



Bandelier National Monument



**PARKING AND TRAFFIC MANAGEMENT
Summary of April 2010 Workshop**

May 2010

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National Park Service

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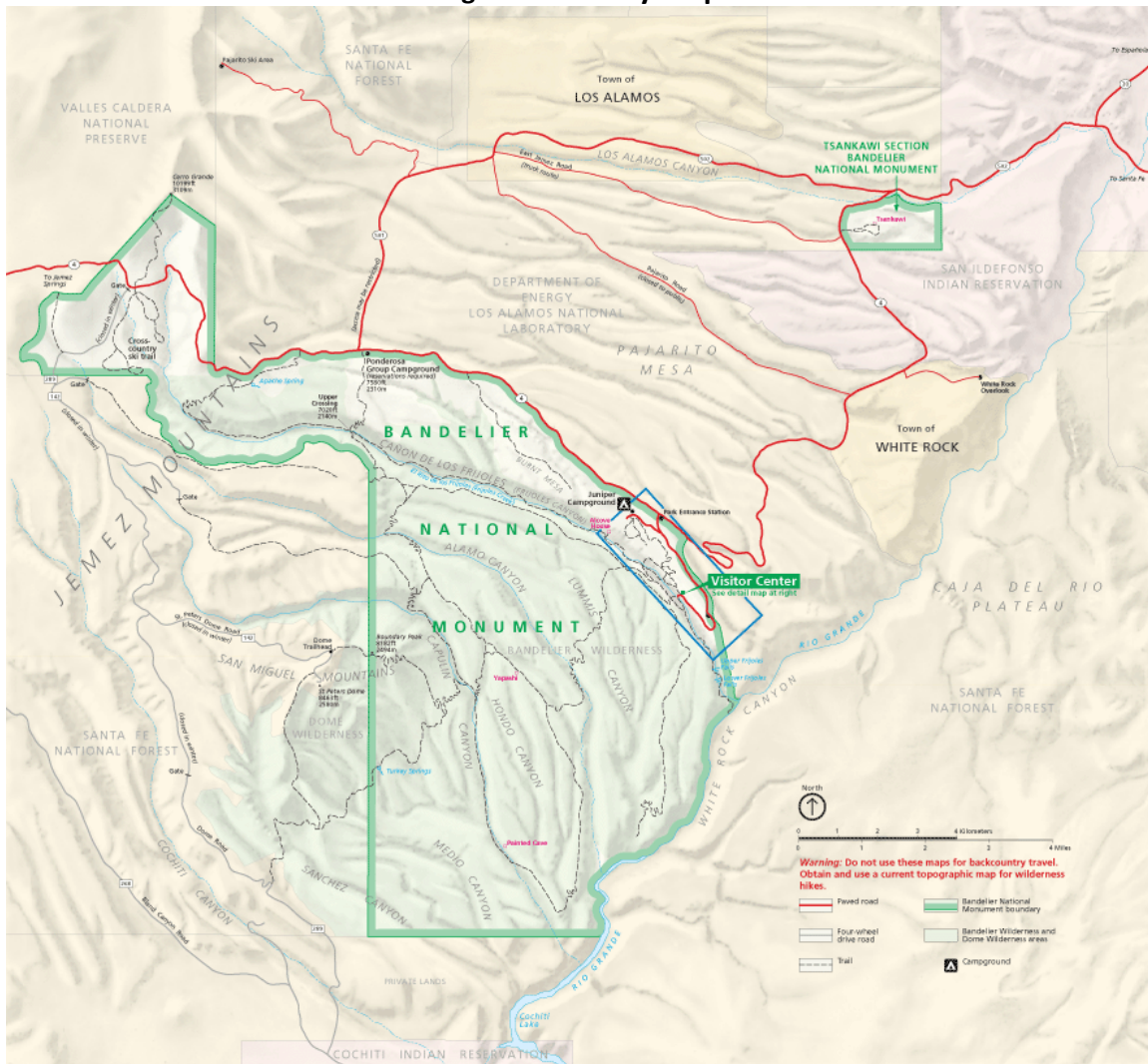
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1 INTRODUCTION

1.1 Project Setting

Bandelier National Monument (hereafter referred to as Bandelier or the park in this document) is located 48 miles northwest of Santa Fe, New Mexico near the towns of White Rock (7 miles) and Los Alamos (20 miles), which is home of the Los Alamos National Laboratory (LANL). The park includes a larger main section and a physically separated smaller area known as the Tsankawi Section, located 15 miles to the northeast of the main section. Bandelier's main entrance (the East Entrance) can be reached by way of US 285, State Highway (SH) 502 and SH 4 (see **Figure 1**). The park includes over 23,000 acres of designated Wilderness and is known for its mesas and shear-walled canyons, as well as ancestral Pueblo dwellings.

Figure 1. Vicinity Map



Source: www.nps.gov/band, 2010

Bandelier typically hosts nearly 215,000 visitors per year, over half of whom visit during peak season (May through August) (NPS Statistics Office 2010). The vast majority of visitors (90%) enter the park via the East Entrance (shown in **Figure 2**) (NPS TAG, 2004).



Park Sign at Entrance Station

The Entrance Road, located off of SH 4 leads to the East Entrance, from which the Juniper and Frijoles Canyon (the canyon) areas can be accessed. The Juniper area is accessed via a road approximately 0.2 miles south of the entrance station to the west of the Entrance Road. The Juniper area encompasses the Juniper Campground, NPS staff residences, an amphitheater and associated parking lot, the Frey Trailhead and a maintenance facility and sewage lagoons. The facilities in the Juniper area, along with the entrance station, are often described as being located on the “mesa top.” Another facility, the gravel lot, is also found on the mesa top. The gravel lot is located south of SH 4 approximately 0.3 mile east of the Entrance Road.

Figure 2. East Entrance Area Map



Source: www.nps.gov/band (modified by project team), 2010

The Entrance Road winds down from the mesa top and ends at the bottom of Frijoles Canyon. An access road to the former corral/stables area heads west from the Entrance Road 2.8 miles south of the entrance station. The Entrance Road ends approximately 0.2 miles south of the road to the corral/stables area (3.0 miles south of the entrance station) at the main parking area serving the facilities in Frijoles Canyon. Frijoles Canyon is the most visited area in the park and provides access to the best known archaeological sites in the park and a Civilian Conservation Corps (CCC)-era historic district. The Entrance Road ends at a stop sign at the north end of the main parking lot. See **Figure 3** for an overview of the Frijoles Canyon main lot area. The main lot is surrounded by CCC-era buildings, including the Visitor Center (on the south side of the lot), which is currently closed for rehabilitation; as well as administrative buildings, a snack bar and a gift shop (all located on the east side of the main lot). Approximately 25 employees reside within the canyon at residences located to the southeast of the main lot and behind the administrative buildings. A small maintenance area is also located southeast of the main lot.



End of Entrance Road at Main Parking Lot



CCC-era Historic District

Tour bus loading and unloading is currently conducted on the southwest side of the main lot, near a pedestrian bridge which crosses over El Rito de los Frijoles (Frijoles Creek). This tour bus loading/unloading area occupies 4 vehicle parking spaces. One RV parking space is located on the east side of the main lot.



Temporary Tour Bus Loading/Unloading



RV Parking Space in Main Lot

A vehicular bridge (also used by pedestrians) crosses Frijoles Creek at the northwest end of the main lot and provides access to the picnic area located north of the bridge, which is used for both picnicking and parking. The main trail to canyon hiking and attractions is accessed via the picnic area (this is the only access to the trail during rehabilitation of the Visitor Center). A temporary Visitor Center, cultural demonstration tent and portable toilets are located just south of the bridge and can be accessed by the pedestrian bridge to the south and the vehicular bridge to the north. The backcountry parking lot is south of the temporary Visitor Center facilities on the west side of Frijoles Creek. Parking in this area is presently used only by park employees, who must pass through the temporary Visitor Center and other facilities to reach the Backcountry Lot.

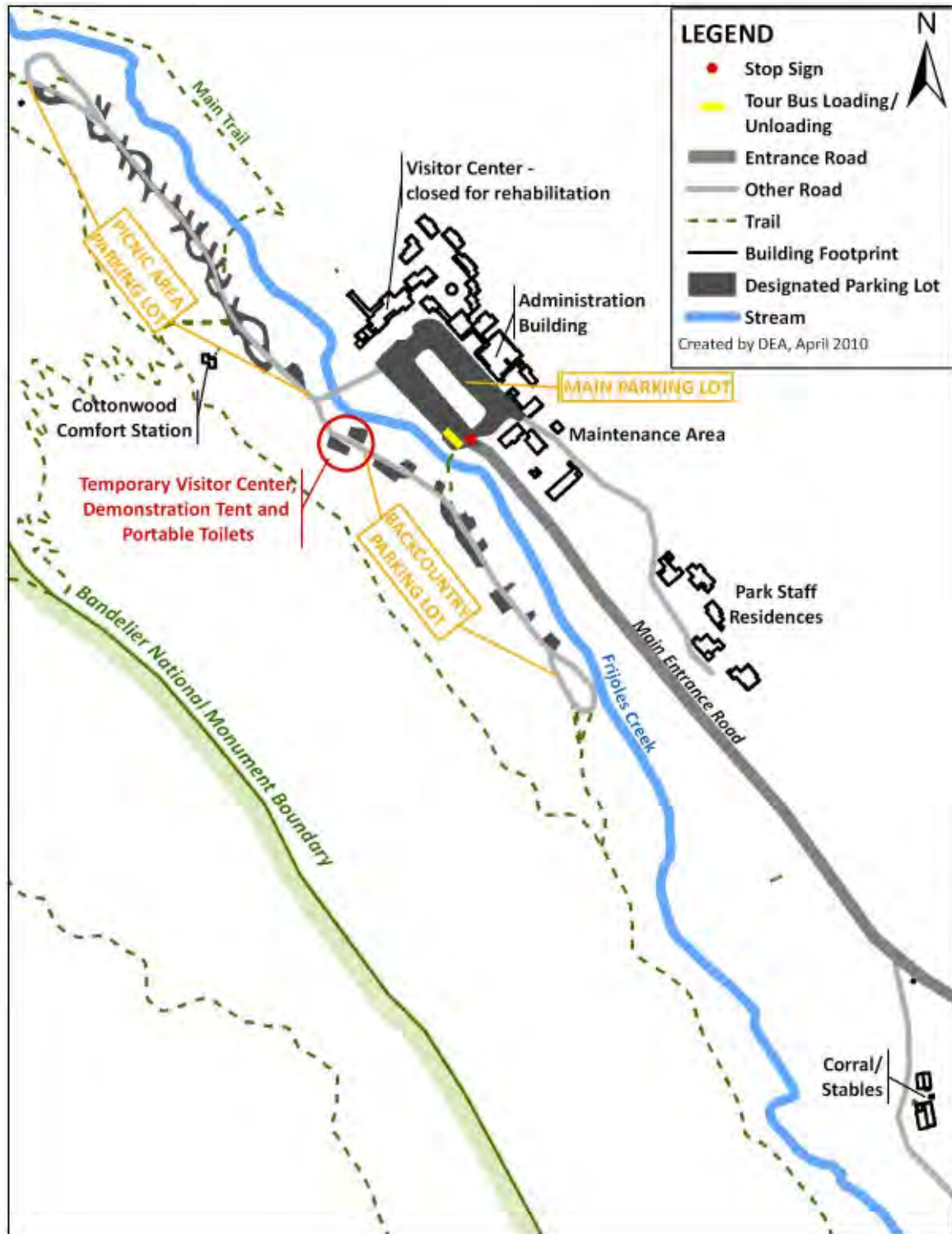


Bridge between Main Lot and Picnic Area/Backcountry Lots



Road Closed to Backcountry Lot at Temporary Visitor Center and Portable Toilets

Figure 3. Frijoles Canyon Main Lot Area Map



Source: Project Team, 2010

1.2 Park Mission, Vision and Goals

This project aims to advance Bandelier National Monument's Mission, Vision and Goals while providing an immediate solution to pressing parking and congestion problems. Bandelier's **Mission** is to "Preserve and protect the cultural and natural resources of Bandelier National Monument and provide for the enjoyment, education and understanding of those resources for present and future generations" (Park Staff, 2010).

