

- Boating use on the Nenana River is increasing, and there may be some demand for additional river access.
- The appropriate level of other concessions operations and commercial services/facilities, including dog sled trips, public use cabins, day trips to Kantishna, and merchandising services, should be determined.

#### Roads and Trails

- Annual maintenance levels are not sufficient to prevent long-term degradation of the Denali park road. Dust is a continuing problem along the park road.
- The visitor experience along the park road to Kantishna needs improvement; people should be encouraged to get out of buses and have direct contact with the park.

- Different length bus tour opportunities should be evaluated.
- Safety problems result from the current location of the railroad in the visitor use area.
- Train station location and design result in parking problems and traffic congestion.
- The appropriate trail network for the entrance area and the road corridor should be determined. There is not a clear connection to external networks and accessibility for special populations is very limited.
- Increased uses of the park road that were not anticipated in the 1986 *General Management Plan* threaten the integrity of the road, result in increased maintenance costs, and jeopardize user safety.

#### Employee Housing

- The appropriate type and location of NPS, ANHA, and concessioner housing throughout the park should be determined.
- The level of community services that should be provided for employees living inside the park should be determined.

#### Administrative/Support Facilities

- Office, storage, and shop space is inadequate and restricts operational efficiency. Adaptive use of structures also results in deterioration of historic buildings.
- Collection of entrance fees could be more effective, and the appropriate type and location of an entrance station and check station has not been determined.
- The appropriate location for and need for expansion of the Denali National Park Post Office should be determined.

- The entrance area does not have adequate structural fire protection.

#### Utility Systems (Electrical, Water, Sewer)

- Utility systems are inadequate to meet current demand and projected future needs.
- The existing entrance area dump station is inadequate to meet current demand and

#### **Impact Issues and Topics Considered in this Document**

##### **Potential Effects on Air and Water Quality.**

Construction activities and visitor-use could affect air and water quality. Also of concern are the effects of road dust and vehicle exhaust on visitors. Since this plan does not propose detailed design specifications for facilities but instead proposes a general direction for visitor development, a general analysis of both topics is provided.

##### **Potential Effects on Floodplains and**

**Wetlands.** Gravel extraction and construction of new facilities could affect floodplains and wetlands. Proposed actions are evaluated with respect to the NPS policy of preserving floodplain and wetland values, minimizing potentially hazardous conditions associated with flooding, and adhering to all federal laws and regulations related to activities in floodplains and wetlands.

**Potential Effects on Fish.** Fish resources exist in lakes, rivers, and creeks in the frontcountry. Impacts on fish from proposed facilities, structures, and road improvements along with increased visitor use are examined.

##### **Potential Effects on Vegetation and Wildlife.**

The potential exists for proposed facilities to adversely affect vegetation and wildlife. Plant communities are the basic foundation of ecosystems. They also provide habitat and forage for wildlife and are therefore indirectly related to wildlife well-being and abundance.

projected future needs. Traffic flow in this area is a problem.

#### Airstrips

- The existing McKinley Park airstrip may be inadequate for current demand and projected future needs. Its location in a primary visitor use area presents safety problems.

Many proposed actions such as the construction of buildings and trails would directly affect vegetation communities. Informal trails in certain high use areas along the park road corridor may cause resource damage. Such impacts are of particular concern given the slow recovery of vegetation and low production of annual biomass in subarctic plant communities.

Both large and small mammals could potentially be affected by proposed development, road maintenance and use, and visitor activities. Concerns include habitat loss as well as maintaining genetic diversity and minimizing human influences on wildlife behavior and habitat use. Specific species of concern include moose, caribou, Dall sheep, wolf, and grizzly bear.

**Potential Effects on Wilderness.** Effects on wilderness could occur from visitor use along the road corridor and at development nodes. Except for some trail construction, development of new visitor and support facilities would occur outside the wilderness boundary and would be concentrated in areas of existing development, primarily near the park entrance.

##### **Potential Effects on Cultural Resources.**

Physical developments or increased use by hikers and sightseers could disturb historic and/or archeological resources. Overcrowded conditions and modifications made for increased administrative and visitor use of historic buildings have caused incremental changes in the headquarters district.

Section 106 of the National Historic Preservation Act, as amended, requires every

federal agency to take into account how each of its undertakings could affect historic (and prehistoric) properties. Undertakings include construction, rehabilitation and repair projects, demolition, loans, loan guarantees, grants, transfer of federal property, licenses, permits, and other types of federal involvement. All federal projects are subject to section 106 review as outlined in 36 CFR 800.

**Potential Effects on Transportation and**

**Access.** Facility siting and development in the frontcountry would affect existing traffic flow and visitor movement. Since the plan's objectives include providing an efficient park visitor transportation system, better integration with external transportation systems that extend beyond the park, and improving access to the park wilderness experience, this topic is included for discussion.

**Potential Effects on Park Management.**

Denali National Park and Preserve is managed to provide outstanding visitor experiences while protecting unique resources. Providing a range of visitor services in the entrance area and along the entire road corridor and monitoring resource conditions present continuing challenges for park management for many reasons, including the remote location and the subarctic environment. New development proposed for the entrance area and road corridor would change conditions for park operations and management.

**Potential Effects on the Socioeconomic**

**Environment.** NPS policy requires that the interests of nearby residents be considered in the planning and development of a national park. Concern was expressed over the possible negative effects on local communities near the Denali frontcountry. Frontcountry development is a concern to gateway communities from Cantwell to Healy since they derive economic benefits through providing goods and services to visitors.

**Impact Issues and Alternatives Considered but Not Addressed in this Document**

**Potential Effects on Existing Visitor Use and Experience.** New facilities could potentially affect existing visitor activities in the frontcountry. Since the principal purpose of frontcountry development would be to serve visitors, this topic is a critical element to analyze. Potential effects on visual resources are included in the discussion.

The following planning issues, impact topics, and alternatives will not be addressed further in this document. Reasons are provided for each issue/topic.

**Reevaluate park road traffic limits in 1986**

**General Management Plan and controlled**

**access transportation system** — The road traffic limits established in the 1986 plan were set to protect wildlife and the visitor experience along the road corridor. Results of recent resource monitoring support continuing these limits.

The Denali Visitor Transportation System was established more than 20 years ago, and the policy of a mandatory transportation system is considered highly successful. While the system has reached capacity during the peak season in recent years, additional traffic capacity remains outside of the busiest weeks of midsummer. Improvements to the reservation system are expected to increase system efficiency and allow more visitors to experience the park interior. Visitor comments have been very supportive of the controlled access concept.

**Establish a new northern transportation**

**route to Kantishna** — The National Park

Service formed a working group in the fall of 1995 to do a preliminary evaluation of current proposals for a new northern access route into the park and to determine if further study is warranted. The working group is scheduled to complete its evaluation by the spring of 1997. This issue will not be evaluated in this development concept plan/environmental impact statement.

**Construct overnight accommodations at or near Wonder Lake** — This proposal was not considered because it is inconsistent with the expected visitor experience and with resource protection in the Wonder Lake area. The National Park Service rejected hotel development and other major developments in the 1973 *Master Plan* and the 1986 *General Management Plan*. The visitor experience in the Wonder Lake area is based on its current undeveloped condition.

**Move visitor transportation system parking outside park** — This alternative was considered in the 1994 environmental assessment on the proposed construction of VTS facilities (NPS 1994a). It was determined that the most efficient means of providing visitor access is to consolidate transportation functions inside the park entrance. These functions cannot be provided at a central location close enough on private or other land outside the park. Available locations would be too far from the park road to maintain basic efficiency and convenience of the transportation system.

**Phase out all development inside the park** — The need exists for the provision of basic visitor services inside the park, and the National Park Service provides those services. The private sector does not provide and cannot be expected to provide these services. Basic services include visitor orientation and in-park transportation, both of which are most efficiently provided inside the park. Park campgrounds provide a unique experience and a true “edge of wilderness” feel not readily available and accessible outside the park. All these services help make an enjoyable, inspirational visitor experience possible.

**Provide more visitor services during winter in the entrance area and keep the park road open to the Savage River** — Providing more winter services was not considered because the cost of services for a small number of winter visitors would be far greater than providing activities for the hundreds of thousands of summer visitors. The cost of maintaining the park road and facilities during the winter would

**Include a detailed development concept plan for the Kantishna Hills area in this document** — Some recommendations for the Kantishna area are included in this plan; however, the Kantishna area development concept will be considered in another planning process since land acquisition is not yet resolved.

be prohibitive. However, proposed new interpretive facilities in the entrance area would be designed to allow for the possible year-round use of parts of these structures.

**Allow more commercial operations such as dog sled trips during winter** — This proposal was not included among the alternatives for the same reason as the other winter services mentioned above. Kantishna-based winter activities were also reviewed. The 1994 Denali Task Force Report recommended that the National Park Service maintain approximately the current level of commercial use in the Kantishna area, and the Park Service has proposed to implement this recommendation.

**Develop public use cabins in the frontcountry** — Public use cabins would conflict with existing visitor uses in the frontcountry of Denali National Park. Developing additional campgrounds, trails, and backcountry campsites allows more people access to a resource-based experience, more effectively meeting the overall plan objectives.

**Remove Eielson Visitor Center and ANHA sales at that location; replace with a comfort station and picnic shelter** — Eielson Visitor Center is a destination for the majority of visitors who use the visitor transportation system and is an effective means of providing visitor information, interpretation, shelter, and a turnaround point for VTS buses. Since Eielson Visitor Center serves a variety of functions that could not be provided if facilities were limited to a comfort station and picnic shelter, this proposal was not incorporated into any of the alternatives.

**Exchange land in the Nenana River**

**corridor** — Proposed land exchanges are beyond the scope of the entrance area and road corridor development concept plan and are not evaluated in this document. Additional information on wildlife and wildlife migration patterns in the Nenana River corridor would be necessary for the National Park Service to make a determination on proposed land exchanges. This information is not currently available.

**Address effects on minority populations and low-income populations** — Executive Order 12898 requires federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This development concept plan would not result in significant direct or indirect negative adverse effects on any minority or low-income populations or communities. Effects on the socioeconomic environment would be short term, positive, and occur primarily within the geographic area near the park entrance and the nearby community of Healy.

**Address effects on threatened and**

**endangered species** — The American peregrine falcon is the only endangered species that may occur in the study area. No nesting sites for this species are known to occur within the project area; however, it may migrate through the area. None of the alternatives would adversely affect individuals or populations of threatened or endangered species, and adverse impacts on federal or state species of special concern are not anticipated. This determination is based on the small amount of acreage to be affected by either construction or visitor use activities, the abundance of

**Address development in the Cantwell and**

**Broad Pass areas** — The Cantwell and Broad Pass areas are addressed in the *Revised Draft Development Concept Plan/Environmental Impact Statement, South Side, Denali National Park and Preserve* (NPS 1996a), and are therefore not included in the study area for the entrance area and road corridor.

undisturbed habitat near these sites, and the mitigation measures to be employed to ensure that there are no adverse impacts on wildlife or plant species. The NPS informal consultations with the U.S. Fish and Wildlife Service according to section 7 of the Endangered Species Act are documented in appendix F.

**Address effects on subsistence** — Subsistence uses are not allowed in the Denali frontcountry (36 CFR 13.41). Proposed developments would therefore not affect subsistence resources or uses. Section 810 of ANILCA and NPS policy require that proposed actions within Alaska national parks address their potential to affect the area's legally permitted subsistence users. A section 810 subsistence statement has been prepared in conjunction with the environmental impact statement (see appendix A).





## PROPOSED ACTION (ALTERNATIVE D): EMPHASIZE TRADITIONAL NPS PROGRAMS

### INTRODUCTION

The final DCP/EIS includes five alternatives for providing for visitor use and resource protection and related facility development in the entrance area and road corridor (or frontcountry) of Denali National Park and Preserve. The frontcountry includes all nonwilderness areas along the Parks Highway, the entrance/headquarters area, and the park road corridor to the Kantishna airstrip. The five alternatives include a no-action alternative and four action alternatives. The proposed action (alternative D) is based on the recommendations of the Denali Task Force, a committee formed at the request of the secretary of the interior in 1994, on proposals received during public scoping, on previous plans, and on planning team work and impact analysis. The proposed action has been modified from the draft EIS based on public comments received. Certain elements of alternatives C and E have been added.

The proposed action would amend the 1986 *General Management Plan*. A complete list of proposed changes to that plan is provided in appendix B.

Facilities and services considered in the proposed action include visitor accommodations, campgrounds, camper conveniences, interpretive facilities, transportation, parking, bus tours, bicycle use, rest and picnic areas, concessions, road maintenance, trails, employee housing, administrative and support facilities, airstrips, and utility systems.

Detailed descriptions of the alternatives other than the proposed action can be found in the draft DCP/EIS. Table 4 of the draft contains a summary of the proposed action and alternatives, and table 5 contains a summary of the environmental consequences of each alternative. Elements common to all alternatives

### VISITOR USE

were also presented in the draft DCP/EIS, and are included with the following description of the proposed action. The text of these common elements is shown in italics.

### GENERAL PLANNING CONCEPTS

- *Continue cooperative regional planning with state of Alaska agencies, the Denali Borough, Native corporations and groups, the Denali Foundation, Alaska Natural History Association, and the public.*
- *Meet the guidelines in ANILCA Title XIII, sections 1306 and 1307 regarding working with Native corporations to implement proposals for administrative and visitor facilities and services.*

The emphasis of the proposed action would be to provide visitor facilities and services in the frontcountry to meet a wide range of visitor needs and interests. Frontcountry developments would be limited to actions in which the National Park Service has traditionally specialized, such as interpretive centers, environmental education opportunities, trails, resource protection programs, and campgrounds. Improved resource protection would be integrated with development actions throughout the frontcountry. The Park Service would encourage the private sector to develop visitor service facilities (accommodations, food service, and other commercial services) and housing and administrative facilities that the Park Service could lease or purchase outside the park.

Refer to the maps for Proposed Action – Entrance Area and Road Corridor; Proposed Action – Entrance Area; and Proposed Action – Park Headquarters/C-Camp.

- *Continue to emphasize access to a high quality wilderness experience for visitors of all ages and abilities.*

Under the proposed plan, facilities, programs, and services would be added to enhance the visitor experience throughout the park. The concept would be to significantly expand day use and camping opportunities in the frontcountry area along with improved resource protection.

Upon arrival at the park, visitors to Denali would encounter an entrance station, creating a sense that they are entering a special place. NPS personnel at the station would greet visitors, collect entrance fees, and provide basic directional information.

Visitors would discover a variety of facilities and services that meet the needs of varied audiences seeking different levels of experience with the park's resources. Existing visitor use opportunities would continue; but additional facilities, programs, and services would be available throughout the entrance area and road corridor. Orientation information at the proposed visitor services building and at the railroad depot would locate park facilities and services and indicate where to obtain additional information. Interpretive and environmental education opportunities would be enhanced by providing facilities offering in-depth interpretation of the park's themes for all visitors.

Interpretive program opportunities in the frontcountry would be expanded. New interpretive programs would include the Teklanika Archeological District, traditional use of the region by Alaska Natives, the Headquarters Historic District, and the Dry Creek Archeological District. Expanded interpretive opportunities including living history, a variety of exhibits, and interpretive programs involving sled dogs would be available at the Savage cabin. Formal sled dog demonstrations would still be provided at headquarters, with a rerouted trail and better viewing for visitors. Additional interpretive

services dealing with regional history would be available in both the Headquarters and Kantishna Historic Districts.

New public transportation from the entrance area to the proposed Savage River rest stop and trailheads would encourage visitors to leave their cars and to explore those parts of the park.

Opportunities for overnight lodging in the entrance area would be eliminated by removal of the Denali Park Hotel and would be available outside the park entrance. The National Park Service would encourage the establishment of small-scale, lower-cost lodging such as a hostel in the Kantishna area.

Additional opportunities for camping in the frontcountry would be provided. The Park Service proposes traditional tent camping, walk in, and backpacker experiences that it has generally provided and that are usually undersupplied by the private sector. Some additional camper services would also be provided in the entrance area, including groceries, fast food/deli service, showers, and laundry. Additional services would be provided by the private sector outside the park.

The Denali visitor transportation system shuttle, Denali natural history tour, and tundra wildlife tour would continue as the primary visitor access modes for most visitors to the park interior. Improvements to rest areas along the park road and expanded interpretive facilities and services, including a new Eielson Visitor Center, would significantly enhance the tours into the interior of the park.

Visitor opportunities along the first 15 miles of the park road would be enhanced. Trail construction, wider road shoulders, new picnic areas, and improvements to rest areas would provide additional opportunities for leisurely day use experiences viewing animals and landscapes.

Hiking opportunities would be increased and enhanced through more and better defined trails

in the entrance area and at certain locations  
along  
the park road corridor. Visitors could escape  
their

Proposed Action: Alternative D – Entrance Area and Road Corridor map

back of map

ties to mechanical transportation systems for brief encounters with the natural and cultural resources along many short trails, especially in the concentrated visitor use areas between the Nenana and Savage Rivers. Conditions and accessibility of existing trails would be upgraded and maintained. These trails would feature both natural and cultural resources along with splendid mountain scenery.

## ROAD MANAGEMENT

### Road Use

- *Retain annual allocation season limits (10,512) for total number of vehicles set in the 1986 General Management Plan. The annual allocation season would be defined as the Saturday before Memorial Day through the second Thursday after Labor Day.*
- *Continue to require operating plans containing tour objectives and detailed management strategies from the concessioner for both tour buses and the visitor transportation system.*
- *Continue to establish formal limits and guidelines for the visitor transportation system.*
- *Continue to require comprehensive training for all bus drivers, including those driving buses to Kantishna businesses.*
- *Keep bus parking and maintenance at the existing locations within the park with no further expansion beyond the limits defined in the 1994 Environmental Assessment on the Proposed Construction of Visitor Transportation System Facilities.*
- *Continue to define the bus transportation operating season as beginning approximately May 15, depending on weather and road conditions, and ending with road closure pending weather conditions in September.*

- *Retain the current daily limits on the tundra wildlife tour (30 buses per day).*
- *Implement regulations on rules of the road and oversized vehicles.*
- *Continue monitoring wildlife behavior, visitor satisfaction, and impacts from visitor use.*
- *Retain “Rules of the Road” that apply specifically to bicycles traveling west of the Savage River check station and provide this information at all visitor orientation points including the Savage River check station.*

**General Vehicles.** The National Park Service would implement the following actions:

#### Phase 1:

- Promulgate special regulations for management of the park road, establishing the GMP limit of 10,512 vehicles during the allocation season in regulation, setting formal “rules of the road,” and setting an allocation season limit for Kantishna business traffic.
- Complete the three-year study of wildlife behavior and visitor satisfaction initiated in 1996.
- Initiate reductions in professional photography vehicle permits and reallocate to the “annual bus” category on a trial basis. (See phase 2 for details of full implementation.)
- Set the shoulder season (approximately May 15–25 and September 15–closing) vehicle limits for the park road at existing numbers (a maximum limit of 20 buses per day) pending additional information on wildlife behavior and visitor satisfaction gathered during a study initiated in 1996.

- Retain existing allocation season limits for the visitor transportation system (3,394 buses) and the tundra wildlife tour (2,089 buses).
- Establish a daily limit of 20 buses for the Denali natural history tour and 30 buses for the tundra wildlife tour, and set the daily limit for the visitor transportation system at 36 based on data from 1990 to 1996.
- Retain Primrose pullout as the turnaround point for the Denali natural history tour. This tour would not count toward GMP traffic limits.
- Continue to work with the concessioner to improve overall operation and efficiency of the shuttle bus system.
- Designate a “no parking” zone at the north end of Wonder Lake from the ranger station to the former gravel pit approximately 1/4 mile north of the lake outlet.
- Retain the mid-September road lottery limit of 400 vehicles per day for each of the four days of operation.

Phase 2:

Upon adoption of formal regulations for management of the park road, the National Park Service would implement the following actions:

- Evaluate shoulder season limits based on additional information on wildlife behavior and visitor satisfaction gathered during the three-year study initiated in 1996. The length of the shoulder season would continue to depend upon weather conditions. Also based on study results and resource conditions, the daily limit for the Denali natural history tour would be reevaluated.
- Continue to evaluate daily limits for the tundra wildlife tour and the visitor transportation system based on information
- Expand courtesy shuttle service in the frontcountry to connect entrance area

gathered through continued research and monitoring.

- Reduce professional photography vehicle permits by 50%, consistent with direction in the 1986 GMP that “private vehicle traffic will be reduced by decreasing vehicle use by campers, professional photographers, NPS employees, and people traveling to Kantishna” (p. 15, 1986 GMP).
- Reallocate the additional vehicles (formerly professional photography vehicle permits) to a new “annual bus” category within the 10,512 seasonal allocation.
- Reallocate available permits as an annual operating decision to retain flexibility between bus systems. At least 400 buses would be available, with up to 150 more depending on the level of traffic in other categories of the overall 10,512-vehicle allocation, which would not be exceeded. This change would be phased in and would depend on study results and resource conditions for full implementation.
- Establish a daily limit of six buses for the new “annual bus” category.
- Adjust the remaining vehicle permits allocated to professional photographers to meet varying demand during the season, with more permits available during early and late summer than during the month of July.
- Continue to work with professional photographers to improve the efficiency and effectiveness of the permit system. Administrative changes such as peer review of permit applications, more stringent standards and enforcement, and implementing a system of reallocating permits when photographers either did not show up or left the park early could be made to improve the system.

facilities with businesses outside the park and to serve the Savage River campground

and trailheads (for proposed new trails) at minimal cost to visitors. This service could be phased in using the existing VTS buses initially and providing separate buses when needed.

Phase 3:

- Upon completion of repairs to the park road west of Eielson Visitor Center, replacement VTS buses for use on that section would be the same as VTS buses used on the remainder of the road.
- Continue monitoring wildlife behavior, visitor satisfaction, and impacts from visitor use. Future changes affecting traffic on the park road would be based on results of this long-term monitoring.

**Kantishna Traffic.** The following actions affecting traffic to Kantishna businesses would be implemented as part of phase 1. Limits for Kantishna business traffic to provide for adequate access to Kantishna businesses would be within the road traffic limits established by the 1986 *General Management Plan*. Building on the general concepts in the plan to establish more specific limits for Kantishna traffic would help ensure long-term protection of the current visitor experience and of wildlife populations along the road corridor. Kantishna businesses could continue using both the Kantishna airstrip and the visitor transportation system for guest access, and they could run buses and other vehicles on the park road subject to the limits listed below.

Overall limits for Kantishna business traffic would be based on current use levels (1994–96 seasons). New limits would allow for some additional expansion as long as the businesses continued current patterns of transporting guests to and from Kantishna. The following limits for the total number of round trips of any type for the allocation season would be phased in over the next three years.

- Denali Backcountry Lodge: 315
- Kantishna Roadhouse: 420

- McKinley Gold Camp: 210
- Northface/Camp Denali: 315

The businesses could determine the types of vehicles to run, subject to the overall limit and other road use restrictions, to best suit their individual needs. However, RV travel (motor homes, trailers, campers) for the purpose of transporting guests to and from Kantishna businesses would not be allowed. Permits or allocation numbers would not be transferrable from one business operation to another. Business operations that exceeded the above limits in the 1994–96 seasons would be given three years after plan implementation to adjust traffic to the new limits.