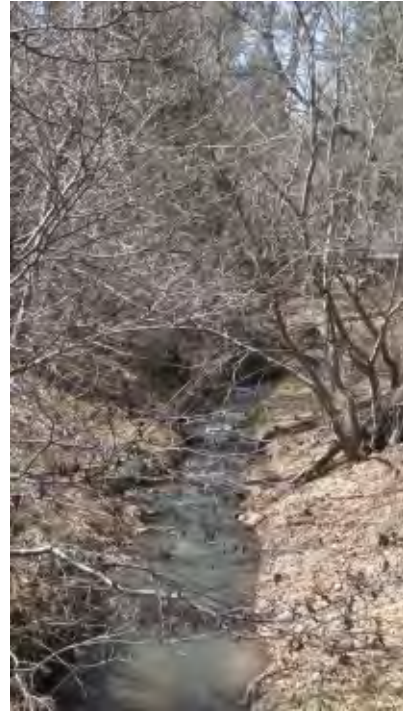
Bandelier's **Vision** is as follows:

"By linking the past with the present and the future, Bandelier National Monument creates a unique sense of place where archaeological and historical resources are protected, ecosystem and wilderness values are maintained, and preservation, stewardship, and sustainability are inspired within visitors, Pueblo people, employees, partners, neighbors, children of all ages, and the world."

Bandelier's has committed to working towards the following **Goals** for the years between 2005 and 2010:

- Reducing soil erosion and promoting vegetative conditions that create a natural fire regime and protect cultural resource integrity within the landscape.
- Creating a Bandelier experience inside and outside the park that facilitates a personal connection to the meanings of the place and catalyzes/inspires people to support, appreciate and integrate Park values into their lives.
- Maintaining prehistoric and historic resources in current or better condition to preserve cultural integrity and information potential.
- Having a healthy and productive work environment and workforce – through mutual trust, fulfillment from meaningful work, informed decision making processes, open communications, manageable workloads and sound leadership.
- Creating strategic partnerships to achieve Bandelier's goals.

(Park Staff, 2010)



Frijoles Creek

The park's goals do not currently include specific measures related to climate change or sustainability. However, interest in integrating these elements into park goals has been expressed by park staff.

1.3 Purpose of the Project

Due to high levels of visitation and limited parking supplies, visitors to Bandelier routinely experience 20 to 30 minute waits for parking spaces to become available after entering the park and associated congestion in the Frijoles Canyon area (NPS TAG 2004). These issues are likely to be compounded due to a series of construction projects scheduled to occur during the summer 2010 season, including completion of the reconstruction of the CCC-era Visitor Center. Construction of new parking is not considered to be an option because of the need to protect historic resources, constrained space, financial limitations and concerns about overcrowding. Consequently, park staff retained the National Park Service (NPS) Denver Service Center (DSC) and David Evans and Associates, Inc. (DEA) to develop a range of transportation and travel demand strategies to manage park visitation and related parking, decrease wait times for parking spaces and improve the visitor experience in the park in the near-term.

A workshop was held April 5th through 7th 2010 at Bandelier in order to address these issues. The workshop was facilitated by representatives from NPS DSC, NPS Intermountain Region (IMR) and DEA (collectively referred to as the project team). Representatives from several park divisions including the Ranger, Resources, Maintenance, Fee Collection and Interpretive Service divisions were involved throughout the workshop. On the afternoon of April 5th, the project team toured park facilities with the Chief Ranger, Acting Chief of Interpretation and Chief of Resources in order to become familiar with the park's issues. All park staff members were invited to participate in a 2.5 hour session on the morning of April 6th in order to share concerns and generate ideas for solutions (see **Appendix A** for a list of those who attended the meeting). Interested park staff were invited to participate in the afternoon session, which was spent developing and refining options and developing evaluation criteria with which to assess the potential short term actions. Representatives from the Ranger, Interpretive Services and Fee Collection divisions participated in this session. On the morning of April 7th, the project team presented a final summary of the issues, near-term options to address the issues, long-term considerations, and an assessment of the near-term options to key participants including the Chief of Maintenance who was not able to participate earlier in the process.

1.4 Goals and Objectives for the Project

The goals and objectives for the workshop, as defined by the project team and workshop participants, include the following items aimed at improving visitor experience through transportation management strategies:

- Simplify access to the park
- Manage traffic and parking
- Improve ease of wayfinding in the park
- Develop means to better utilize staff resources
- Develop short-term solutions that can be implemented immediately

- Develop recommendations to supplement short-term solutions and set the stage for longer-term solutions



Parking at Main Lot

1.5 Introduction to the Report

This report provides documentation of work completed prior to, during and subsequent to the April 2010 workshop. Section 2.0 outlines park issues and concerns defined by park staff and the project team. Section 3.0 provides an overview of data collection and analysis efforts including a summary of previous planning efforts, identification of project assumptions and givens, a list of current park users, data related to visitation and analysis of traffic and parking data. Data gaps are also identified. Section 4.0 describes planning timeframes defined to provide structure to the near-term options. Section 5.0 outlines near-term options defined as part of this project, including an overview of alternative typologies, a description of near-term options and assessment of options that could be implemented immediately. Section 6.0 outlines additional strategies to manage traffic and parking, as well as to improve visitor information. Finally, Section 7.0 details key recommendations for next steps.

2 PARK ISSUES AND CONCERNS

A list of issues experienced by visitors and staff at the park was generated by park staff as part of the workshop. The project team and key participants used this list of issues as the basis for near-term options and long-term considerations developed as part of the workshop.

- Parking and traffic congestion
 - Vehicles routinely queue at the entrance to the parking lot during peak season and can regularly wait up to 30 minutes. Special events increase these effects dramatically.
 - Congestion at the entrance to the parking lot can create a bottleneck that prevents NPS vehicles from easily entering the Frijoles Canyon area for regular maintenance and operation activities.

- Tour bus loading and unloading contributes to parking and traffic congestion issues.
- Several construction projects are underway or planned for Frijoles Canyon in the summer 2010 season and will further impact parking congestion.
- Visitor experience and resource protection
 - Visitor experience, which is primary to both the NPS and park missions, is often compromised by a poor arrival experience (long waits, congestion, confusion, etc.).
 - Visitors often encounter difficulty finding the temporary Visitor Center and toilets, and often do not visit the facility, where a self-guiding interpretive brochure is available, prior to hiking along the main loop trail. This results in missed interpretive and educational opportunities.
 - Visitors are often confused as to where key facilities (temporary Visitor Center, restrooms, main trail, etc.) are located. Wayfinding and signage exists to direct visitors, so it is not clear why visitor confusion persists. It may be that the arrival process is not a clear and logical sequence of steps and that the arrival experience varies depending on where visitors park. Also, signage is only presented in English, which may be an issue for some visitors.
 - Resources are often damaged because of overcrowding, parking practices and creation of social trails and cut-through paths.
 - Wildlife breeding and nesting occurs within the Frijoles Canyon main lot area and further constrains the construction season due to the need to mitigate for noise and other impacts resulting from construction activity
- Advance communication with public and visitors
 - Lack of real time information on construction and traffic congestion affects the visitor's ability to make decisions regarding the timing of their visit. The park does maintain a website but does not have highway advisory radio (HAR) capabilities or changeable message signs.
 - Any changes to existing visitor experience need to be communicated to the public as soon as possible. Messaging to the public takes time to develop.
- Employee utilization and satisfaction
 - Staff members at all pay levels are frequently diverted from their designated responsibilities to manage traffic and parking, resulting in a misallocation of staff resources. This decreases productivity and increases employees stress levels.
- Employee parking and travel to work
 - Employee commute options must respect the fact that staff work hours vary by days of the week and hours of the day.
- Park maintenance and operation
 - It is important to maintain park operations and maintenance throughout construction, including retaining the maintenance yard in the canyon for maintenance activities (as opposed to parking).
 - There is a need to balance access for staff and visitor experience

- Safety
 - Employee and visitor safety is compromised because of pedestrian-vehicle conflicts, particularly in the picnic area and on the vehicle bridge (where construction traffic contributes to the chaos).
 - Employee and visitor safety is compromised because of vehicle-vehicle conflicts.
 - Employees are subject to exhaust fumes and environmental hazards (sun, wind, etc.) when they act as parking and traffic guides. Fee collection staff members are particularly affected.
- Air Quality
 - Pollutant emissions are increased due to idling cars waiting to enter the park. This affects air quality at this Class I park.
- Overcrowding
 - Some park staff expressed concerns about overcrowding in Frijoles Canyon and indicated a need to better understand user capacities.
 - Visitation to Bandelier is highly concentrated in the Frijoles Canyon area. Opportunities exist to disperse visitor activities to other areas of the park and to other nearby visitor attractions.

3 SUMMARY OF FACTS

Available data and previous plans were gathered as part of the workshop in order to develop a summary of the best available information relevant to issues experienced at Bandelier. Previous planning efforts are documented in order to provide a framework of previous decision-making and recommendations. Project assumptions and givens were developed by the project team and park staff and are identified below. A list of current park users is also outlined, along with visitation, traffic and parking data and analysis. Data gaps are also identified.

3.1 Previous Planning Efforts

Several planning documents developed over the last 35 years provide guidance for actions at Bandelier National Monument. These planning documents are identified and recommendations relating to transportation and congestion management are summarized below.

- ***Final Master Plan, April 1977***
 - Recommends further study of traffic congestion at the main park entrance to develop appropriate solutions.
 - Recommends phasing most parking out Frijoles Canyon and relocating parking to the mesa top.
 - Recommends establishing “controlled visitor transportation” (mandatory shuttle service) during the summer.

- ***Transportation Study, 1981***
 - Provides visitation and traffic data and analysis, including a source for the percentage of total vehicle entries that are present at the maximum vehicle occupancy of the Frijoles Canyon area.
 - Evaluates a range of transportation alternatives including private vehicle access, mandatory transit shuttle service (as proposed in the *Final Master Plan*), as well as partial transit/partial vehicle access alternatives. Report includes detailed analysis of operational concepts, vehicle types, system operating characteristics and system support facilities.
 - Recommends mandatory transit shuttle service.
 - Evaluates alternative costs including an analysis of capital, operating and maintenance costs, as well as an evaluation of user fees and subsidies.
 - Implementation of a shuttle system has not occurred, likely due to lack of funding for the high cost of operating a mandatory shuttle and the required capital investments.

- ***Resource Management Plan, January 1995***
 - Identifies key cultural and natural resources and related desired conditions.
 - Describes, documents and prioritizes resource management issues and problems related to natural and cultural resources.
 - Identifies prescriptive actions designed to minimize the loss of resources and information, meet legal requirements, mitigate management and visitor-caused impacts to resources and mitigate external impacts to the park's natural and cultural resources.
 - This plan does not include a visitor experience component.