Additional permits could be allocated to another Kantishna overnight lodging business based on the criteria in 43 CFR Part 36. This would require the National Park Service to apply the provisions of the National Environmental Policy Act to determine whether an environmental assessment, environmental impact statement, or categorical exclusion applied for each specific permit application. In all cases, the overall allocation season traffic limit of 10,512 vehicles would apply. Therefore, new businesses would have significantly fewer permits available than any of the existing Kantishna businesses. New overnight accommodations such as the proposed hostel would also be encouraged to use the existing transportation system for guest access and to work in partnership with existing businesses for administrative and other travel.

Up to 1,360 total vehicles could travel to and from Kantishna, comprising 13% of all traffic under the GMP limits. This total includes other Kantishna traffic (individual inholders, mining claim owners, and others), which has averaged less than 100 vehicles per year recently and could be expected to decline slightly as former mining claims are acquired by the federal government.

**Bicycles.** The National Park Service would establish a permit system for bicycle use west of the Savage River. This would function primarily as a registration system and numbers would not



initially be limited, pending continued wildlife monitoring. This permit system would also “Rules of the Road” for bicycles would continue, and this information would be available at all visitor orientation points, including the Savage River check station.

A bicycle/foot trail would be constructed and maintained to connect the Nenana River canyon to the entrance area. Gravel shoulders constructed along the paved section of the park road to enhance wildlife viewing would be available to cyclists also.

### Road Maintenance

- *Continue to implement road repair projects based on site-specific project design and internal review with superintendent approval.*
- *Implement new methods for improved subgrade drainage systems, structural repairs, and adequate surface material on the park road. (See appendix C of the draft plan for explanation of methods.)*
- *Repair road failures as they occur.*
- *Continue to realign road surface in slump areas by importing or using local materials to keep the vertical alignment within safe standards.*
- *Continue study of road condition, renewable materials sources, and annual gravel loss, and document road character.*
- *Use the Toklat River and Teklanika Pit as materials sources.*

The National Park Service would take the following actions affecting the park road:

- Maintain road character as defined in appendix C of the draft plan.
- Complete priority 1 and priority 2 repair projects (see appendix C). Priority 1 projects

apply to the Kantishna Hills.

include correcting safety problems by improving site distance, providing for safe vehicle passing, improving road surface friction, repairing culvert crossings, and repairing curve superelevations. Priority 2 projects include repairing shear failures, slumps, active road surface pumping, road rutting, and inadequate subgrade drainage.

Road repairs would treat the underlying causes of road failures to reduce the need for repetitive repairs and minimize gravel use over the long term.

- Purchase gravel from private landowners or acquire from previously disturbed park lands in the Kantishna area, provided that specifications for maintenance and repair on the west end of the park road could be met. Gravel extraction from previously disturbed park land would include subsequent reclamation. Once Kantishna sources are no longer feasible, an additional gravel source could be developed along Moose Creek approximately 2 miles upstream from North Face Lodge.
- Establish an additional gravel source in the Teklanika River near the Teklanika Campground to supplement the existing upland pit nearby, pending additional information on feasibility. The upland site would continue to be the gravel processing location and would not be expanded. Gravel processing and hauling could occur from two different sites at the same time.
- Relocate the gravel crushing operation near the existing Toklat rest stop to the north end of the Toklat road camp.
- Complete the five-year study of dust palliatives and particle binders initiated in 1994 and implement the resulting recommendations. This research includes monitoring of effectiveness, environmental impacts, and safety. The study area would be expanded to up to 15 miles of the park road,

with supplemental water treatment for dust control on other selected sections of the

- Construct an additional 8-foot gravel shoulder along the paved section of the park road from mile 8 to the Savage River where topography and resource conditions allow. This would provide for safer, more leisurely scenery and wildlife viewing as well as a margin of safety for bicycle traffic. Gravel for this project would be obtained outside the park.

## GENERAL DEVELOPMENT

### Accommodations

**Entrance Area.** The park hotel would be closed no later than 2002, and no hostel or other economy lodging would be constructed in the entrance area.

**Kantishna and Wonder Lake.** The National Park Service would encourage private sector development of a small-scale hostel facility (20–30 people) on private land in Kantishna and recommend that this structure incorporate alternative energy systems such as photovoltaic. The hostel would include indoor accommodations, showers and restrooms, a central cooking area, and a secure food storage area. If not developed by the private sector, the National Park Service could build the hostel and issue a concessions contract for its operation. Guests would be transported to the hostel via the visitor transportation system or other Kantishna buses.

The National Park Service would implement the 1994 Denali Task Force Report recommendation to acquire development rights and/or property to retain the existing character and approximate level of commercial use at Kantishna.

The Park Service would implement administrative changes to expedite acquisition of Kantishna mining claims.

road.

### Campgrounds

Throughout the frontcountry, campground maintenance would be improved and rehabilitation projects completed as necessary.

**Entrance Area.** A total of 50 sites would be added to the Riley Creek campground, including 25 tent camping sites and 25 walk-in sites similar to those at Morino Campground.

A hike-in campground would be constructed along the proposed Nenana River trail approximately 1 mile downstream from the confluence of the Nenana and Yanert Rivers. This campground could include up to 15 sites, which would be phased in based on visitor demand and resource protection needs.

**Park Interior.** Private RV access would continue to be allowed to Teklanika with a three-night minimum stay.

A campground would be constructed in the Kantishna area that would be accessible to both hikers and bicyclists. This campground would be located adjacent to a former mining route to minimize new trail construction needed. The campground could include up to 10 sites, which would be phased in based on visitor demand and resource protection needs. Potential locations might include the Eldorado and Slate Creek areas, Glen Creek, and along Skyline Drive. Development would depend on progress with acquisition of former mining claims and reclamation work.

Ten backcountry campsites would be designated in the Kantishna Hills along former mining routes so that new trail construction would be minimal. Five additional campsites could be designated depending on visitor demand and resource protection needs. Potential locations would include the Eldorado and Slate Creek areas, Glen Creek, Caribou Creek, Glacier Creek, and along Skyline Drive. Development would

depend on progress with acquisition of former mining claims and reclamation work.

Proposed Action: Alternative D – Entrance Area map

Quotas would be adjusted as necessary in backcountry units in which a new campground or new campsites are located depending on visitor experience and resource protection needs.

### **Visitor Services**

The existing visitor access center would be expanded from 7,000 square feet to 14,000 square feet and adapted for use as an interpretive and discovery center. An expanded ANHA sales outlet and the theater would remain in the building, but all other functions would be moved to a new visitor services building to the southeast.

Camper convenience services such as a general store, fast food and deli service, showers, and laundry would be provided at an expanded facility between the existing visitor access center and the Riley Creek campground. The National Park Service would encourage the private sector to provide additional services outside the park, with shuttle access. The post office would be replaced with a larger building (approximately 2,000 square feet) near the new camper conveniences center. This building could be connected to the camper conveniences facility and would share a common parking lot.

Upon completion of the above actions, the existing buildings would be removed and the area returned to as near a natural condition as possible.

### **Interpretive Facilities**

- *Define the upper limit or carrying capacity for attendance at dog sled demonstrations at park headquarters and implement a management strategy such as a ticket or reservation system as necessary.*
- *Provide expanded interpretation (signs, wayside exhibits, etc.) of the Headquarters Historic District.*

- *Complete interpretive plans for new facilities and programs such as interpretation of the Kantishna Historic District, the park road, prehistoric uses in the Teklanika area, the Dry Creek Archeological District, and cultural and historic resources in the entrance area.*

As mentioned above, the existing visitor access center would be expanded and adaptively used as an interpretive and discovery center (14,000 square feet total). This building would include a museum, a theater, an expanded ANHA sales outlet, and interpretation of traditional uses by Alaska Native people. The discovery center portion of the building would include “hands on” and interactive exhibits to provide an in-depth orientation to the resources of Denali. The National Park Service would continue working with the Alaska Natural History Association, the Denali Foundation, and the Denali Elderhostel in developing this facility.

Some of the existing buildings in the hotel area, including the auditorium, would be adaptively used for an environmental education and science center after the hotel closes no later than 2002. Overnight accommodations for up to 50 people would be provided in former concessioner housing. The environmental education and science center would be available for extended interpretive and educational programs ranging from a few hours to a week or more. Programs for local and regional school groups would be developed, and science programs for adults would be available as well. In addition to the auditorium, housing, and office space, the center would ultimately include classrooms for activities during inclement weather, a library, a science laboratory, a storage area and workroom, and an ANHA sales outlet for selected background books and other educational materials. An arrangement could be made with the concessioner to provide food service in the existing employee dining area.

Other entrance area actions proposed include improving information and orientation at the railroad depot and highlighting cultural resources in the Riley Creek campground area with a 1-mile, accessible trail. The main entrance sign (currently located along the Parks Highway near the Jonesville Bridge) would be replaced with a simpler sign and moved to the parking area just inside the park entrance.

The Headquarters Historic District buildings and landscape would be rehabilitated to protect these historic resources and to provide new interpretive opportunities including walk-through tours. A year-round visitor contact station could be established in the existing maintenance office near the visitor parking area after consolidation of maintenance functions in the auto shop area. An off-season ANHA sales outlet could be established at this contact station or at the environmental education and science center.

New facilities and programs proposed for the park interior include installation of wayside exhibits at all rest areas. Wayside exhibits would not be installed at Stony Overlook; it would continue to function as an undeveloped picnic area.

Eielson Visitor Center would be replaced with a facility of appropriate size and function and would incorporate alternative energy systems such as photovoltaic to supplement or replace the diesel generator.

Interpretive plans would be developed for all new facilities and programs. The park staff would update and implement the 1993 *Wayside Exhibit Proposal for Denali National Park and Preserve* (NPS 1993a) and include more emphasis on cultural and historical resources. The National Park Service would also implement the recommendations of the historic furnishing report for the Pearson cabin. A *Plan for the Interpretation of Denali National Park and Preserve* (NPS 1990c) would be updated and amended as necessary.

Interpretive activities at the Savage cabin would be expanded and would include living history, a variety of interpretive exhibits, and the use of sled dogs at designated times. Formal sled dog demonstration programs available at headquarters would not be duplicated. Dogs would still be based at headquarters and transported to the Savage cabin for interpretive programs during periods of higher visitor use. The sled dog demonstration loop trail at headquarters would be reconfigured to improve safety and enhance visitor viewing.

The National Park Service would work in partnership with Kantishna lodge owners to provide interpretation (such as signs and site bulletins) of the historic Kantishna Roadhouse, the Quigley cabin, and the Old Eureka/Kantishna Historic Mining District. The Quigley cabin would be developed as an interpretive contact center upon resolution of ownership issues.

### **Entrance Area Transportation and Parking**

Private vehicles would arrive at the entrance station immediately after leaving the Parks Highway. Drivers would obtain basic directional information at the station. They would be directed to the new visitor services building for additional park information and to purchase tickets for a bus trip into the park interior. Short-term and long-term parking as well as a bus staging area would be located in this area. The parking area would include about 250 spaces, with 60% for autos and 40% for RV use. Visitors wishing to use the interpretive and discovery center could reach that facility by either walking on a 1/4 mile nature trail from the new parking area or by driving around to the existing visitor access center parking lot.

Private vehicles would be allowed on the park road to Savage River.

Additional parking would be constructed northeast of the kennels at the headquarters area for up to 20 NPS employee vehicles.

Shuttles would continue to provide service to the Riley Creek campground, the new visitor services center, and the headquarters area. These shuttles could also provide service for services building with the Savage River campground and rest area, providing access to proposed new trails in that area. As mentioned above, this service would be provided at minimal cost to visitors and could be initiated with the existing visitor transportation system.

The concession-operated tour buses would load and unload passengers at concessioner lodging facilities outside the park with stops in the entrance area as needed. The concessioner courtesy buses would load and unload passengers staying in concessioner lodging at the railroad depot and other locations as necessary. Other lodging and tour operators would provide courtesy shuttle service between the depot/entrance area facilities and their facilities.

Kantishna lodging operators would continue to offer shuttle service from the park entrance to their facilities. Kantishna passengers and employees would park their vehicles in a new parking lot on the former airstrip site.

Existing pedestrian trails would be used with trailhead modifications and new connections to link the new visitor services center, the camper conveniences center, and the interpretive and discovery center. A bicycle/foot trail would connect visitor services inside the park with those outside via a bridge over the Nenana River.

### **Entrance Station**

An entrance station would be constructed between the Parks Highway and the entrance to the Riley Creek campground. NPS employees at the entrance station would check and sell park passes and collect entrance fees. The fee area would be expanded to include the area east of the Savage River. The entrance station area would include expanded traffic lanes, including

employees with on-demand stops at C-Camp. Shuttle service would be implemented to connect the new visitor

at least one lane for administrative and post office traffic.

### **Rest and Picnic Areas**

The National Park Service would maintain existing rest areas at Teklanika and Polychrome. Two rest areas would be constructed near the Savage River: one would be located on the west side of the river for use by buses only and another near the campground would be available to the general public (see the Proposed Action: Alternative D – Savage River Area map). The latter would provide an opportunity for mountain and wildlife viewing. Upon completion of the bus turnaround and rest area on the west side of the Savage River, the chemical toilets at Primrose would be removed.

An additional rest area would be constructed at Toklat (see the Proposed Action: Alternative D – Toklat Area map), with protection such as sheetpile installed along the river as necessary. Topography, soil type, and other design elements would determine the specific site, which could change by several hundred yards. Site design would also include alternative energy use to the extent practicable to reduce overall electrical demand at the Toklat road camp.

Each rest area in the frontcountry would include interpretive exhibits, a shelter and comfort station, and a short (1/4–1/2 mile) loop trail.

Two new picnic areas with shelters and two to three tables each would be constructed in the entrance area: one near the new visitor services center and another near the environmental education and science center. Another picnic area with two to three tables but without a shelter would be constructed near the Savage River.

A new picnic facility would also be incorporated into the design for the replacement Eielson Visitor Center. A comfort station would be constructed to accommodate visitors to the kennels and to the Headquarters Historic District.





Proposed Action: Alternative D – Savage River Area map

Proposed Action: Alternative D – Toklat Area map

## Trails

- *Reroute the steep portions of the Rock Creek trail and the section near the VTS parking lot (approximately 1 mile total).*

The existing trail system in the entrance and headquarters areas would be upgraded, accessibility improved, and routine maintenance provided. Extensive rehabilitation would be completed in the Horseshoe Lake area.

The following trails would be constructed and maintained (also see the Proposed Trails map).

### Entrance/Headquarters Areas:

- Triple Lakes trail (7 miles) with footbridge connecting to the Riley Creek campground area (upgrade and relocate as needed).
- Bicycle/foot trail (1 mile) connecting visitor services in the Nenana River canyon to visitor services inside the park.
- Foot trail (8 miles) linking McKinley Village with the entrance area (Nenana River trail) with trailheads at each end.
- Upper section of Mt. Healy overlook trail (1 mile).
- 1-mile, accessible loop trail in Riley Creek campground to highlight cultural resources.

### Park Interior:

- A loop trail system in the Savage River area that includes a 1/4–1/2 mile loop located downstream from the proposed bus turnaround, a longer loop extending about 1 mile downstream with a footbridge for the approximately 1-mile return on the opposite side of the river, and a trail up the ridge to the east. This trail would connect to hiking trails extending to the top of the ridge and connecting to the Savage River campground. The trail downstream along the Savage River could possibly incorporate the historic horse trail.

- A 1/4–1/2 mile accessible loop trail at Primrose pullout.
- A 1-mile loop trail to the ridge north of Eielson Visitor Center.
- A 1/4–1/2 mile loop trail at each of the proposed Savage and Toklat rest areas.
- A 1/4 mile river access trail at the Teklanika rest stop.

### West End:

- McKinley Bar trail from Wonder Lake campground access road to the river (upgrade and relocate this 2-mile trail as needed).
- A 1/4 mile trail from the designated parking area, south along Lake Creek to the north end of Wonder Lake.
- A 1/4 mile trail to the top of the small hill at the north end of Wonder Lake (between the lake outlet and the ranger station). The trailhead and viewing area at the lake outlet would be rehabilitated.

### Employee Housing

- *Replace inadequate and below standard housing such as trailers at C-Camp and Toklat.*

The National Park Service would retain the six-plex apartment building for permanent housing. Up to six additional garages in three separate buildings would be constructed in the headquarters area for housing units that do not currently have them.

C-Camp housing for seasonal and temporary employees would be improved and upgraded for year-round use with no net loss in total beds. The central showerhouse and laundry facility would be remodeled.

Proposed Trails map

back of map

In the concessioner housing area, 100 of the 195 beds would be converted for NPS use after hotel closing; 50 of the 100 beds would be allocated to the environmental education facility; and 44 would be for NPS, research staff, and ANHA housing.

In the park interior, seasonal employee housing at Sanctuary, Igloo Creek, East Fork, and Toklat would be renovated. Housing upgrades at Toklat would include measures to reduce electrical demand. At Wonder Lake, the National Park Service would upgrade seasonal housing and provide for two additional NPS staff.

### **Administrative and Support Facilities**

The following actions could be implemented during the next 15–20 years. However, the developments outlined in previous sections that directly serve park visitors and protect resources are a higher priority. In the interim, park management would expand administrative space and consolidate functions as practicable to improve overall operational efficiency.

The National Park Service would construct additional administrative space in the headquarters area by replacing the “Outback” building that houses dispatch, the library, and ANHA offices with a new 5,000-square-foot building. This building would be designed to be architecturally compatible with existing rustic buildings in the headquarters area. When completed it would include NPS offices, ANHA office space, and the main park library.

Maintenance functions would be consolidated at the auto shop area in a new 8,000-square-foot building. The vacated space (3,000 square feet) would be rehabilitated for other administrative uses. The National Park Service would rehabilitate all the buildings and the landscape of the Headquarters Historic District.

Interpretation division offices, including a multimedia workroom, would be located within space vacated by maintenance and ranger operations or in part of the new 5,000-square-

foot building mentioned above. Administration, concessions, and resource management offices would be similarly located, consolidating functions as much as possible. Additional resource management facilities such as a laboratory and curatorial storage would be located in the headquarters area either by constructing a new building or by adaptive use of vacated maintenance space. Greenhouse facilities to support revegetation projects in the park would be developed in cooperation with the University of Alaska-Fairbanks, if practicable. Otherwise, a greenhouse could be constructed near the headquarters area. A parking area for up to 20 employees would be constructed northeast of the dog kennels.

Additional seasonal office space for visitor services staff would be constructed as part of the new visitor services center. Seasonal office space for interpretation division employees would be available in the interpretive and discovery center and at the environmental education and science facility. National Biological Service office space would also be provided for in the environmental education and science facility area.

The National Park Service would relocate and consolidate some functions such as research and administration in Healy and Fairbanks to the extent practicable.

A new EMS/fire station (3,230 square feet) would be constructed in the auto shop area with East District protection offices consolidated there. The dispatch office would also be located in this building. An ANHA warehouse of up to 4,000 square feet would be constructed near or adjacent to the EMS/fire station or near the environmental education and science center on a previously disturbed site. Interim storage for the Alaska Natural History Association would be met with temporary structures within the development subzones.

In the park interior, the National Park Service would upgrade existing administrative space at Toklat, Eielson, and Wonder Lake. At the Toklat road camp, upgrades would include a

rebuilt maintenance building of approximately 7,000

Proposed Action: Alternative D – Park Headquarters/C-Camp map

square feet. Sheetpile would be installed to protect the facilities there from river erosion. Any upgrades to facilities would also include measures to reduce electrical demand. On the west end, the Wonder Lake ranger station would be rehabilitated.

### Utility Systems

- *Upgrade utilities in the entrance and headquarters area, including upgrade of electrical and water systems and rehabilitation of sewer systems.*

In addition to the above common action, the National Park Service would implement the following projects to upgrade electricity, water, sewer, and communications systems in the frontcountry:

- Expand utility systems in the entrance area to provide for year-round use of portions of the environmental education and science center and the visitor services building. This would include installation of a septic tank and leachfield and development of a water system.
- Replace C-Camp and headquarters leachfields with one package sewage treatment plant (25,000 gallons per day capacity).
- Expand utility systems in the headquarters area to serve additional structures such as the new office building and the comfort station in the kennels area.
- Expand the existing dump station near the Riley Creek campground to improve traffic circulation. A second two-port island would be added and connected to existing water and sewer systems.
- Upgrade water systems at Sanctuary and Igloo Campgrounds by installing dish washing stations and grey water disposal systems (one at each campground). A 5,000-

gallon water storage tank would be installed at each campground with a photovoltaic energy system to power the pump.

- Construct an onsite waste water disposal system for the proposed Toklat rest area.
- Upgrade the electrical system serving Toklat, incorporating measures to reduce electrical demand.
- Upgrade the Wonder Lake ranger station water system.
- Provide minimal sewage facilities (pit toilets) for the Yanert Overlook and Kantishna area backpacker campgrounds.

### Airstrips

The McKinley Park airstrip would be closed to provide for potential expansion of the Alaska Railroad depot and to reduce resource impacts in the entrance area. NPS aircraft operations would be relocated to either the Healy or Denali private airstrips contingent upon availability of hangar space. Remaining flightseeing and air taxi services would also be relocated to the other airstrips. A helipad would be retained in the entrance area for medical evacuations.

No flightseeing or air taxi services would be based at the McKinley Park airstrip. The National Park Service would work cooperatively with the Alaska Department of Transportation and Public Facilities to develop a master plan for the Kantishna airstrip. Uses such as flightseeing by existing Kantishna area lodges would continue. Pedestrian and vehicle use on the airstrip would be reduced by adding a vehicle bypass around the airstrip.

## PARK OPERATIONS

### NPS Operations



Major changes in park operations under this alternative would include developing a centralized visitor services and interpretive center area and replacing concessioner-operated facilities in the hotel area with an environmental education and science facility. These two changes in the entrance area would enable the National Park Service to provide a full range of interpretive and educational opportunities.

Road maintenance activities would increase significantly for several years until backlogged repairs were completed.

Other major changes to park operations would include the following:

- expanded rest area, campground, and trail maintenance programs
- entrance station operations, which would provide a new opportunity for visitor orientation and information as well as more efficient fee collection
- increased patrols and bear management activities along trails and in backcountry campgrounds
- additional resource monitoring and revegetation projects

### **Other Concessions Operations, Commercial Uses, and Special Uses**

The McKinley Park airstrip would be closed and no longer available for commercial use. Commercial use of the airstrip would be eliminated by relocating all remaining flightseeing and air taxi services to airstrips outside the park. The National Park Service would maintain the existing level of commercial use at the Kantishna airstrip and implement the 1994 Denali Task Force Report recommendation to acquire development rights and/or property to retain the existing character and approximate level of commercial use at Kantishna.

The National Park Service would continue to work cooperatively with the State of Alaska Department of Natural Resources, the Department of Fish and Game, and the Department of Transportation and Public Facilities to determine the best location for improved access to the Nenana River and the appropriate size and type of facility to construct.

The National Park Service would monitor resource conditions on and near Wonder Lake (including loon nesting areas) to minimize impacts from canoe use. Based on this additional resource information, the National Park Service would set limits on canoe use by Kantishna lodges through the concessions permit process.