- ***Draft Development Concept Plans and /Finding of No Significant Impact (FONSI) – Frijoles Canyon and Tsankawi, December 1995***
 - Recommends the relocation of support activities out of Frijoles Canyon, including the maintenance facility and administrative offices. The plan recommends that principle visitor services and interpretation remain in the canyon. The relocation of the maintenance facility to near the sewage lagoon was completed. All other recommended actions have not been completed.
 - Recommends a mandatory shuttle during peak season with a primary staging area and parking lot on the mesa top near the entrance station. The FONSI mandates that a Visitor Experience Resource Protection (VERP) study be completed prior to “initial visitor facilities and visitor service operations planning” and that the frequency of a shuttle operation “will not exceed the capacity determined by the VERP.” None of the above described actions have been implemented, nor has a VERP study been completed.
 - Implementation of a shuttle system has not occurred, likely due to lack of funding for the high cost of operating a mandatory shuttle and the associated required capital investments.

- ***Federal Highway Administration and Federal Transit Administration Report, 1999***
 - Identifies need for a 2.5-mile shuttle route from the entrance station (on the mesa top) to the Visitor Center in Frijoles Canyon in order to address congestion issues and queuing at the entrance to the parking lot.
 - Recommends further consideration of a shuttle between the entrance station and Tsankawi. Shuttle service was further considered during a subsequent site visit by the Transportation Assistance Group (TAG).
 - Recommends a VERP study in order to determine whether the monument could accommodate additional visitors without degrading visitor experience or natural and cultural resources. No steps have been taken to date to conduct a VERP study.

- ***Transportation Assistance Group (TAG) Pre-Project Planning (PPP) Review, May 2004***
 - Provides a summary of a TAG site visit that occurred in July 2003 in order to review Project Management Information System (PMIS) work order 63188, which requests \$1.32 million in funding for an alternative transportation study.
 - Recommends the modification of PMIS 63188 to request funding for NPS participation in a multi-agency taskforce for a Regional Transportation District.
 - Recommends that the park undertake a comprehensive transportation planning effort as part of the development of a General Management Plan (GMP).
 - Recommends further consideration of possible partnership opportunities.

- ***Greening Charrette, April 2003***
 - Identifies congestion and lack of parking as problems.
 - Identifies a lack of widespread use of alternative fuels for park vehicles and fleet.
 - Recommends the development of means to disperse visitor use, including use of the Frey Trail and the opening of the Cerro Grande area for hikers. Cerro Grande has subsequently been opened for visitor use.
 - Recommends investigation of a hiker's shuttle to provide access back to vehicles parked in the amphitheater parking lot for visitors hiking down Frey Trail.
 - Recommends further consideration of shuttle options outlined in previous reports, as well as the possibility of car-free days.
 - Recommends the consolidation of employee parking in the gravel yard, which is located on the mesa just south of the park entrance station off of SH 4.
 - Recommends the development of a Transportation Management Plan to manage cars, provide information to intercept visitors before they arrive at the park, and develop an overflow parking agreement with LANL or another partner.

3.2 Project Assumptions and Givens

The following items were identified by project team and park staff as assumptions to be taken as givens during the planning process.

- All recommendations will support the objectives defined by the park's Mission, Vision and Goals.
- The park has limited to no additional funding available to address traffic and parking issues.
- Near-term solutions must not impact the park's natural and cultural resources so that any recommended actions would not require compliance beyond a Categorical Exclusion or Memo to File. Solutions must maintain or improve the current condition of natural and cultural resources.
- Recommendations as part of this project will not focus solely on implementing transit shuttle service.
- All recommendations will meet Federal Accessibility Standards.
- Visitation in summer 2010 will remain at approximately the same level as experienced in summer 2009.
- Bandelier is currently prioritized as number 15 in the queue for the development of a GMP. The GMP, which will have a transportation component, will likely receive funding in FY2011.

3.3 Current Park Users

A list of users that currently frequent the canyon was generated as part of the April 5, 2010 workshop. The resulting list of park users is outlined below:

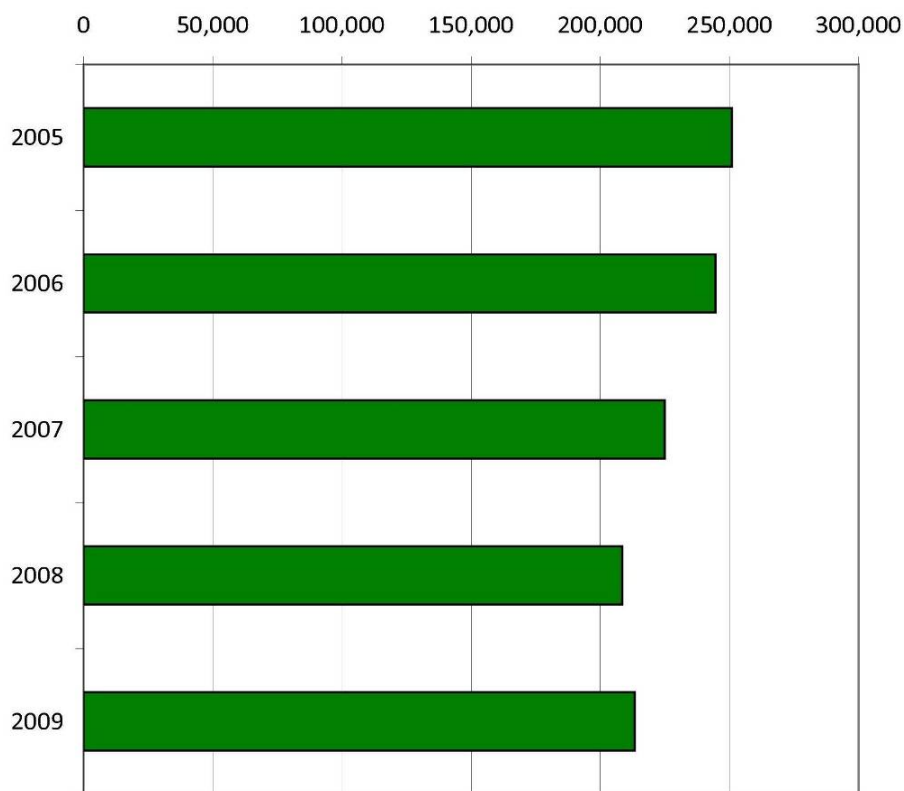
- Local day-use visitors arriving in private vehicles
 - A key group of these users are Albuquerque residents who drive approximately two hours and arrive during peak hour.
- Tourist day-use visitors from out of the region arriving in private vehicles
- Day-use visitors arriving by tour bus
- Day-use student visitors arriving by school bus
 - Parents in private vehicles often accompany students on field trips
- Overnight visitors
 - An average of three backpacker vehicles are reported to be present in the canyon at any given time
- Visitors staying at Juniper Campground (campground closed for the upcoming summer 2010 season)
- Park employees who reside outside of the park
- Park employees who reside within the park (in the Juniper area and in Frijoles Canyon)
- Employees from other government agencies with offices in the canyon (USGS, Vanishing Treasures, etc.)
- NPS vehicles engaged in maintenance activities
- NPS employees visiting temporarily from other parks or administrative units

- Private consultants/contractors hired by NPS
- Concessioner employees
- Park volunteers
- Western National Parks Association (WNPA) employees
- Cultural demonstrators (Living history)
- Vehicles related to park/concessioner deliveries
- Construction worker vehicles
- Vehicles making construction deliveries

3.4 Visitation

Visitation levels reached their zenith in the mid- to late 1990s when total annual visitors exceeded 350,000 and peaked at over 430,000 visitors. As shown in **Figure 4**, visitation levels steadily dropped between 2005 and 2008, with a slight increase of two-percent between 2008 and 2009. Approximately 213,400 individuals (recreational and non-recreational) visited Bandelier in 2009. **Figure 5** depicts visitation by month for 2009. Peak visitation occurs during the months of May, June, July and August, when more than half of annual visitors (113,000) visit the park. Another peak occurs in October due to the Albuquerque International Balloon Fiesta (NPS Statistics Office, 2004).

Figure 4. Five-Year Historic Visitation
Number of Visitors



Source: Public Use Visitor Statistics, 2010

Figure 5. 2009 Visitation by Month



Source: Public Use Visitor Statistics, 2010

3.5 Traffic and Parking Data

Data related to traffic and parking was collected and analyzed as part of this project. Data sources are described below, along with an analysis of traffic volumes, vehicle accumulation, parking lot capacity, and employee parking demand.

Data Sources

Traffic and Parking Data was obtained from three primary sources: the 1981 *Transportation Study*, monthly traffic counts recorded by park staff for 2008 through the present (from which some daily traffic counts were developed) and field inspection conducted during the workshop (April 5-7, 2010).

The 1981 *Transportation Study* provides detailed information regarding visitation, traffic volumes and traffic volume projections and vehicle accumulation. Monthly traffic counts recorded by park staff starting in 2008 were provided to the project team. These traffic counts record the number of vehicles exiting the park at the entrance station. Therefore, they do not allow for analysis of travel patterns related to entrance and exits from the park. The consistency of traffic count records vary. 2008 traffic counts were not taken

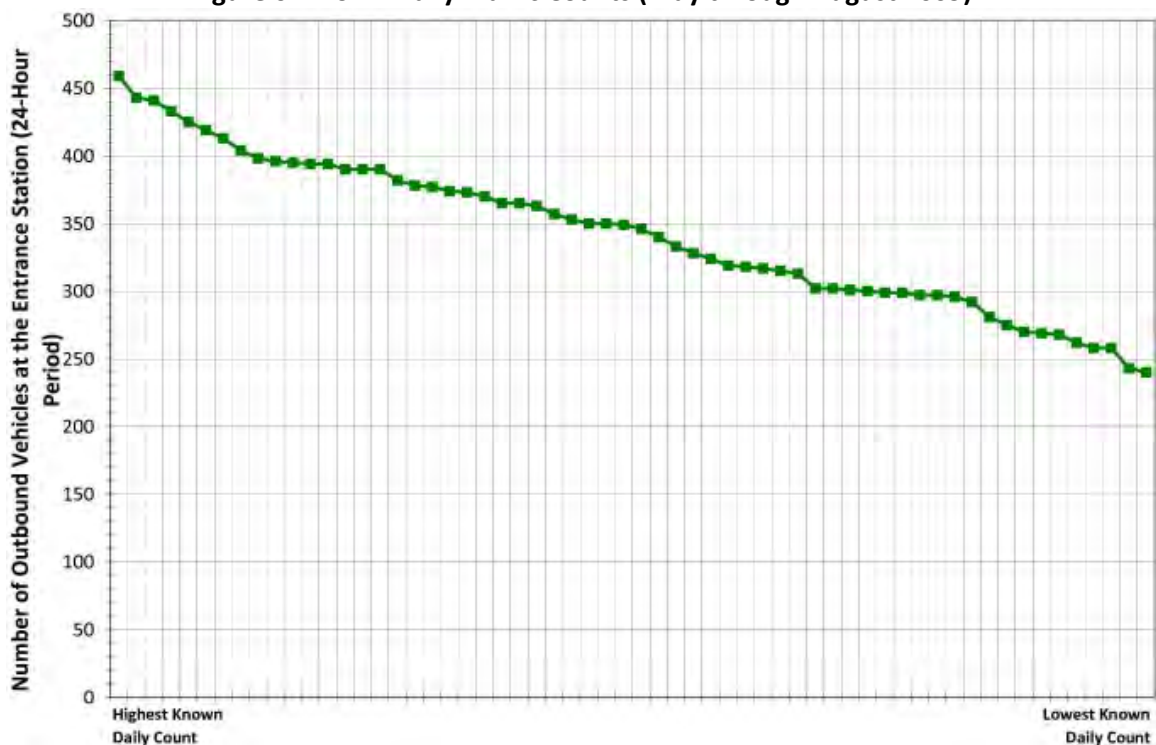
frequently enough to be usable for this effort. Traffic counts were reported more consistently for 2009 peak months and are used in this analysis.