The National Park Service would also continue to work cooperatively with Kantishna area lodges to develop other visitor opportunities. For example, the Jauhola cabin north of the Kantishna airstrip would be rehabilitated for use by the lodges and the National Park Service. Interpretive activities for small groups (up to 10 people) would be held there with use times allocated among the Kantishna lodges and the Park Service. The access route to the Jauhola cabin would be maintained as a trail, with motorized access by all-terrain vehicles allowed only for major rehabilitation projects.

Guided hiking by the two Kantishna limited concessions permit holders would be allowed in designated areas along the park road west of mile 84, the Wonder Lake campground access road, and the McKinley Bar trail. These guided activities would be available only for overnight guests of the two permit holders. A maximum of two permits would therefore be available for guided hiking. These restrictions would not apply to the historic operator in Kantishna.

### **VISITOR EXPERIENCE AND RESOURCE PROTECTION**

- *Complete a resource management plan and other action plans to address issues such as revegetation, fish habitat restoration, bear management, wildland fuel reductions around structures, hazardous tree management, and administrative uses of resources.*
- *Implement a visitor experience and resource protection program such as that described below to prevent problems resulting from visitor use.*

The National Park Service is currently developing a visitor experience and resource protection (VERP) program for addressing carrying capacity based on the U.S. Forest Service limits of acceptable change methodology and NPS-management policies. This process will ultimately provide the tools necessary for the National Park Service to fulfill its obligations to address visitor carrying capacity for parks and to safeguard the quality of park resources and visitor experiences.

Carrying capacity at many parks has usually been addressed and defined in terms of physical or facility design limits. The implication was that if these limits were exceeded, carrying capacity was exceeded and the park would have to develop more facilities. For example, carrying capacities at many parks were often based on factors such as the number of cars and buses that could be parked in the parking lots at one time or on how many people could be accommodated in a visitor center or other facilities at one time.

These traditional definitions of carrying capacity address visitor access to a park and park resources and not the quality of the experience or resource protection issues. When facility limits were reached, vehicles were turned away from entering the park or visitors had to wait in line to enter. Parks were essentially managing for visitor access. The VERP process changes the emphasis from

Upon NPS approval of the VERP methodology and approval of this development concept plan, VERP would be fully implemented at Denali. In

facility capacity to visitor experience and resource protection concerns.

The VERP process defines carrying capacity as “the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions that complement the purposes of the park units and their management objectives.” VERP emphasizes managing to achieve and maintain predetermined social and resource conditions. Providing for a high quality visitor experience and resource protection are the goals of management as opposed to simply providing for unlimited use of park resources.

In this context, carrying capacity represents a desired set of conditions that are influenced by visitor use rather than a specific number of visitors. This concept can be applied proactively to better manage a park.

Denali National Park and Preserve is under increasing pressure to accommodate more and more visitors while still providing a quality experience and protecting park resources. VERP would provide a framework for proactive management of the park to meet these challenges.

The National Park Service is currently testing the VERP process at several parks. This development concept plan provides a basis for beginning to address the carrying capacity of Denali and is being completed consistently with the VERP process. The plan identifies general management goals, management subzones, and management strategies. Specific desired conditions and key impact indicators still must be identified and desired conditions must be compared with existing conditions. Adopting this approach to carrying capacity would also require the park staff to establish monitoring and evaluation procedures to ensure that acceptable resource and social conditions are achieved and maintained.

the interim, park staff would monitor park resources and visitor use to determine whether or not carrying capacity is being exceeded in

any subzone. The expected level and types of visitor use and facility development proposed in this development concept plan are not anticipated to result in unacceptable impacts on the desired visitor experience or on the park's natural and cultural resources. However, if monitoring shows that the carrying capacity has been exceeded, the National Park Service would take actions to restore conditions to acceptable levels, such as restricting visitor use or modifying facilities.

For the life of this plan, park visitation is expected to be controlled by limits on road use, by the quantity and quality of facilities, and by park management actions. Use of VERP would enable the park to avoid some of the problems that other parks have experienced when visitor use has not been managed to protect the quality of the visitor experience or the resource base.

Under the proposed plan the VERP program would be implemented as described above. Management zoning would be as described in appendix D. (Refer to the management subzone maps at the conclusion of the description of the proposed plan.)

## **PLAN IMPLEMENTATION AND PHASING**

### **Implementation**

The most important objective of this development concept plan is to outline actions that improve the visitor experience and resource protection in Denali and that can be implemented immediately upon plan approval. Another objective is to provide comprehensive, general guidance for development in and management of the entrance area and road corridor for the next 15–20 years or more.

Funding is the ultimate determinant of when proposed developments, programs, and staffing additions would be implemented. Because of dwindling federal resources, the National Park Service is interested in partnerships to develop cost-effective solutions for carrying out

legislated responsibilities. The purpose of this development concept plan is to determine the types of actions necessary and the locations for proposed development, leaving funding options open.

### **Phasing**

Priorities for implementing actions under the proposed plan have been developed and are outlined in the following table. This list is preliminary and may be amended in the future.

Definitions of priorities include:

*1 = highest priority:* Highest priority projects include those related to immediate health and safety concerns and protection of threatened and endangered resources. Also included in this category are major actions designed to enhance the visitor experience and resource protection in the frontcountry and management actions that can be implemented without additional funding, such as regulatory changes.

*2 = second highest priority:* Second level priorities include essential services and NPS functions and actions that are the second phase of a high priority project. This priority level also includes major actions that would enhance the visitor experience and resource protection in the frontcountry but would require additional site-specific environmental compliance.

*3 = lowest priority:* Lower priority projects encompass the later phases of projects initiated at higher priority levels, smaller projects that contribute to an improved visitor experience and resource protection, and projects that require substantial follow-up site planning and compliance.

### **Cost Estimates for New Development**

The cost for new high priority (level 1) development in the proposed plan would be approximately \$19 million (see itemized cost

PROPOSED ACTION (ALTERNATIVE D)

estimate in replacement table E-4, appendix E  
errata sheet).

## IMPLEMENTATION PRIORITIES

Priority	Description of Actions
Level 1: Highest Priority	<p><b>Road Use:</b> Implement Phase 1 of traffic limits affecting buses and private vehicles (including Kantishna traffic); construct bicycle/foot trail connecting Nenana River canyon to visitor services center area.</p> <p><b>Road Maintenance:</b> Establish additional gravel sources at Teklanika River and Kantishna; complete road repairs addressing safety issues; expand experimental use of dust palliatives and particle binders.</p> <p><b>General Development:</b> Close park hotel; provide expanded interpretive opportunities at the Savage cabin; construct rest areas and trail system in Savage River and Toklat areas; construct new visitor services building and expand visitor access center for interpretation; construct Triple Lakes trail; construct short loop trail at Primrose and river access trail at Teklanika; construct EMS/fire station in auto shop area; rehabilitate entrance area utilities; install package sewage treatment plant for C-Camp and headquarters; add bypass to Kantishna airstrip.</p> <p><b>Park Operations:</b> Acquire development rights and/or property in Kantishna.</p>
Level 2: Second Highest Priority	<p><b>Visitor Use:</b> Expand interpretive information and programs in entrance area.</p> <p><b>Road Use:</b> Implement Phase 2 of changes to traffic limits.</p> <p><b>Road Maintenance:</b> Make road repairs addressing high priority structural failures.</p> <p><b>General Development:</b> Close McKinley Park airstrip; construct additional campsites at the Riley Creek campground; construct Yanert Overlook campground and Nenana River trail; construct environmental education and science facility; construct new camper convenience center; construct entrance station; construct cultural resources trail; install wayside exhibits at all rest areas; replace Eielson Visitor Center; reconfigure sled dog demonstration trail at headquarters; construct trails at north end of Wonder Lake; upgrade C-Camp; convert some concessioner housing in former hotel area to NPS use; consolidate maintenance functions in auto shop area and remodel vacated space for administrative use; provide additional visitor opportunities in Kantishna (guiding, rehabilitate the Juahola cabin).</p>
Level 3: Lowest Priority	<p><b>Road Use:</b> Implement Phase 3 of changes to traffic limits.</p> <p><b>Visitor Use:</b> Provide additional interpretive services in the Kantishna area.</p> <p><b>Road Maintenance:</b> Make road repairs addressing second highest priority failures; construct gravel shoulders along sections of paved road.</p> <p><b>General Development:</b> Construct Kantishna area campground and campsites; replace Denali National Park Post Office; construct new picnic areas; construct new comfort station for kennels and headquarters visitors; upgrade existing trail system in entrance area; construct loop trail north of Eielson Visitor Center; upgrade/relocate McKinley Bar trail; upgrade employee housing and administrative space in park interior; construct additional administrative space in headquarters area; expand entrance area dump station; upgrade water systems and electrical systems in park interior.</p>



Key to Management Subzone Maps

back of map



Management Subzones, Proposed Action: Alternative D – Entrance Area/Nenana River Corridor map

Management Subzones, Proposed Action: Alternative D – Headquarters/C-Camp Area map

Management Subzones, Proposed Plan: Alternative D – Savage Campground to Primrose Rest Area  
map

Management Subzones, Proposed Plan: Alternative D – Teklanika Area map

Management Subzones, Proposed Plan: Alternative D – Toklat to Eielson Visitor Center Area map

Management Subzones, Proposed Plan: Alternative D – Wonder Lake Area map

**TABLE 5: SUMMARY OF ENVIRONMENTAL CONSEQUENCES  
OF THE ALTERNATIVES – ERRATA SHEET**

**IMPACT TOPIC: NATURAL RESOURCES**

**Wildlife**

Page 117, ALTERNATIVE D - PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS — Insert the following text after last sentence:

To mitigate the potential for adverse effects on Dall sheep, the National Park Service would continue monitoring human-wildlife interactions along the road corridor and may also close trails periodically when sheep are in the area.

**Vegetation and Soil**

Page 119, ALTERNATIVE D - PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS, sentence 1 — Change to read as follows:

Proposed actions would affect ~~53.2~~ 42.3 acres, most if it involving expansion of existing developed areas in the frontcountry.

**Water Resources (Floodplains, Wetlands, and Water Quality)**

Page 120, ALTERNATIVE D - PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS, sentence 3 — Rewrite as follows:

~~Relocating the gravel crushing operation at Toklat to a site within the floodplain would place the operation at significant risk of flooding and would contradict NPS guidelines governing floodplain management.~~ Relocating the gravel crushing operation at Toklat to a site immediately below the road camp also would not adversely affect the floodplain.

**IMPACT TOPIC: CULTURAL RESOURCES**

Page 120, ALTERNATIVE D - PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS, sentence 1 — Change to read as follows:

The historic integrity of the Wonder Lake ranger station; and the Headquarters Historic District; ~~and the Kantishna tailings piles~~ could be affected.

**IMPACT TOPIC: SOCIOECONOMIC ENVIRONMENT**

Page 124, ALTERNATIVE ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS, sentence 5 — Change to read as follows:

Approximately ~~\$21~~ \$19 million would be spent to implement ~~the~~ high priority ~~(level 1)~~ construction.



## AFFECTED ENVIRONMENT – ERRATA SHEET

### NATURAL RESOURCES

#### WILDERNESS

Page 127, column 2, paragraph 3, last sentence — Change to read as follows:

Until the Department of the Interior forwards and Congress acts on this recommendation, it is NPS policy to manage areas of potential wilderness as if they were designated wilderness.

#### WILDLIFE

Page 127, column 2, paragraph 5, sentence 1 — Change to read as follows:

~~Tourists~~ Visitors from all over the world ~~visit~~ come to Denali to observe wildlife.

Page 128, column 1, paragraph 2, last sentence — Change to read as follows:

Fall rutting congregations can reach sizes of ~~50~~ 15 or more moose, and it may be possible to witness bulls sparring to determine dominance.