Field inspections undertaken during the April 2010 workshop yielded rough estimates of parking capacities for all parking lots that are currently open to visitors and employees or that could potentially be open in the future.

Traffic Volumes

Daily traffic volumes were derived from traffic count data recorded by park staff. Sixty-one unique peak month daily traffic counts (May through August) were able to be extracted from the traffic count data. The range of these traffic counts is shown in **Figure 6**. These traffic counts represent the total number of vehicles exiting the park at the entrance station in a 24-hour period. Therefore, the counts do not include campground users, residents or park staff that travel to and from the Juniper Campground and residence area to Frijoles Canyon.

Figure 6. Known Daily Traffic Counts (May through August 2009)



Source: Traffic Count Data Provided by Bandelier National Monument Staff, 2010

In transportation planning work, a “design day” traffic count is selected to represent a typically busy day, but not the busiest day. The design day is typically developed by taking the 85th percentile traffic volume (15% of hourly or daily counts are higher than the design day count). Because visitation at parks is concentrated in a relatively short season, DEA’s practice for determining design conditions at parks is to use the 90th to 95th percentile count (5 to 10% of the days have higher counts than the design day). Statistics related to average weekday, average weekend day and the proposed design day traffic counts is shown in **Table 1**.

Table 1. Traffic Count Statistics

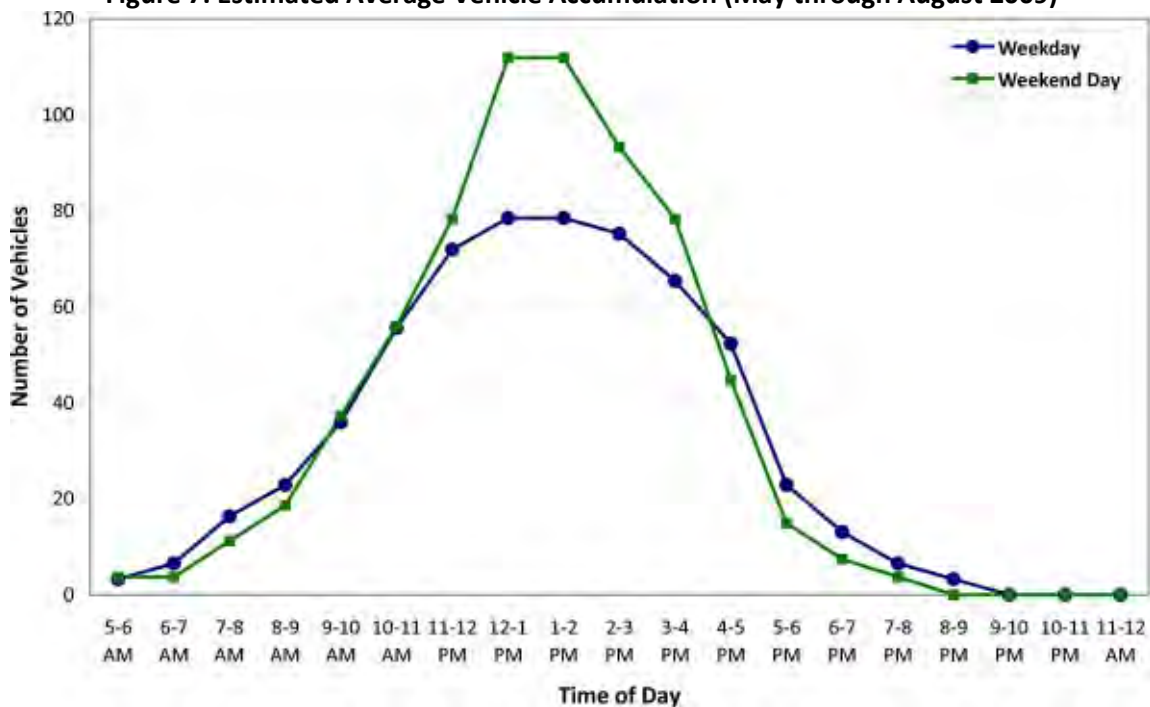
Statistic	Number of Vehicles (24-Hour Period)
Average Weekday	327
Average Weekend Day	373
Design Day	420

Source: Traffic Count Data Provided by
Bandelier National Monument Staff, 2010

Vehicle Accumulation

It is important to understand the total number of vehicles present in the park at any given time, referred to as “vehicle accumulation,” in order to develop options that can accommodate the resulting parking demand. Because no hourly traffic counts currently exist, there is no way to precisely analyze visitor arrival rates by time of day, or vehicle accumulation rates. In the absence of current data, the project team applied the daily traffic count data provided by park staff to the hourly vehicle accumulation percentages reported in the 1981 *Transportation Study* to develop an assessment of expected hourly vehicle accumulation in the park. **Figure 7** provides an overview of the resulting vehicle accumulation by hour. In this figure, vehicle accumulation represents the total number of vehicles in the park at any given time, including vehicles parked in Frijoles Canyon, vehicles traveling between the entrance station and the canyon, vehicles waiting to park in the canyon, employee vehicles parked or traveling in the canyon and any NPS-related vehicles parked or traveling in the canyon.

Figure 7. Estimated Average Vehicle Accumulation (May through August 2009)



Source: Traffic Count Data Provided by Banderlier National Monument Staff, 2010; *Transportation Study*, 1981.

Statistics related to average weekday, average weekend day and design day vehicle accumulation is shown in **Table 2**.

Table 2. Maximum Vehicle Accumulation Statistics

Statistic	Maximum Number of Vehicles in the East Entrance Area at One time
Average Weekday	78
Average Weekend Day	112
Design Day	126

Source: Traffic Count Data Provided by Bandelier National Monument Staff, 2010; *Transportation Study*, 1981.

The peak hours of visitation appear to occur during 11 AM and 4 PM. Park staff anecdotally reported that visitors from White Rock and Los Alamos typically arrive at the park early in the day and that tourists more commonly visit during peak hours. Parking capacities identified during the April 2010 workshop indicate that 110 parking spaces are currently available for visitors. Using available data, it appears that parking demand exceeds supply for at least two hours on average weekend days. However, anecdotal information from park staff indicates that parking demand exceeds supply for a minimum of three to four hours and often more on weekend days. There are at least 13 days in the peak season with higher visitation than the average weekend day. Parking demand on these days likely exceeds parking supply for a longer portion of the day and by a greater amount than on an average weekend day. More detailed data collection and analysis would be required in order to identify the specific time periods when demand exceeds supply.

Tour Bus Operations

Tour buses frequently carry visitors to Bandelier. There is one loading/unloading space reserved for tour buses in Frijoles Canyon, located on the western edge of the parking lot near the pedestrian bridge. Tour buses are allowed to drop off visitors in this space, and then must leave the canyon. They are able to park in the amphitheater parking lot on the mesa top while waiting for visitors to complete their visit. There is no reservation system in place for tour buses, and they arrive up to every 15 to 30 minutes during peak season. Park staff expressed some concern that the unregulated presence of tour buses may degrade visitor experience due to high concentrations of visitors arriving at the same time. Park staff indicated a need to evaluate user capacity in greater detail, possibly through a VERP study or through the GMP process.



Pedestrian Bridge near Tour Bus Loading/Unloading

Parking Capacity

Data related to parking lot capacity was gathered during the April 2010 workshop. A complete inventory of parking lots currently open to visitors and employees, as well as parking lots that could potentially be open in the future in Frijoles Canyon and elsewhere in the East Entrance area is provided in **Tables 3** and **4**.

Table 3. Frijoles Canyon Parking Lot Capacity

Parking Lot	Current Use	Number of Spaces	Notes
Main Lot	• Visitor parking - NPS and concessioner employees may park here, along with volunteers, cultural demonstrators, etc.	82 spaces	• 76 spaces for general visitor parking • 4 spaces reserved for bus loading/unloading • 1 space reserved for one RV • 1 NPS vehicle
Picnic Area	• Same as Main Lot	28 spaces	
Location of Temporary Visitor Center (including demonstration tent and toilets)	• No parking is available due to presence of temporary structures	19 spaces	• Temporary Visitor Center and tent take 10 spaces • Temporary toilets take 9 spaces
Backcountry Lot	• Employee parking • No visitor parking is available due to presence of temporary structures	27 spaces	
TOTAL	156 spaces 110 spaces are currently available for visitors		

Source: Project Team, 2010

Approximately 156 spaces currently exist in the Frijoles Canyon area, 110 of which are currently open to visitor parking. A temporary Visitor Center, demonstration tent and

toilets take up 19 parking spaces. Because of these temporary structures, visitor parking is not allowed in the backcountry lot (27 spaces), although employees are permitted to park here.



Main Lot



Pull-Through Parking Space at Picnic Area Parking



Backcountry Lot (Currently used for Employee Parking)

Table 4. Parking Capacity for Lots Outside of Frijoles Canyon

Parking Lot	Current Use	Number of Spaces
Residential parking	• Parking for employees who live in the canyon	25 spaces
Corral/Stables	• Occasional employee parking • Construction staging • Occasional temporary residence for contractors (using utility hook-ups)	14 spaces
Amphitheater (not including trailhead parking)	• NPS vehicles • Occasional employee parking • Occasional visitor parking	30 spaces
Maintenance Access Road	• No parking typically occurs here	10 to 15 spaces
Gravel Lot Access Road	• No parking typically occurs here	10 spaces
TOTAL	Approximately 89 to 94 spaces	

Source: Project Team, 2010



Corral/Stable Area Road

Approximately 90 spaces are available in other locations outside of Frijoles Canyon. Twenty-five of those spaces are considered to be used by employees who reside in the canyon. Fourteen spaces are available in the corral/stables area, located approximately 0.1 mile up the Entrance Road from the entrance to the main parking lot. An additional 50 to 55 spaces are available at different sites within the East Entrance area.

Employee Parking Demand

The number of employees and other officials employed during peak season, as well as employee parking demand was identified during the April 2010 workshop, as shown in **Table 5**.

Table 5. Approximate Number of Employees and Other Officials during Peak Season

Type of Employee	Number of Employees
Permanent NPS	35
Seasonal NPS	44
Concessioner Staff	5
Other (Volunteers, Cultural Demonstrators, etc.)	5
TOTAL	89 employees/other officials

Source: Project Team and Park Staff, 2010

Twenty-five of the NPS permanent and seasonal employees live in NPS residential units in Frijoles Canyon. These 25 employees are assumed to each use a parking space in the residential area. All employees and other officials are not likely to be parked in Frijoles Canyon at one time. Therefore, it was assumed that 90% of all employees and other official users (80 individuals) are present in the canyon at one time and require parking at some location within the canyon or East Entrance area.

3.6 Data Gaps

Several data gaps were identified as part of this process, as outlined below:

- Hourly traffic counts in each direction at the entrance station and “below” the Juniper Access road on the Entrance Road – Collection of this data would provide a reliable source to analyze travel patterns and vehicle accumulation.
- Vehicle arrival and departure data – A license plate survey would provide detailed information on visitor arrivals and departures in order to develop data on length of stay.
- Visitor use data – A visitor use survey would provide information on the type of visitors using the park, activities they engage in within the park, activities they engage in outside of the park, etc.
- User capacity data – A study of user capacity would provide information on the desired number of users in the canyon.