#### FISH

Page 129, column 1, paragraph 3, last sentence — Change to read as follows:

Other fish found in park waters include Dolly Varden, lake trout, and sculpin, and chinook, ~~and~~ coho, and chum salmon.

Page 129, column 1, paragraph 5, sentence 1 — Change citation to read:

(Sheldon ~~1960~~ 1930)

### CULTURAL RESOURCES

#### ARCHEOLOGICAL ENVIRONMENT

Page 132, column 1, paragraph 1, sentence 2 — Change to read as follows:

Archeological sites from the Nenana River valley have been valuable in explaining northwestern American early Holocene human history with the earliest components ~~identification~~ identified as Nenana complex sites.

Page 132, column 1, paragraph 1, sentence 3 — Change to read as follows:

Nenana complex components have been ~~defined~~ identified in the Nenana Valley at the Dry Creek, Walker Road and Moose Creek sites, located immediately northeast of the park.

Page 132, column 2, paragraph 2 — Delete first sentence:

~~The most recent people to occupy and use the area around Denali are Athabascan Indians.~~

## **CULTURAL ENVIRONMENT**

### **Kantishna**

Page 133, column 2, paragraph 4, sentence 2 — Change to read as follows:

One of these, the Kantishna Hydraulic Company, constructed a 12,000-foot-long ditch system, including dams and piping, to bring water from Wonder Lake to Moose Creek just above ~~Eureka~~ Eldorado Creek.

Page 134, column 1, paragraph 2, sentence 5 — Change to read as follows:

Segments of the ditch constructed by the Kantishna Hydraulic Company can still be seen along the hillside stretching from Wonder Lake to ~~Eureka~~ Eldorado Creek.

Page 135, column 1, paragraph 3, sentences 1 and 2 — Correct spelling:

~~Person~~ Pearson

## **VISITOR USE AND EXPERIENCE**

Page 136, column 2, footnote 1, sentence 2 — Rewrite as follows:

~~Railway and motor coaches are multiplied by a factor of 36.~~ Railway counts are given by the Alaska Railroad, and motor coach numbers are multiplied by a factor of 36.

## **SOCIOECONOMIC ENVIRONMENT**

### **VISITOR USE STATISTICS AND ANALYSIS**

Page 148, table 8, and page 151, table 10 — Clarification:

Table 8: column labeled, “NPS backcountry” includes mountaineering; in table 10, it does not.

### **PRINCIPAL KINDS OF ACTIVITIES**

Page 152, column 1, number 3, sentence 1 — Change to read as follows:

The shuttle bus takes visitors ~~to~~ as far as the end of the road in Kantishna, a round trip of 11 to 12 hours.

## ENVIRONMENTAL CONSEQUENCES – ERRATA SHEET

### IMPACTS OF ALTERNATIVE D – PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS

#### IMPACTS ON WILDERNESS

##### Analysis

Page 204, column 1, paragraph 3, sentence 1 — Delete sentence and replace with the following text:

~~Relocating the gravel crushing operation to a site 1/3 mile north of the Toklat road camp would not only expand the visual impact of the developed area, but noise generated by processing operations would be deflected downriver beyond the wilderness boundary, intruding on the solitude of the area.~~ Relocating the gravel crusher to a site just below the Toklat road camp would not significantly impair the visual quality of the surrounding wilderness since the new site would appear to be an extension of the existing developed area.

#### IMPACTS ON WILDLIFE

##### Analysis

Page 205, column 1, paragraph 2, sentence 1 — Change to read as follows:

Increased development in the frontcountry, particularly in the entrance area near Riley Creek, would result in the permanent loss of ~~26.3~~ 25.5 acres of moose calving habitat.

Page 205, column 1, paragraph 2, sentence 4 — Change to read as follows:

Impacts resulting from these losses are not expected to have significant adverse or long-term impacts on local populations ~~of most of these species.~~

Page 205, column 1, paragraph 2, last sentence — Delete sentence and replace with the following text:

~~Short term impacts on moose populations because of loss of calving areas and affects on lynx populations are possible.~~ Nonetheless, the long-term impact on recruitment to the local moose and lynx populations is unknown.

Page 205, column 2, paragraph 3 — Insert the following text after last sentence:

To mitigate the potential for adverse effects on Dall sheep, the National Park Service would continue monitoring human-wildlife interactions along the road corridor during the core visitor use period as well as during the shoulder seasons. Activities determined to have an adverse effect

on wildlife would be modified or eliminated. This may include periodic trail closures when sheep are in the area.

Page 206, column 1, paragraph 2 — Delete first sentence:

~~Granting a concessions permit for canoe rentals on Wonder Lake would increase the frequency of canoes on the lake.~~

Page 206, column 1, paragraph 2, sentence 2 — Change to read as follows:

To ensure that canoeing pressure ~~does is~~ not having an adverse affect on migratory breeding birds, including sensitive species such as ~~arctic~~ common loons, the National Park Service would monitor human-wildlife interactions throughout the visitor use season.

## **Conclusion**

Page 206, column 1, paragraph 3, sentence 1 — Rewrite as follows:

~~Other than potential short term effects on the local moose population because of loss of calving habitat, construction of a trail route along the rocky slopes east of the Savage River is the only proposed action that could adversely affect park fauna, particularly a band of Dall sheep that inhabit this area.~~ The long-term impact on recruitment to the local moose population due to a loss of calving habitat is unknown. Construction of a trail route along the rocky slopes east of the Savage River could adversely affect park fauna, particularly a band of Dall sheep that inhabit this area.

Page 206, column 1, paragraph 3 — Insert the following text after sentence 2:

To mitigate the potential for adverse effects on Dall sheep, the National Park Service would continue monitoring human-wildlife interactions along the road corridor and may also close trails periodically when sheep are in the area.

## **IMPACTS ON FISH**

### **Analysis**

Page 206, column 2, paragraph 1, sentence 2 — Change to read as follows:

The only actions that would potentially affect fish resources involve gravel removal from within the Toklat and Teklanika river floodplains; and acquisition of mine tailings from former placer mining operations in Kantishna; ~~and gravel extraction from the Moose Creek terrace pit.~~

Page 207, column 1, paragraph 2, sentence 1 — Change to read as follows:

~~The development of a gravel pit at the Moose Creek terrace site~~ removal of tailings piles in Kantishna would also require direct water crossings of Moose Creek by dump trucks, causing a potential increase in turbidity and sedimentation at sites downstream.

## IMPACTS ON VEGETATION AND SOIL

### Analysis

#### Parkwide.

Page 207, column 1, paragraph 4, sentence 1 — Change to read as follows:

Proposed actions would affect ~~53.2~~ 42.3 acres, most of it involving expansion of existing developed areas in the frontcountry.

#### Entrance Area.

Page 207, column 2, paragraph 3, sentence 1 — Change to read as follows:

Proposed construction in the entrance area, which includes additional NPS support facilities and replacement of infrastructure, new visitor facilities in the hotel area, and expanded recreational opportunities in the Nenana River corridor, would commit ~~32.6~~ 31.7 acres of spruce and mixed forest to development.

#### *Nenana River Corridor* —

Page 207, column 2, paragraph 5, sentences 1 and 2 — Change to read as follows:

New trail construction within the Nenana River corridor would eliminate vegetation along a 5-foot-wide swath between the north park entrance (~~Gainesville bridge~~) and McKinley Village. ~~(The trail between the Gainesville bridge and the visitor access center would be 8 feet wide to accommodate mountain bikes.)~~

#### *Hotel/Depot*—

Page 208, column 1, paragraph 3, last sentence — Change to read as follows:

Similarly, reuse of concessioner housing for NPS employees, closing the McKinley Park airstrip, and relocation of the camper store and post office to the Riley Creek area, along with restoration of their present sites, would limit further disturbance and restore native vegetation to at least 1.1 acres.

Page 208, column 2, paragraph 1 — Insert the following text after last sentence:

Construction of a new septic tank and leachfield to accommodate year-round use of portions of the environmental education center and the visitor services building and installation of monitoring wells at the sewer lagoons would involve an additional 1 acre of new ground disturbance, although these sites would be revegetated following project completion.

#### *Riley Creek* —

Page 208, column 2, paragraph 3, sentences 1 and 2 — Change to read as follows:

New construction would remove vegetation from ~~14.75~~ 13.75 acres of spruce forest, mostly near the visitor access center. This includes ~~5~~ 3 acres needed to expand the parking lot and construct a picnic area; 0.5 acre to expand the existing building and convert it into an interpretive center; and 0.75 acre to build a new visitor services facility.

Page 208, column 2, paragraph 3, last sentence — Change to read as follows:

Restoration activities around new development would restore native vegetation to approximately ~~2.5~~ 3.5 acres.

*C-Camp* —

Page 209, column 1, paragraph 1, last sentence — Change to read as follows:

Expansion of the maintenance area to accommodate construction of two new buildings (building and utilities facility and EMS/fire station) would eliminate 3 acres of spruce forest, ~~1 acre of which would be revegetated following construction.~~

*Headquarters* —

Page 209, column 1, paragraph 4 — Insert the following text after sentence 1:

Construction of six garages in three separate buildings in the headquarters housing area would eliminate 0.15 acre of spruce forest.

*Park Interior* —

Page 210, column 1, paragraph 3 — Change heading to read as follows:

**Park Interior.**

*Road Maintenance Impacts* —

Page 211, column 1, paragraph 4, last sentence — Delete sentence:

~~The only exceptions include those impacts associated with proposed grade raises along the park road, and relocation of the Toklat gravel crushing operation to a site 1/3 mile north of the road camp.~~

Page 211, column 2, paragraph 2, sentence 1 — Delete sentence:

~~Gravel excavations at the Moose Creek terrace pit would remove 9.9 acres of moist tundra vegetation (low mesic shrub birch ericaceous shrub and open low willow shrub vegetation).~~

Page 211, column 2, paragraph 2, sentence 6 — Delete sentence and begin new paragraph with the following text:

~~Since the Toklat gravel crushing operation would be relocated to a site within the active floodplain, gravel operations would not impact soils or vegetation, although access to the site would necessitate the removal of 0.2 acre of vegetation.~~

Relocation of the gravel crusher to a 1.7-acre site at the north end of the road camp would result in little additional ground disturbance, including no new access roads. The site is heavily disturbed and unvegetated, and is currently used for stockpiling miscellaneous construction materials. To prevent further erosion of the riverbank and to subsequently protect the site itself, erosion control techniques such as sheetpile or rock gabions may be required. Although gravel piles may alter drainage patterns at the site, these effects are not expected to be significant.

**Conclusion**

Page 212, column 2, paragraph 1, sentence 1 — Change to read as follows:

Proposed actions would affect ~~53.2~~ 42.3 acres, most of it involving expansion of existing developed areas in the frontcountry.

**TABLE 22: ACREAGE TO BE AFFECTED BY ALTERNATIVE D - PROPOSED ACTION**

Page 212, under **Hotel/Depot**, insert the following:

ACTION	NEW GROUND DISTURBANCE	ACRES TO BE RESTORED OR LANDSCAPED
Close McKinley Park airstrip	0	To Be Determined

Page 213, under **Riley Creek Campground/Visitor Access Center Area**, insert the following:

Upgrade sewage systems in entrance area, including installation/construction of septic tank and leachfield to accommodate year-round use of environmental education center and visitor services building	1.0	1.0
--	-----	-----

Page 213, under **Riley Creek Campground/Visitor Access Center Area**, revise as follows:

Expand visitor access center parking lot and construct picnic area	<del>5.0</del> <u>3.0</u>	0.5
--	---------------------------	-----

Page 213, under **C-Camp**, revise as follows:

<i>Auto Shop</i> : Construct buildings and utilities structure; EMS/fire station	3.0	<del>1.0</del> <u>0</u>
--	-----	-------------------------



Page 213, under **Headquarters**, insert the following:

Construct 6 garages (3 separate buildings) in housing area	0.15	0
--	------	---

Page 215, under **Road Maintenance**, revise as follows:

<i>Gravel Acquisition:</i>		
Excavate within currently authorized limits at Teklanika pit	1.25	0
<del>Develop Moose Creek Terrace pit</del>	<del>9.9</del>	<del>0</del>
<u>Acquire gravel from previously disturbed land in Kantishna</u>	<u>0</u>	<u>To Be Determined</u>
Construct 1,000-foot access road for Teklanika River site	0.1	0
Relocate Toklat gravel crusher to <u>site #2, north end of road camp (site #1),</u> <del>construct 1,100-foot access road,</del> and restore alluvial fan	<del>0.2</del> <u>0.1</u>	2.0

Page 215, under **TOTAL**, revise as follows:

<b>TOTAL:</b>	<del>53.2</del> <u>42.3</u>	<b>11.0</b>
---------------	-----------------------------	-------------

**IMPACTS ON WATER RESOURCES (FLOODPLAINS, WETLANDS, AND WATER QUALITY)**

**Analysis**

Page 216, column 1, paragraph 4, sentence 1 — Change to read as follows:

Floodplain and water quality impacts resulting from gravel extraction within the Teklanika River floodplain, ~~the Moose Creek terrace pit, and acquisition of mine tailings from placer mining operations~~ acquiring gravel from previously disturbed land in Kantishna, would be the same as those outlined for alternative C.

Page 216, column 2, paragraph 2 — Delete paragraph:

~~The proposed Moose Creek gravel pit would not be located within a floodplain, nor are any impacts on floodplains expected from its operation. Some groundwater and intermittent surface flow from heavy rains and spring snowmelt would be intercepted by the pit. However, this is not expected to be a significant problem since the substrate has a good infiltration capacity and the drainage area is small. To mitigate impacts on water quality and aquatic resources, the pit would be designed with enough downward slope toward the back wall to hold storm water drainage inside the pit. An attempt would be made to time operations so that heavy equipment and water are not in the pit simultaneously.~~

Page 216, column 2, paragraph 3, sentences 3-7 — Delete sentences and replace with the following text:

~~The gravel crushing operation would be relocated to a site approximately 1,800 feet north of the road camp, around the corner of the prominent rock outcrop that extends onto the floodplain (see the Toklat Area map). The site would be within the active floodplain and would be at significant risk from high water flooding. At least 1,100 feet of additional road would be needed to access the area. To protect the road from erosion, bank protection (most likely sheetpile) would be placed along its length. The site may also need to be elevated on a gravel pad, protected by sheetpile, to prevent flooding. Due to high erosion rates at the proposed gravel crusher location immediately below the road camp, sheetpile or rock gabions would be needed to protect the riverbank from further erosion. To accommodate the turning radii of heavy equipment, it may be necessary to expand the site by extending the bank protection into the floodplain, and backfilling with gravel. Although this would require a minor alteration of the floodplain, it would prevent further bank erosion and provide a large enough working area.~~

Page 217, column 1, paragraph 2 — Delete paragraph:

~~NPS guidelines governing floodplain management indicate that modification or development in floodplains should be avoided when practicable alternatives exist. The long-term placement of construction equipment and sheetpile within the active floodplain is contrary to the spirit, if not the letter of this directive. It may also be difficult for the National Park Service to obtain the necessary section 404 permit from the U.S. Army Corps of Engineers. Although the Corps will approve gravel removal from the riverbar, they require that no excavated material be stockpiled on the floodplain. Therefore, unless the crusher site is removed from the floodplain via sheetpile, material would have to be stockpiled elsewhere.~~

## **Conclusion**

Page 217, column 2, paragraph 2, sentence 3 — Rewrite as follows:

~~Relocating the gravel crushing operation at Toklat to a site within the floodplain would not only place the operation at significant risk from highwater flooding, but would also contradict NPS guidelines governing floodplain management. Relocating the gravel crushing operation at Toklat to a site immediately below the road camp also would not adversely affect the floodplain.~~

## **IMPACTS ON CULTURAL RESOURCES**

### **Conclusion**

Page 218, column 1, paragraph 3, sentence 1 — Change to read as follows:

The historic integrity of the Wonder Lake ranger station, and the Headquarters Historic District, ~~and the Kantishna tailings piles~~ could be affected.

## **IMPACTS ON VISITOR USE AND EXPERIENCE**

## **Analysis**

Page 219, column 2, paragraph 1, sentence 2 — Change to read as follows:

Visitors venturing farther into the park to Wonder Lake and Kantishna would have access to additional trails; and campsites, ~~and concessions activities such as canoeing on Wonder Lake.~~

Page 219, column 2, paragraph 2 — Delete paragraph and replace with the following text:

~~Establishing an additional gravel source along Moose Creek would mean increased traffic and noise as well as a visual intrusion for visitors using that part of the Kantishna Hills, as in alternative C. Relocation of the gravel crushing operation at Toklat from near the rest area to 1/3 mile north of the road camp could affect visitors traveling in that part of the backcountry as the operation would be audible in the immediate area and beyond depending on wind direction.~~

Acquiring gravel from previously disturbed land in Kantishna would mean increased traffic and noise as well as a visual intrusion for visitors in that area of the park. Although there may be short-term impacts on the visitor experience, there would also be long-term benefits to scenic quality as formerly disturbed sites are restored to natural conditions. Relocation of the gravel crushing operation at Toklat to a site just below the Toklat road camp would not significantly impair the visual quality of the surrounding wilderness since the new site would appear to be an extension of the existing developed area. To minimize noise-related impacts, an attempt would be made to schedule crushing operations during the shoulder seasons whenever possible, as well as limit operations to daytime hours during the visitor use season.

## **IMPACTS ON PARK OPERATIONS AND PARK MANAGEMENT**

### **Analysis**

Page 221, column 1, paragraph 2, sentence 2 — Change to read as follows:

Establishment of a new gravel source ~~along Moose Creek~~ in Kantishna would allow completion of road maintenance and repair projects west of Eielson Visitor Center as in alternative C.

## **IMPACTS ON TRANSPORTATION AND ACCESS**

### **Analysis**

Page 221, column 2, paragraph 2, last sentence — Change to read as follows:

Shuttle service between the entrance area and visitor services north and south of the park entrance could help reduce the rate of increase in traffic on the Parks Highway.

Page 221, column 2, paragraph 3, last sentence — Change to read as follows:

Pedestrian and bicycle traffic along this section of the highway would decrease dramatically with the availability of a new trail connecting the Nenana River ~~bridge~~ canyon to the visitor services building and parking area.

Page 222, column 1, paragraph 2 — Delete paragraph and replace with the following text:

~~The airstrip in the entrance area would continue to be available as an intermodal transportation link and for medivacs.~~

The airstrip in the entrance area would be closed, so the small percentage of visitors arriving by air would need to travel to the park from either the Healy or the Denali private airstrips. Flightseeing operations are already based at these airstrips outside the park and would continue to provide courtesy shuttles to and from area lodges. Helipads would be retained in the entrance area for medical evacuations.

## **IMPACTS ON THE SOCIOECONOMIC ENVIRONMENT**

### **Analysis**

Page 223, column 2, paragraph 2, sentence 1 — Change to read as follows:

The park's high priority (level 1) development program is estimated to cost approximately ~~\$24~~ \$19 million (see itemized costs in appendix E errata sheet) and would provide short-term construction-related employment opportunities in the local area over the economic life of the projects.

### **Conclusion**

Page 224, column 1, paragraph 3, last sentence — Change to read as follows:

Approximately ~~\$24~~ 19 million would be spent to implement high priority construction.

## **CUMULATIVE IMPACTS**

### **Cumulative Impacts on Wildlife**

Page 226, column 2, paragraph 4 — Change to read as follows:

~~Concession operated canoe rentals on Wonder Lake could have~~ Canoe use on Wonder Lake would be monitored to determine long-term effects on breeding populations of migratory birds. To minimize the potential for adverse impacts on nesting birds, canoes may need to be restricted from certain areas of the lake during certain times of the visitor use season. The appropriate number of canoes and the areas of the lake where they may be used would need to be determined in the development of the concessions agreements with Kantishna businesses. A monitoring program would ~~assist in assessing the additional~~ determine the effects of the canoe operation use on wildlife on and around Wonder Lake.

### **Cumulative Impacts on Vegetation and Soil**

Page 227, column 1, paragraph 3, sentence 1 — Rewrite as follows:

~~Within the park development zone, actions that would have major impacts on vegetation and soils would be construction of a 450-space parking lot near the visitor access center and the establishment of an additional gravel source at the Moose Creek terrace pit for in-park road repairs.~~ Within the park development zone, actions that would have major impacts on vegetation and soils include new construction associated with additional interpretive and educational facilities, infrastructure improvements, NPS support facilities, and increased recreational opportunities (e.g., new trails, picnic areas, backcountry campgrounds).

Page 227, column 1, paragraph 3, sentence 2 — Change to read as follows:

Implementing these proposals would satisfy ~~the~~ long-term development needs for parking and gravel sources, and as such, would constitute the maximum potential development on undisturbed sites within park boundaries.

Page 227, column 1, paragraph 3, last sentence — Change to read as follows:

~~Other~~ Facility proposals within the park development zone would reuse or expand existing development footprints, involve small acreage, or be along the park road, which would reduce the incremental impact on soils and vegetation.

### **Cumulative Impacts on Air Quality**

Page 227, column 2, paragraph 4, sentence 1 — Change to read as follows:

Air quality impacts from the proposed action could be expected to be negligible compared to the effects of other existing or future actions associated with tourism and increased development in the region.

### **Cumulative Impacts on Fish and Water Resources**

Page 228, column 1, paragraph 2, sentence 2 — Change to read as follows:

~~Establishment of the Moose Creek Terrace upland gravel~~ sources on previously disturbed land pit and removal of tailings piles in Kantishna may affect fish populations, but these effects would also be highly localized and temporary.

### **Cumulative Impacts on Cultural Resources**

Page 228, column 2, paragraph 3, sentence 1— Change to read as follows:

Under the proposed action, the historic integrity of the Wonder Lake ranger station, and the Headquarters Historic District, ~~and the Kantishna tailings piles~~ could be affected.

**UNAVOIDABLE ADVERSE IMPACTS, IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES, AND THE RELATIONSHIP BETWEEN SHORT-TERM USE OF THE ENVIRONMENT AND MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY**

Page 230, column 1, paragraph 4, sentence 2 — Change to read as follows:

Approximately ~~53.2~~ 42.3 acres of wildlife habitat would be committed to development, causing the irretrievable loss of ~~26.3~~ 25.5 acres of moose calving habitat in the entrance area, primarily near the visitor access center and Riley Creek campground.

Page 230, column 2, paragraph 2, sentence 1 — Change to read as follows:

Irreversible commitments of geologic resources include gravel excavated from the Teklanika ~~and Moose Creek pits~~, and ~~mine tailings obtained from placer mining operations~~ previously disturbed land in Kantishna.

## CONSULTATION AND COORDINATION FOR THE DRAFT DEVELOPMENT CONCEPT PLAN/ENVIRONMENTAL IMPACT STATEMENT

The National Park Service consulted with numerous agencies and organizations and the interested public in developing the planning alternatives described in this *Draft Development Concept Plan/Environmental Impact Statement*. A "Notice of Intent" to prepare an environmental impact statement was published in the *Federal Register* on July 20, 1995 (60 FR 37470). A newsletter announcing initiation of the planning project was published on August 11, 1995, and a series of public scoping meetings were conducted during the last week in August. A final public scoping meeting occurred in Healy, Alaska, on October 26, and public comments were accepted through November 22, 1995. Numerous informal meetings and telephone contacts with interested parties were also done during this period. The draft *Development Concept Plan/Environmental Impact Statement* was released to the public in June 1996, with a 60-day comment period extending from June 21 through August 19, 1996. A series of public meetings were held at various locations throughout Alaska between August 5 and 14, 1996, to receive comments and ideas. A summary of the draft document was also posted on the Internet. Following public review, comments have been analyzed, responses developed, and appropriate changes in the plan made and incorporated into the final development concept plan/environmental impact statement. The National Park Service has continued informal meetings and telephone contacts with interested parties.