4 PLANNING TIMEFRAMES

Four distinct planning timeframes were defined based on several construction projects scheduled for summer 2010. The construction efforts planned or underway for the summer 2010 season include the following:

- **Rehabilitation of the Visitor Center**
 - Expected start date: Currently underway
 - Expected completion date: mid-July 2010



Visitor Center Rehabilitation Underway

- **Re-roofing of CCC-era buildings in Frijoles Canyon**
 - Expected start date: June 15, 2010
 - Expected completion date: August 15, 2010
 - Expected duration of construction: 2 months
- **Re-paving of the Juniper Campground and access roads**
 - Expected start date: June 1, 2010
 - Expected completion date: November 30, 2010
 - Expected duration of construction: 5 months
 - Note: The re-paving is funded with American Recovery and Reinvestment Act of 2009 (ARRA) along with other re-paving projects in other proximate government lands.
- **Other Related Construction**
 - Replacement of the gas line to Frijoles Canyon – This project includes work that will occur above the administration building and residential areas in the canyon. A portion of the Frijoles Canyon maintenance area will be used for staging. The timeline of construction is unknown.
 - Installation of new Visitor Center exhibits – New exhibits will be installed after the completion of the rehabilitation of the Visitor Center. The Visitor Center is expected to be complete by mid-July 2010.

The planning timeframes are based on the overlapping of the three main construction projects (rehabilitation of the Visitor Center, re-roofing of building in the canyon and re-paving in the Juniper Campground area). The defined planning timeframes used to develop near-term options for the summer 2010 season are outlined below.

Timeframe 1: Renovation of Visitor Center Underway

This timeframe encompasses the time from now (mid-April 2010) until the Visitor Center is expected to re-open (scheduled for mid-July 2010, but may be later due to construction delays). Based on 2009 visitation, approximately 72,000 visitors could visit the park during this time period (May through mid-July) (NPS Statistics Office, 2010). If construction is delayed beyond the current expected completion date, more visitors would be affected.

Timeframe 2: Visitor Center Complete, Re-Roofing Project Underway

This timeframe assumes that the Visitor Center has re-opened (expected in mid-July 2010) and that the re-roofing project in Frijoles Canyon is underway. This timeframe assumes that the re-paving project in the Juniper area has not yet begun.

Timeframe 3: Visitor Center Complete, Re-Roofing and Re-Paving of Juniper Area Projects Underway

This timeframe assumes that the Visitor Center has re-opened (expected in mid-July 2010) and that the re-roofing project is still underway. It assumes that the re-paving of the Juniper area is also underway.

Timeframe 4: All Construction Complete (Summer 2011 Season)

This timeframe assumes that all major construction projects affecting Frijoles Canyon and the Juniper area are complete. This timeframe provides the basis of the No Action scenario for the summer 2011 season.

5 NEAR-TERM OPTIONS

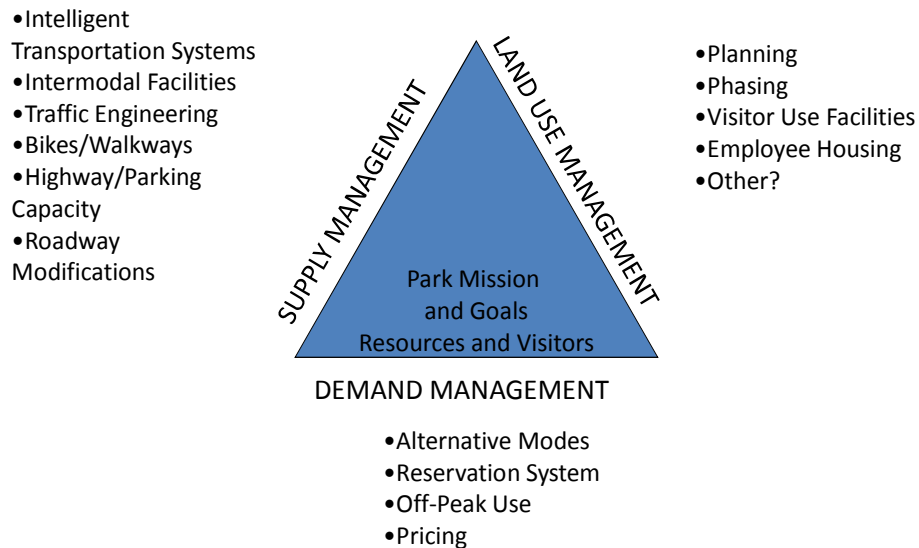
Near-term Options were developed based on the planning timeframes described in **Section 4.0**. A description of these options is provided below. Typical NPS alternative typologies or strategies used to develop the options are also described below. An assessment of the Timeframe 1 options is provided in order to help guide the park's decision-making process.

5.1 Alternative Typology

Figure 8 provides an overview of the three main types of approaches that are combined to develop transportation solutions. The first approach is to manage adjacent land use and facilities, including visitor use facilities and employee facilities. The types of land use adjacent to transportation facilities and the types of facilities present can have a large impact on the effectiveness of transportation solutions. The second approach to transportation planning is to manage the demand, including consideration of alternative modes of transport, development of incentives to equalize use and control the timing and

duration of visitation. Finally, management of supply is incorporated into transportation planning through the use of Intelligent Transportation Systems (ITS), modification of road and parking facilities and implementation of alternative transportation (pedestrian and bicycle) facilities. All three methods were considered in the crafting of near-term recommendations for Bandelier.

Figure 8. A Typology of Alternatives



Source: NPS Denver Service Center, 2010

5.2 Options by Planning Timeframe

Each option identifies the amount and potential location of visitor parking supplies, as well as employee parking and access management concepts.

Section 6.0 provides a list of strategies that could be considered to supplement the recommendations in order to manage traffic and parking, as well as to improve visitor information.

Common to All Timeframes and Options

Several recommendations are made for all options, as outlined below.

- **Re-stripe the main lot**
 - Parking spaces in the main lot are currently 10 to 12 feet wide. It is recommended that they be re-striped to provide 9-foot wide parking spaces.
 - Re-striping the lot to 9 feet spaces will result in three to five additional spaces.
- **Other parking requirements**
 - Retain picnic area for visitor parking
 - Retain one parking space for official NPS vehicles in the main lot

- o Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon
- o Provide at least 14 spaces in the Corral/Stable area for employee parking

Timeframe 1: Renovation of Visitor Center Underway

The project team developed two options for Timeframe 1 which encompasses the time from now (mid-April 2010) until the Visitor Center is expected to re-open (mid-July 2010). Shortly after the conclusion of the April 2010 workshop, park leadership decided to implement Option B (Move Temporary Visitor Center to the Administrative Building Lobby). The information presented below contributed to that decision.

“Option A: Retain Temporary Visitor Center in its Current Location” assumes that the temporary Visitor Center and associated facilities (cultural demonstration tent and portable toilets) remain in their current locations. Under this option, tour bus loading and unloading would likely be relocated to the space currently reserved for RVs. An RV space would need to be designated elsewhere, possibly in one of the pull-through spaces in the picnic area. Portable toilets would remain in their current location near the temporary Visitor Center. **NOTE: This option is obsolete**

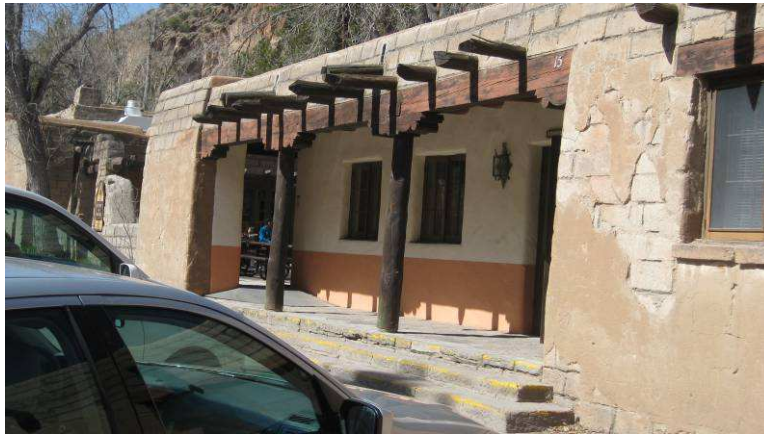


Temporary Visitor Center



Cultural Demonstration Tent

“Option B: Move Temporary Visitor Center to the Administrative Building Lobby” assumes that the temporary Visitor Center would be relocated to the lobby of the administrative building. Cultural demonstrations would occur near the fireplace in the lobby. Access to the lobby would require modifications to meet American with Disabilities Act (ADA) requirements. Phone, computer and other wiring would be provided through an internal window into the lobby. The lobby would be enclosed by closing the doors to the lunchroom and providing a curtain to the hallway. NPS employees could enter through the side door into the courtyard. The security of WNPB books would be ensured by locking the doors to the building during off-hours. Under this option, tour bus loading and unloading would be relocated to in front of the permanent Visitor Center. Portable toilets would be relocated to the southwest corner of the main parking lot, occupying three parking spaces. **Note: This option was implemented.**



Administrative Building

Parking requirements for both options are outlined in **Table 6**.

Table 6. Parking Availability for Timeframe 1 Options: Renovation of Visitor Center Underway

Parking Requirements	Number of Parking Spaces Provided	
	Option A: Retain Temporary Visitor Center in its Current Location	Option B: Move Temporary Visitor Center to the Administrative Building Lobby Implemented
VISITOR PARKING		
Re-stripe Main Lot*	85	85
Picnic Area	28	28
Temporary Visitor Center	0	5
Temporary Toilets	0	9

Table 6. Parking Availability for Timeframe 1 Options: Renovation of Visitor Center Underway

Parking Requirements	Number of Parking Spaces Provided	
	Option A: Retain Temporary Visitor Center in its Current Location	Option B: Move Temporary Visitor Center to the Administrative Building Lobby Implemented
Backcountry Lot	0	27
TOTAL	108*	154**
EMPLOYEE/OTHER OFFICIAL PARKING		
Main Lot	1	1
Backcountry Lot	27	0
Residential Area	25	25
Temporary Visitor Center	0	5
Corral/Stable Area	14	14
Amphitheater Lot	13	30
Road to Maintenance Area	0	5
Road to Gravel Lot		
Other Remote Carpool Location		
TOTAL	80	80

Source: Project Team and Park Staff, 2010

*If the Main Lot is not re-striped, the total number of visitor parking spaces under Option A would be approximately 103 spaces.

**If the Main Lot is not re-striped, the total number of visitor parking spaces under Option B would be approximately 149 spaces.

As shown in **Table 6**, Option B would provide for a 43% increase (46 additional spaces) in visitor parking compared to Option A.