### CONSULTATION WITH THE U.S. FISH AND WILDLIFE SERVICE

The National Park Service has consulted with the Alaska State Historic Preservation Office (SHPO) and the Western Office of the Advisory Council on Historic Preservation since the initiation of this project. An advance copy of the document was provided for their review. A copy

of the published *Draft Development Concept Plan/Environmental Impact Statement* was sent to both of these offices in order to initiate and plan for coordination of survey, eligibility, effect, and mitigation of possible cultural resources in the proposed project areas early in

Section 7 of the Endangered Species Act, as amended, prohibits federal agencies such as the National Park Service from implementing any action that is likely to jeopardize the continued existence of a federally protected (i.e., endangered, threatened) species. Further, the act requires that the National Park Service consult with the Fish and Wildlife Service on any action it authorizes, funds, or executes that could potentially affect a protected species or its designated critical habitat.

To help meet its responsibilities under the act, the National Park Service has consulted with the U.S. Fish and Wildlife Service to identify those listed plant and animal species that may occur within the entrance/road corridor area (see appendix F of the draft DCP/EIS). On October 21, 1996, in a telephone conversation between Natural Resource Specialist Liz Bellantoni of the National Park Service's Denver Service Center and Endangered Species Biologist Virginia Moran of the U.S. Fish and Wildlife Service's Ecological Services office in Anchorage, biologist Virginia Moran indicated that the U.S. Fish and Wildlife Service had no threatened and endangered species concerns regarding the draft entrance area and road corridor development concept plan for Denali National Park and Preserve.

### COORDINATION WITH THE ALASKA STATE HISTORIC PRESERVATION OFFICE AND THE WESTERN OFFICE OF THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

of the published *Draft Development Concept Plan/Environmental Impact Statement* was sent to both of these offices in order to initiate and plan for coordination of survey, eligibility, effect, and mitigation of possible cultural resources in the proposed project areas early in

the planning process. All implementation actions that could affect historic properties as defined in the 1965 National Historic Preservation Act would be evaluated through consultation with the SHPO. These actions include, but are not limited to, proposed changes to historic buildings or districts and ground-disturbing activities.

**FOLLOW-UP ENVIRONMENTAL/  
REGULATORY REQUIREMENTS**

In instances where resource conditions may have changed or more detailed site design is required, the National Park Service would ensure that the necessary level of impact assessment has been completed prior to implementing any proposed actions. Such evaluations may determine the need for more detailed environmental compliance. This may include preparation of project-specific environmental assessments tiered from this plan, obtaining additional clearances and permits from regulatory agencies, or development of further mitigation strategies.

Environmental assessments may be required to fully implement the following elements of the proposed action:

1. Package treatment plant and sewer lines for C-Camp and headquarters
2. Gravel acquisition from previously disturbed park land in Kantishna, with subsequent reclamation
3. 1-mile cultural resources trail, analyzing specific route and completing cultural resources (section 106) compliance
4. Nenana River Trail and Yanert Overlook campground, looking at specific route and location and trailhead development
5. Nenana River access facilities (if constructed inside park)
6. Savage River 2-mile loop trail with bridge, considering exact location and bridge design
7. Savage River short loop trail
8. Savage River bus turnaround
9. Savage River ridge trail (location, connections to other trails)
10. Primrose, Triple Lakes, Mt. Healy, Eielson and Wonder Lake trails; also McKinley Bar trail relocation
11. Kantishna backpacker campground (location, cumulative impacts)
12. Kantishna backcountry campsites (location, road maintenance, cumulative impacts)
13. Kantishna hostel (location, cumulative impacts)
14. New structures at headquarters including a greenhouse and laboratory
15. Replace Eielson Visitor Center (location, loss of functions for two years if on same site)
16. Expansion of C-Camp
17. Gravel acquisition from Teklanika River and access road
18. Park road reconstructions
19. Installation of septic tank and leachfield and development of water system to support winter use of environmental education center and visitor services building
20. Changes to traffic limits such as shoulder season limits and daily bus limits within the overall 10,512-vehicle allocation



A floodplain statement of findings would be required for the following:

- Teklanika River gravel source
- Relocation of Toklat gravel crushing operation, with river protection
- Gravel acquisition from Kantishna area

A wetlands statement of findings would be required for the following:

- Bicycle and foot trail connecting Nenana River bridge to Riley Creek area
- New permanent restrooms for kennels and headquarters visitors
- Relocate Triple Lakes trail
- Relocate McKinley Bar trail

- Riley Creek bridge on relocated Triple Lakes trail
- Savage River 2-mile loop trail
- Toklat rest stop, with river protection

A Clean Water Act, Section 404 permit would be obtained for the discharge of dredged or fill material into waters of the United States. A section 401 water quality certification would be acquired in conjunction with the 404 permit.

A Clean Water Act, Section 402, National Pollutant Discharge Elimination System permit would be obtained for any point source discharge of pollutants into surface waters.

## APPENDIXES – ERRATA SHEET

### APPENDIX A: ANILCA SECTION 810 - SUBSISTENCE STATEMENT

#### III. PROPOSED ACTION ON FEDERAL LANDS

##### Proposed Action

Page 260, column 1, paragraph 3, last sentence —

The National Park Service would work cooperatively with the Kantishna area lodges to develop additional visitor opportunities such as rehabilitating the Jauhola cabin and ~~authorizing additional recreational guiding services in the nonwilderness areas near Kantishna.~~ expanding guided hiking opportunities.

### APPENDIX B: LIST OF CHANGES TO 1986 GENERAL MANAGEMENT PLAN

#### ALTERNATIVE D - PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS

##### Entrance Area

Page 265, column 1, item 2 — Change to read as follows:

Construct ~~Gainesville cutoff~~ trail to Nenana River canyon for foot traffic and bicycles

Page 265, column 1, item 4 — Change to read as follows:

~~Reduce commercial use of~~ Close McKinley Park airstrip

##### Park Headquarters/C-Camp

Page 265, column 1, item 4 — Delete text:

~~Install modular rest room near park kennels~~

##### Parkwide

Page 265, column 2, item 3 — Change to read as follows:

Reduce professional ~~photographer~~ photography road traffic travel permits ~~from 10 to 5 per day by 50% and reallocate additional vehicles to new "annual bus" category~~

Page 265, column 2, item 4 — Delete text:

~~Expand visitor transportation system and Wildlife Tour limits by up to 5 buses per day if under annual cap of 10,512~~

## **APPENDIX C: ROAD MANAGEMENT**

### **ROAD REPAIRS AND MAINTENANCE**

#### **Proposed Road Improvement Projects**

##### **Priority 1: Correct Safety Concerns.**

**Improve Road Surface Friction:** Examples at miles 67–69

Page 271, column 1, paragraph 1, last sentence — Change to read as follows:

Repair methods would include providing and maintaining an adequate gravel surface by hauling in new material from the proposed gravel sources ~~on Moose Creek, in Kantishna.~~ in Kantishna.

### **GRAVEL SOURCES**

#### **Moose Creek Terrace**

Page 273, column 1, paragraph 2 — Add new paragraph below existing text:

Similar extraction methods would be used in developing gravel sources on previously disturbed lands in the Kantishna area, the priority under the proposed action. The Moose Creek terrace site could be developed later if necessary.

## APPENDIX E: COST ESTIMATES

Page 279 — The introductory text for the cost estimates, with minor revisions, has been included for informational purposes.

### APPENDIX E: COST ESTIMATES

Following are development cost estimates for the proposed action as of June 1996. Cost estimates are shown for only high priority (level 1) projects as identified in the text. Most cost estimates are rough NPS class C estimates based on the cost of similar facilities constructed in Alaska through federal government contracts. Actual costs may be higher or lower depending on the final design, site conditions, and the contracting agency. Facilities may be constructed by the National Park Service or some other entity such as a private or nonprofit corporation. Gross construction includes net government contract costs, construction supervision, and contingencies (net construction + 31%). Project planning includes surveys, more detailed site planning, facility design, construction documents, and additional project compliance activities (25% of net).

Most facility costs were developed using the NPS Denver Service Center cost estimating database. These figures were adjusted using data provided by the Alaska System Support Office and Denali National Park staff. Certain facilities, such as cabins or trails, would be developed using "off the shelf" plans and "day labor" construction; therefore design, construction supervision, and contingency costs are not identified. In other words, in some cases the project planning cost figure has been reduced below the standard 25% figure. These estimates are intended primarily to assist in comparing the relative cost of the alternatives. Some figures may not add up due to rounding. Due to inflation, these estimates are good until 1998.

Page 283, Table E-4 — Replace with the following table to show revised cost estimates:

**REPLACEMENT TABLE E-4: ALTERNATIVE D – PROPOSED ACTION: EMPHASIZE TRADITIONAL NPS PROGRAMS**

<b>FACILITY/ITEM</b>	<b>GROSS</b>	<b>PROJECT PLANNING</b>	<b>TOTAL</b>
<b>Accommodations</b>			
Phase out hotel — Site restoration	\$ 380,000	\$ 40,000	\$ 420,000
<b>Interpretive Facilities</b>			
Expand visitor access center/interpretive center (7,000 sq. ft.)	2,725,000	520,000	3,245,000
Interpretive displays			
Site work	655,000	125,000	780,000
Construct visitor services building (5,000 sq. ft.)	545,000	104,000	649,000
Interpretive displays	1,131,000	250,000	1,381,000
Site work	65,000	13,000	78,000
	164,000	31,000	195,000
<b>Parking</b>			
Expand visitor access center parking 250 spaces	1,633,000	326,000	1,959,000
<b>Bicycle Use</b>			
Construct trail connecting visitor services in the Nenana River canyon with visitor services in the park (up to 1 mile)	200,000	0.00	200,000
<b>Rest Areas</b>			
Rest area at Toklat	972,000	186,000	1,158,000
Rest area near Savage check station	365,000	73,000	438,000
Rest area near Savage campground	820,000	164,000	984,000
<b>Roads</b>			
New gravel sources in Kantishna	400,000	77,000	477,000
New gravel source at Teklanika (includes reclamation cost)	400,000	77,000	477,000
<b>Trails</b>			
Triple Lakes trail (7 miles, with bridge)	240,000	0	240,000
Loop trail system in Savage River area (2 miles, with bridge)	120,000	0	120,000
Loop trail at Primrose (up to 0.5 mile)	40,000	0	40,000
River access trail at Teklanika rest area (0.25 mile)	40,000	0	40,000
<b>Administrative and Support Facilities</b>			
New EMS/fire station	1,421,000	271,000	1,692,000
<b>Utilities</b>			
Rehabilitate entrance area utilities	5,800,000	0	5,800,000
Replace C-Camp leachfields with a package treatment plant	1,245,000	237,000	1,482,000
<b>Airstrips</b>			
Add vehicle/pedestrian bypass at Kantishna airstrip	17,000	4,000	21,000
<b>Habitat Restoration (Mitigation)</b>	75,000	0	75,000
<b>Resource Data Collection for Proposed Projects</b>	0	100,000	100,000
<b>TOTAL — ALTERNATIVE D</b>	<b>\$19,453,000</b>	<b>\$2,598,000</b>	<b>\$22,051,000</b>