Option A (Retain Temporary Visitor Center in its Current Location) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Restrict visitor parking in the backcountry lot (safety issues would persist due to the continued use of the adjacent temporary Visitor Center area)
- Employee/other officials parking
 - Restrict employee parking in the main lot
 - Create dedicated parking spaces for employees with mobility limitations
 - Provide for continued use of the backcountry lot (27 spaces)

- Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
- Require a minimum of 13 employees to park in the amphitheater lot and shuttle to the canyon by some means (carpool, vanpool, etc.)
- Employees and other officials arriving for late shifts would use any available parking
- Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Option B (Move Temporary Visitor Center to the Administrative Building Lobby) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Provide for additional parking where the temporary Visitor Center and associated facilities are currently located (14 spaces)
 - Provide for exclusive use of the backcountry lot by visitors (employees prohibited from using this lot)
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles
 - Create dedicated parking spaces for employees with mobility limitations
 - Restrict employee parking in the backcountry lot
 - Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
 - Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
 - Require 30 employees to park in the amphitheater lot and travel to the canyon by some means (carpool, vanpool, etc.)
 - Require a minimum of five employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location) and travel to the canyon by some means (carpool, vanpool, etc.)
 - Employees and other officials arriving for late shifts would use any available parking
 - Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Timeframe 2: Visitor Center Complete, Re-Roofing Project Underway

The project team developed two options for Timeframe 2 which assumes that the Visitor Center has re-opened (expected in mid-July 2010) and that the re-roofing project in Frijoles Canyon is underway. This timeframe assumes that the re-paving project in the

Juniper area has not yet begun. Both options assume that five parking spaces in the main lot will be unavailable due to the re-roofing project and that tour bus loading and unloading activities are relocated to their former location in front of the Visitor Center.

“Option I: Employee Parking Outside of Canyon” assumes that all employee parking be relocated outside of Frijoles Canyon (with a few exceptions).

“Option II: Maximize Employee Parking in Canyon” assumes that employees continue to park in the canyon.

Parking requirements for both options are outlined in **Table 7**.

Table 7. Parking Availability for Timeframe 2 Options: Visitor Center Complete, Re-Roofing Project Underway

Parking Requirements	Number of Parking Spaces Provided	
	Option I: Employee Parking Outside of Canyon	Option II: Maximize Employee Parking in Canyon
VISITOR PARKING		
Re-stripe Main Lot	80	80
Picnic Area	28	28
Temporary Visitor Center	5	5
Temporary Toilets	9	9
Backcountry Lot	27	0
TOTAL	149*	122**
EMPLOYEE/OTHER OFFICIAL PARKING		
Main Lot	1	1
Backcountry Lot	0	27
Residential Area	25	25
Temporary Visitor Center	5	5
Corral/Stable Area	14	14
Amphitheater Lot	30	8
Road to Maintenance Area	5	0
Road to Gravel Lot		
Other Remote Carpool Location		
TOTAL	80	80

Source: Project Team and Park Staff, 2010

*If the Main Lot is not re-striped, the total number of visitor parking spaces under Option A would be approximately 144 spaces.

**If the Main Lot is not re-striped, the total number of visitor parking spaces under Option B would be approximately 117 spaces.

As shown in **Table 7**, Option I would provide for a 22% increase (27 additional spaces) in visitor parking compared to Option II.

Option I (Employee Parking Outside of Canyon) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Additional 14 spaces available where the temporary Visitor Center and associated facilities are currently located (permanent Visitor Center will have re-opened)
 - Provide for exclusive use of the backcountry lot by visitors (employees prohibited from using this lot)
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles
 - Create dedicated parking spaces for employees with mobility limitations
 - Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
 - Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
 - Require 30 employees to park in the amphitheater lot and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - Require a minimum of five employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location) and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - Employees and other officials arriving for late shifts would use any available parking
 - Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Option II (Maximize Employee Parking in Canyon) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Provide for additional parking where the temporary Visitor Center and associated facilities are currently located (14 spaces)
 - Restrict visitor parking in the backcountry lot
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles

- o Create dedicated parking spaces for employees with mobility limitations
- o Provide for continued use of the backcountry lot by employees (27 spaces)
- o Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
- o Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
- o Require a minimum of eight employees to park in the amphitheater lot and shuttle to the canyon by some means (carpool, vanpool, etc.)
- o No additional requirements for employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location)
- o Employees and other officials arriving for late shifts would use any available parking
- o Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Timeframe 3: Visitor Center Complete, Re-Roofing and Re-Paving of Juniper Area Projects Underway

The project team developed two options for Timeframe 3 which assumes that the Visitor Center has re-opened (expected in mid-July 2010) and that the re-roofing project is still underway. It assumes that the re-paving of the Juniper area is also underway. Both options assume that five parking spaces in the main lot will be unavailable due to the re-roofing project and that the amphitheater lot will be unavailable for parking due to re-paving activities and that tour bus loading and unloading activities are relocated to their former location in front of the Visitor Center.

“Option I: Employee Parking Outside of Canyon” assumes that all employee parking be relocated outside of Frijoles Canyon (with a few exceptions).

“Option II: Maximize Employee Parking in Canyon” assumes that employees continue to park in the canyon.

Parking requirements for both options are outlined in **Table 8**.

Table 8. Parking Availability for Timeframe 3 Options: Visitor Center Complete, Re-Roofing and Re-Paving of Juniper Area Projects Underway

Parking Requirements	Number of Parking Spaces Provided	
	Option I: Employee Parking Outside of Canyon	Option II: Maximize Employee Parking in Canyon
VISITOR PARKING		
Re-stripe Main Lot	80	80
Picnic Area	28	28
Temporary Visitor Center	5	5
Temporary Toilets	9	9
Backcountry Lot	27	0
TOTAL	149*	122**
EMPLOYEE/OTHER OFFICIAL PARKING		
Main Lot	1	1
Backcountry Lot	0	27
Residential Area	25	25
Temporary Visitor Center	5	5
Corral/Stable Area	14	14
Amphitheater Lot	0	0
Road to Maintenance Area	35	8
Road to Gravel Lot		
Other Remote Carpool Location		
TOTAL	80	80

Source: Project Team and Park Staff, 2010

*If the Main Lot is not re-stripped, the total number of visitor parking spaces under Option A would be approximately 144 spaces.

**If the Main Lot is not re-stripped, the total number of visitor parking spaces under Option B would be approximately 117 spaces.

As shown in **Table 8**, Option I would provide for a 22% increase (27 additional spaces) in visitor parking compared to Option II.

Option I (Employee Parking Outside of Canyon) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Additional 14 spaces available where the temporary Visitor Center and associated facilities are currently located (permanent Visitor Center will have re-opened)

- Provide for exclusive use of the backcountry lot by visitors (employees prohibited from using this lot)
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles
 - Restrict employee parking in the backcountry lot
 - Create dedicated parking spaces for employees with mobility limitations
 - Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
 - Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
 - Require a minimum of 35 employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location) and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - Employees and other officials arriving for late shifts would use any available parking
 - Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Option II (Maximize Employee Parking in Canyon) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Provide for additional parking where the temporary Visitor Center and associated facilities are currently located (14 spaces)
 - Restrict visitor parking in the backcountry lot
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles
 - Create dedicated parking spaces for employees with mobility limitations
 - Provide for continued use of the backcountry lot (27 spaces)
 - Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
 - Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
 - Require a minimum of eight employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location) and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - Employees and other officials arriving for late shifts would use any available parking

- o Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Timeframe 4: All Construction Complete (Summer 2011 Season)

The project team developed two options for Timeframe 4 which assumes that all major construction projects affecting Frijoles Canyon and the Juniper area are complete. This timeframe provides the basis of the No Action scenario for the summer 2011 season. Both options assume that all parking spaces in the main lot and all spaces in the amphitheater lot are available again and that tour bus loading and unloading activities are relocated to their former location in front of the Visitor Center.

“Option I: Employee Parking Outside of Canyon” assumes that all employee parking be relocated outside of Frijoles Canyon during the peak season when visitor parking demand exceeds supply (with a few exceptions).

“Option II: Maximize Employee Parking in Canyon” assumes that employees continue to park in the canyon.

Parking requirements for both options are outlined in **Table 9**.

Table 9. Parking Requirements for Timeframe 4 Options: All Construction Complete (Summer 2011 Season)

Parking Requirements	Number of Parking Spaces Provided	
	Option I: Employee Parking Outside of Canyon	Option II: Maximize Employee Parking in Canyon
VISITOR PARKING		
Re-stripe Main Lot	85	85
Picnic Area	28	28
Temporary Visitor Center	5	5
Temporary Toilets	9	9
Backcountry Lot	27	0
TOTAL	154*	127**
EMPLOYEE/OTHER OFFICIAL PARKING		
Main Lot	1	1
Backcountry Lot	0	27
Residential Area	25	25
Temporary Visitor Center	5	5
Corral/Stable Area	14	14
Amphitheater Lot	30	8
Road to Maintenance Area	5	0

Parking Requirements	Number of Parking Spaces Provided	
	Option I: Employee Parking Outside of Canyon	Option II: Maximize Employee Parking in Canyon
Road to Gravel Lot		
Other Remote Carpool Location		
TOTAL	80	80

Source: Project Team and Park Staff, 2010

*If the Main Lot is not re-striped, the total number of visitor parking spaces under Option A would be approximately 149 spaces.

**If the Main Lot is not re-striped, the total number of visitor parking spaces under Option B would be approximately 122 spaces.

As shown in **Table 9**, Option I would provide for a 22% increase (27 additional spaces) in visitor parking compared to Option II.

Option I (Employee Parking Outside of Canyon) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Additional 14 spaces available where the temporary Visitor Center and associated facilities are currently located (permanent Visitor Center will have re-opened)
 - Provide for exclusive use of the backcountry lot by visitors (employees prohibited from using this lot)
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles
 - Restrict employee parking in the backcountry lot
 - Create dedicated parking spaces for employees with mobility limitations
 - Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
 - Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
 - Require 30 employees to park in the amphitheater lot and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - Require a minimum of five employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location) and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - Employees and other officials arriving for late shifts would use any available parking
 - Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Option II (Maximize Employee Parking in Canyon) would include the following provisions for visitor and employee parking:

- Visitor parking
 - Provide for exclusive use of main lot by visitors (employees prohibited from using this lot)
 - Provide for continued use of the picnic area
 - Provide for additional parking where the temporary Visitor Center and associated facilities are currently located (14 spaces)
 - Restrict visitor parking in the backcountry lot
- Employee/other officials parking
 - Restrict employee parking in the main lot, with the exception of one space reserved for official NPS vehicles
 - Create dedicated parking spaces for employees with mobility limitations
 - Provide for continued use of the backcountry lot (27 spaces)
 - Reserve five spaces for miscellaneous officials requiring ad hoc parking where the temporary Visitor Center and associated facilities are currently located
 - Require employee parking in the corral/stable area (employees would walk from the corral to the canyon along the Entrance Road or on a trail that leads to the canyon residential area)
 - Require a minimum of eight employees to park in the amphitheater lot and shuttle to the canyon by some means (carpool, vanpool, etc.)
 - No additional requirements for employees to park in auxiliary areas (road to maintenance area, road to gravel lot or other remote carpool location)
 - Employees and other officials arriving for late shifts would use any available parking
 - Retain 25 parking spaces in the residential area for employees residing in Frijoles Canyon

Options Considered and Eliminated

One option was considered but eliminated under Planning Timeframe 1 (Renovation of Visitor Center Underway). The possibility of retaining the temporary Visitor Center and associated facilities in its current location while also allowing visitor parking in the backcountry lot was eliminated from consideration. Retaining the temporary facilities in their current location precludes the use of the backcountry lot for visitor parking because the safety of pedestrians in the vicinity of the temporary Visitor Center would be compromised by vehicular activity associated with visitors driving to and from the backcountry lot.

5.3 Assessment of Timeframe 1 Options

An assessment of the Planning Timeframe 1 options (Renovation of Visitor Center Underway) was developed and was presented at the closing session of the April 2010 workshop in order to guide the decision-making process. The project team and key park

staff conducted an evaluation of the options loosely based on the Choosing by Advantages (CBA) process during the April 2010 workshop. Workshop participants defined a set of evaluation factors and described attributes for each option for the identified factors. The project team identified advantages for the options for each factor and established importance scores for each advantage, which were then reviewed by key park staff. **Table 10** presents the resultant CBA matrix

Subsequent to the April 2010 workshop, park leadership decided to implement Option B. Steps are currently being taken to relocate the temporary Visitor Center and associated facilities to the administrative building lobby. This quick action will assist in maximizing the benefits outline in **Table 10**. If the opening of the permanent Visitor Center is delayed, additional benefits of relocating the temporary visitor facilities would accrue.

Table 10. Assessment of Timeframe 1 Options (Renovation of Visitor Center Underway) – Choosing by Advantages Matrix

CBA FACTOR	Option A: Retain Temporary Visitor Center in its Current Location	Alt. A Score	Option B: Move Temporary Visitor Center to the Administrative Building Lobby	Alt. B Score
PROTECT CULTURAL AND NATURAL RESOURCES				
Minimizes impacts to historic structure/fabric	No additional impacts to historic fabric		Some concern about potential impacts to historic fabric including stone floor and doors	
Advantages	Better	85	Least Preferred	0
Improves air quality in a Class I park by reducing vehicle idling	Idling at same levels as 2009		Would reduce idling by approximately 30% due to the availability of more spaces during peak hours	
Advantages	Least Preferred	0	Much Better	80
PROVIDE FOR VISITOR ENJOYMENT, EDUCATIONAL, AND RECREATIONAL OPPORTUNITIES				
Provides for improved orientation in the short term	Remains the same as 2009		Improves visitor orientation since the Visitor Center would be more visible from the main parking lot (assuming it is properly signed)	
Advantages	Least Preferred	0	Better	60
Reduces wait times for parking and decreases parking congestion (measured by the number of spaces that would be available in the canyon)	108 visitor parking spaces in the canyon		154 visitor parking spaces in the canyon; Mitigates constructions and reduces overall congestion	
Advantages	Least Preferred	0	Significantly Better	100

Table 10. Assessment of Timeframe 1 Options (Renovation of Visitor Center Underway) – Choosing by Advantages Matrix

CBA FACTOR	Option A: Retain Temporary Visitor Center in its Current Location	Alt. A Score	Option B: Move Temporary Visitor Center to the Administrative Building Lobby	Alt. B Score
Provides for appreciation of cultural resources	Visitor Center is in temporary trailer (not a cultural resource)		Visitor Center would be in an historic CCC-era building, allowing for appreciation of this cultural resource	
Advantages	Least Preferred	0	Much Better	60
PROTECT PUBLIC HEALTH, SAFETY AND WELFARE				
Reduces risk of vehicle-vehicle conflicts	No discernible difference		No discernible difference	
Advantages	Not Evaluated		Not Evaluated	
Reduces vehicle-pedestrian conflicts for staff and visitors	Same as 2009		Would reduce conflicts due to improved use of sidewalk	
Advantages	Least Preferred	0	Slightly Better	25
Reduces park staff's exposure to environmental hazards	Same as 2009		Would reduce exposure due to less congestion and time spent managing traffic	
Advantages	Least Preferred	0	Better	50
Improved emergency response and services	Same as 2009		Could save "minutes"	
Advantages	Least Preferred	0	Slightly Better	20
IMPROVE EFFICIENCY OF PARK TRANSPORTATION OPERATIONS				
Reduces impacts on employee convenience (measured by the number of employees that are required to park outside of the canyon	13 employees would be required to park outside of the canyon (in amphitheater lot)		35 employees would be required to park outside of the canyon (30 in the amphitheater lot and five elsewhere)	
Advantages	Much Better (for most)	80	Least Preferred	0

Table 10. Assessment of Timeframe 1 Options (Renovation of Visitor Center Underway) – Choosing by Advantages Matrix

CBA FACTOR	Option A: Retain Temporary Visitor Center in its Current Location	Alt. A Score	Option B: Move Temporary Visitor Center to the Administrative Building Lobby	Alt. B Score
IMPROVE EFFICIENCY OF PARK MAINTENANCE OPERATIONS				
Improves operational efficiency and sustainability of maintenance operations	Would require one move instead of two; Would eliminate the necessity of cleaning of two buildings (although additional cleaning of Administrative building would be required)		Would require two moves instead of one; Would eliminate the necessity of cleaning two buildings (although additional cleaning of Administrative building would be required); Would eliminate costs associated with heating/cooling of temporary structure	
Advantages	Much Better	85	Least Preferred	0
IMPROVE EFFICIENCY OF PARK FEE COLLECTION AND RANGER SERVICES				
Improves efficiency of park fee collection and ranger services	Would decrease efficiency of services from 2009 due to burden of operating during construction in peak season		Would reduce the need for staff to manage traffic in addition to performing their assigned duties	
Advantages	Least Preferred	0	Much Better	90
IMPROVE EFFECTIVENESS OF PARK INTERPRETIVE OPERATIONS				
Improves effectiveness of park interpretive operations	Visitors often fail to visit the temporary facility prior to their hike due to low visibility; Would not require the development of temporary signage		Would improved efficacy due to greater visibility; Would require the development of temporary signage	
Advantages	Least Preferred	0	Much Better	60

Table 10. Assessment of Timeframe 1 Options (Renovation of Visitor Center Underway) – Choosing by Advantages Matrix

CBA FACTOR	Option A: Retain Temporary Visitor Center in its Current Location	Alt. A Score	Option B: Move Temporary Visitor Center to the Administrative Building Lobby	Alt. B Score
IMPROVE EFFICIENCY OF WNPA BOOK SALES				
Improves efficiency of WNPA book sales	Same as 2009		Would require less hauling of books to sales location since book storage is located in the Administrative building; Would provide for better on-site supervision for same reason; Could lead to an increase in book sales due to greater visibility	
Advantages	Least Preferred	0	Much Better	70
PROVIDES COST-EFFECTIVE, ENVIRONMENTALLY RESPONSIBLE, AND OTHERWISE BENEFICIAL DEVELOPMENT FOR THE NPS				
Provides other advantages to the NPS in the near-term summer 2010 season	NPS accepts consequences of leaving in place, based in general, on above criteria		Could be staff and public (particularly locals) who question the cost efficiency associated with the move for two months; Short-term non-monetary benefits from the move in general per above criteria; Could act as a first step to long term benefits	
Advantages	Not scored, evaluated by above factors		Not scored, evaluated by above factors	

Table 10. Assessment of Timeframe 1 Options (Renovation of Visitor Center Underway) – Choosing by Advantages Matrix

CBA FACTOR	Option A: Retain Temporary Visitor Center in its Current Location	Alt. A Score	Option B: Move Temporary Visitor Center to the Administrative Building Lobby	Alt. B Score
COSTS				
Initial Cost	Cost would be incurred for one move		Costs would be incurred for two moves, instead of one; Additional move would incur some costs related to NPS services and supplies; Initial costs would be offset to some degree by savings on life cycle cost savings	
Advantages	Not scored		Not scored	
Life Cycle Cost	Lost productivity in fee collection and ranger staff due to above criteria; No dollar value to gauge improvements to visitor experience		Delayed completion of work orders by maintenance over time it would take to complete the move twice instead of once	
Advantages	Not scored		Not scored	
TOTAL CBA SCORE		250		615
Version 4/13/10				

Source: Project Team and Park Staff, 2010

The evaluation process for the immediate term options was necessarily general and was intended to highlight the key implications of the decision to relocate the temporary Visitor Center and associated facilities. A summary of the advantages of the options is provided below. A key consideration in the decision was the duration of time that the temporary facilities would be in use and the resulting numbers of visitors who would be affected by the location of the facilities. The sooner that the temporary facilities are relocated, the more visitors would benefit from greater access to parking and less congestion and associated delays waiting for parking. If the completion of the Visitor Center is delayed, additional visitors would benefit from the improved access possible with the temporary facilities relocated. The number of visitors who could benefit from relocated facilities, along with the additional costs and lost staff time associated with traffic management activities was weighed against the extra costs and staff time associated with required improvements to the administrative building lobby and the extra move of Visitor Center equipment and materials from the lobby to the permanent location. The project team did not make a recommendation to the park staff regarding this decision, however the information presented here contributed to the park leadership's decision to implement Option B (made shortly after the April 2010 workshop). Steps are currently being taken to relocate the temporary Visitor Center to the administrative building lobby. Estimates of the cost of relocating the temporary facilities were considered by the park as part of the decision-making process.

Option A: Retain Temporary Visitor Center in its Current Location

- Would only require staff to move the Visitor Center once (instead of twice), thus reducing costs associated with moving
- Would not require creation of new temporary signage and printed materials, thus reducing initial costs
- Would not require the diversion of park maintenance and other staff to engage in additional relocation of facilities and their contents, thus reducing initial costs
- Would eliminate a possible risk of impacts to the historic fabric of the CCC-era building



Option B: Move Temporary Visitor Center to the Administrative Building Lobby

- More parking would be available for visitors, thus reducing the intensity, duration and frequency of instances when parking demand exceeds supply
- Would reduce vehicular emissions in the park
- Would reduce the diversion of park staff from their assigned duties for traffic management responsibilities, creating life cycle cost savings

*Doors to the Administrative Building
(part of the Historic District)*

- Would reduce the exposure of park staff to noxious fumes and environmental hazards
- Would improve visitor experience overall by reducing wait times, decreasing parking congestion, improving access to interpretation and interpretive opportunities (including access to the CCC-era cultural resource)
- Would improve WNPA operations and could potentially increase book sales
- Would eliminate the necessity of cleaning two separate buildings and would reduce heating/cooling and building maintenance costs (these lifecycle cost savings could offset the additional initial cost incurred by this option)



Wayfinding Sign

6 ADDITIONAL STRATEGIES TO MANAGE TRAFFIC AND PARKING AND IMPROVE VISITOR INFORMATION

The project team also developed additional strategies related to traffic and parking management and the improvement of visitor information to supplement near- and long-term solutions. Most strategies require additional research into their feasibility and practicality before implementation.

6.1 Strategies to Manage Traffic and Parking

Strategies to manage traffic and parking are described under the following categories:

- Traffic and parking management options
- Demand management strategies
- Staffing options
- Employee parking and carpool options
- Future data collection efforts
- Partnership building
- Construction Contract Specifications

Traffic and Parking Management Options

- Facilitate queue by-pass for emergency access and employee vehicles using radio communications and a “flag-man” or other methods
- Move the vehicle queue to the mesa top from Frijoles Canyon in order to improve air quality in the canyon and reduce congestion
- Relocate tour bus parking from the amphitheater to other locations within the park on the mesa top or outside the park
- Consolidate NPS vehicles to minimize unnecessary parking in the canyon and in the amphitheater lot
- Better define parking spaces in the picnic area and backcountry lots where possible

Demand Management Strategies

- Close the park to visitors once parking is full and implement necessary warning system for visitors (physical barriers, variable message signs to provide advance warning, etc.)
- Implement a reservation or timed-entrance system (would require additional fee collection staff and a change in operations)
- Encourage tour buses to come to Bandelier during off-peak hours
- Consider changing the fee structure in order to encourage off-peak travel (could include charging for the use of parking spaces during peak times)

Staffing Options

Table 11 provides an overview of approximate costs associated with these staffing options

- Use existing staff to manage traffic, as is currently done
- Hire temporary seasonal staff specifically for traffic management
- Secure volunteer “parking hosts” (similar to campground hosts) whereby the park would provide RV hook-ups in exchange for traffic control staffing

Table 11. Traffic Management Staffing Options - Approximate Costs

	Existing staff (base-funded)	Hire temporary seasonal staff	Secure volunteer parking hosts
Employee/ volunteer requirements	• GS-9 (\$25.01/hour) • GS-10 (\$27.54/hour) • GS-12 (\$36.27/hour)	• GS-10 to manage for 4 hours per week (base-funded, \$27.54/hour) • Four GS-1 (\$9.74/hour each)	• GS-10 to manage for 4 hours per week (base-funded, \$27.54/hour) • Four couples (cost of utilities)
Approximate Daily cost (4 hours per day)	\$315	\$170	\$30
Non-monetary costs	Defers interpretive, law enforcement and administrative duties	Defers manager’s duties to train and manage GS-1 traffic management team	Defers manager’s duties to train and manage volunteer traffic management team
Estimated Cost for 10 week season	\$22,050	\$11,900	\$2,100

Source: Project Team and Park Staff, 2010

Employee Parking and Carpool Options

- Aim to minimize employee parking in the canyon and maximize the use of administrative areas for employee parking during the peak season while continuing to accommodate special needs and schedules
- Develop an employee survey in order to understand the potential for carpooling from outside of the park (such a survey was distributed to staff on April 14, 2010)
- Provide assigned parking for all employees with possible preferential treatment for carpool vehicles
- Provide a park vehicle to facilitate carpool trips from the amphitheater lots and other overflow parking sites (road to the maintenance facility and road to the gravel yard), similar to a carpooling arrangement that has been in place in the past
- Provide for off-site all-staff trainings so that all employees are not parking in the canyon at one time
- Consider implementing incentives to encourage employee carpooling
- Consider the provision of bicycles to assist employees with their commute between the corral, amphitheater, gravel lot and other remote parking areas

Future Data Collection Efforts

- Install hourly traffic counts in each direction at the entrance station and “below” the Juniper Access road on the Entrance Road
- Confirm parking options at remote parking sites
- Consider conducting a license plate survey to understand average length of stay
- Consider conducting a visitor use survey (such as those conducted by the University of Idaho)
- Identify opportunities for evaluating user capacities

Partnership Building with Atomic City Transit and Others

- Atomic City Transit (ACT), a Los Alamos County agency, has expressed interest in developing a partnership to provide transit service between Bandelier and its gateway communities (White Rock and/or Los Alamos)
- ACT’s current operating conditions, described below, are conducive to a partnership
 - ACT is a fee-free system that operates between White Rock and Los Alamos on weekdays only, primarily to serve LANL employees
 - There is currently no service along SH 4 outside of the park
 - ACT has a large fleet with vehicles of different sizes and passenger capacities that are not used on weekends or holidays
 - Federal funding and grants compose approximately 50% of ACT’s funding, with the other 50% funded through the county’s general fund
 - Although a portion of the park’s East Entrance area (including Frijoles Canyon) is not in Los Alamos County, there are no known legal or administrative barriers to implementing service within the park
 - ACT has the ability to apply for funding through the Federal Transit Administration (FTA)

- Further study of the feasibility and practicability of a shuttle service (either in partnership with ACT or through another channel) is required
- Elements that should be considered in future study of potential shuttle service include:
 - Potential operating plans (loop route, one-way route to gateway communities, hiker's shuttle to provide access to Frey Trail from the canyon, etc.)
 - Staging areas (gravel lot off of SH 4, locations in White Rock and/or Los Alamos, etc.)
 - Stop locations (White Rock, Los Alamos, Tsankawi Section, Frijoles Canyon, Valles Caldera, Manhattan Project, etc.)
 - Changes to entrance fee structure and collection methods
 - Effects of possible visitor "pulsing" on park operations and interpretation
- Funding through Federal Lands Highways Category III could be pursued to fund transportation planning including the exploration of transportation partnerships, shuttle serves and long-range parking and transportation solutions
- An FTA Transit in Parks (TRIP) grant could be pursued to secure funding for study and implementation of a pilot shuttle
- Partnerships could be established with other entities (Chamber of Commerce, local businesses, etc.) that may be interested in pursuing shuttle service as a marketing opportunity
- There are several good models of transit partnerships currently in place in the NPS including at Glacier National Park, Devils Postpile National Monument and Acadia National Park (see **Appendix D** for the Cooperative Agreement in place at Glacier National Park)

Construction Contract Specifications

- For current construction contracts, address key issues related to parking and visitor access in pre-construction meetings. Where possible in future contracts, include key provisions relating to parking and visitor access and coordinate these issues across multiple contracts. Issues to be addressed include:
 - The required duration of construction
 - Construction start and end dates
 - Construction phasing
 - Construction hours
 - Construction employee access and parking
 - Express site-specific criteria and construction staging locations
 - Mandate length of notice required prior to the start of construction

6.2 Strategies to Improve Visitor Information

Visitor Information Dissemination Options

- Use web resources to effectively communicate information related to construction process and the availability of parking
- Use "E-blasts" to update regular visitors about information related to construction (see **Appendix E** for an example e-Blast for the Glacier National Park Going-to-the-Sun Road construction)

- Distribute alternative recreation itineraries and real time information (if possible) to visitor centers in White Rock and Los Alamos
- Provide informational materials to local businesses and lodging in order to alert visitors to the park's peak hours and construction issues, and encourage them to visit during off-peak times
- Use pre-movie advertisements at local movie theaters to provide a public service announcement to local residents about Bandelier's peak hours and construction activities
- Implement Highway advisory radio
- Implement 511 to provide information about access and congestion conditions at the park
- Utilize and implement variable message signs through partnership interests with Los Alamos County, New Mexico Department of Transportation (NMDOT) or other agencies along SH 4 and SH 502 in order to inform drivers of access and congestion conditions at the park
- Increase clarity of wayfinding through the use of volunteers to provide orientation, distribution of materials at entrance station and/or improved signage, including a possible translation of signs into Spanish or the use of international symbols in order to reduce visitor confusion

Visitor Dispersal Strategies

- Consider developing alternative visitor "itineraries" to provide a range of visitor experiences and to educate visitors on other local attractions that could be visited during Bandelier's peak hours, including the following locations (see **Appendix C** for an example of such an itinerary):
 - Tsankawi Section – Tsankawi attracts different users than the main portion of Bandelier; however, improved wayfinding and signage and additional interpretive opportunities may attract visitors
 - Los Alamos – Heritage tourism, the Bradbury Museum, town parks and restaurants could attract visitors
 - Valles Caldera National Preserve (VCNP)
- Encourage use of other Bandelier hiking areas including:
 - Frey Trail
 - Cerro Grande
 - Burnt Mesa

7 NEXT STEPS

The following actions are recommended as next steps to be pursued in the short-term in order to provide data to better support future planning efforts, improve visitor experience, reduce disruptions to staff and set the stage for longer-term improvements. A list of the key next steps follows:

- Coordinate with Federal Highways Administration (FHWA) and NPS to install hourly traffic counters in each direction (at the entrance station and “below” the Juniper Access Road on the Entrance Road)
- Develop and distribute an employee survey to identify opportunities for carpooling and future shuttle service (underway)
- Confirm parking options and numbers of spaces at remote parking sites
- Aim to minimize employee parking in the canyon and maximize the use of administrative areas for employee parking while continuing to accommodate special needs and schedules
- Encourage employee carpooling
- Explore vanpool options for long-distance commuters
- Pursue opportunities to secure volunteers to assist with traffic and parking management
- Begin working with Atomic City Transit and other potential partners on a possible shuttle service
- Work with construction contractors to develop specifications (as feasible)
- Consider revising PMIS statement, applying for TRIP funding and developing a work scope for follow-on study
- Consider developing additional materials that document local attractions that visitors might enjoy experiencing during Bandelier’s peak hours

8 SOURCES

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APPENDICES

Appendix A: Workshop Participants

Appendix B: 2009 Monthly Traffic Counts

Appendix C: Sample Trip Itinerary (Point Reyes National Seashore)

Appendix D: Sample Cooperative Agreement (Glacier National Park)

Appendix E: Sample “E-Blast” (Glacier National Park)

APPENDIX A: WORKSHOP PARTICIPANTS

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**APPENDIX B: MONTHLY TRAFFIC COUNTS
(MARCH 2009 THROUGH MARCH 2010)**

Note: September 2009 traffic counts were not provided

TRAFFIC COUNTER- After Hours

MONTH March YEAR 2009

DATE	COUNTER READING
1	
2	
3	
4	
5	
6	
7	
8	1700
9	
10	
11	
12	
13	
14	
15	
16	1206
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	4930
31	

ENDING READING	5170
STARTING READING	0
MONTH TOTAL	

Clear totals at the end of each month!

TRAFFIC COUNTER- After Hours

MONTH April YEAR 2009

DATE	COUNTER READING
1	169
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	2959
13	
14	
15	
16	3912
17	
18	
19	
20	
21	
22	
23	5442
24	
25	
26	6619
27	6988
28	
29	7455
30	7731
31	

ENDING READING	7731
STARTING READING	0
MONTH TOTAL	

Clear totals at the end of each month!

TRAFFIC COUNTER- After Hours

MONTH May YEAR 2009

DATE	COUNTER READING
1	
2	
3	488
4	
5	
6	1617
7	1857
8	
9	2125
10	2421
11	
12	
13	
14	3572
15	3874
16	
17	4545
18	
19	
20	
21	5908
22	6207
23	6522
24	6841
25	
26	
27	
28	
29	
30	9107
31	

ENDING READING	~~9719~~ 9919
STARTING READING	0
MONTH TOTAL	

Clear totals at the end of each month!

TRAFFIC COUNTER- After Hours

MONTH June YEAR 2009

DATE	COUNTER READING
1	301
2	
3	
4	846
5	1146
6	1464
7	1745
8	
9	2768
10	3011
11	
12	3761
13	~~3761~~ 4165
14	~~4165~~ 4530
15	
16	4919
17	
18	6024
19	6377
20	6674
21	7072
22	7515
23	
24	
25	8512
26	8862
27	9252
28	9576
29	9950
30	10296
31	

ENDING READING	10296
STARTING READING	0
MONTH TOTAL	

Clear totals at the end of each month!

TRAFFIC COUNTER- After Hours

MONTH July YEAR 2009

DATE	COUNTER READING
1	378
2	
3	1167
4	1626
5	
6	2422
7	2771
8	
9	3506
10	3888
11	4278
12	4668
13	4970
14	5303
15	5631
16	5971
17	6288
18	6682
19	7032
20	
21	
22	8086
23	8457
24	8890
25	
26	9583
27	9956
28	
29	10611
30	10976
31	11339

ENDING READING	11339
STARTING READING	0
MONTH TOTAL	

Clear totals at the end of each month!

TRAFFIC COUNTER- After Hours

MONTH August YEAR 2009

DATE	COUNTER READING
1	394
2	813
3	
4	1557
5	~~2288~~
6	2357
7	2752
8	3165
9	3606
10	
11	4324
12	4694
13	5051
14	5309
15	5705
16	6130
17	6422
18	~~7254~~
19	
20	7294
21	7607
22	7876
23	8146
24	8408
25	8666
26	
27	9196
28	9471
29	9770
30	10067
31	10335

ENDING READING	10335
STARTING READING	0
MONTH TOTAL	

Clear totals at the end of each month!

10644
10335

309

TRAFFIC COUNTER**After Hours**MONTH OctoberYEAR 2009

DATE	COUNTER READING
1	328
2	719
3	1033
4	1315
5	
6	2222
7	2513
8	2855
9	3234
10	3667
11	4087
12	4479
13	4750
14	
15	
16	5744
17	6205
18	6581
19	6850
20	
21	7261
22	7507
23	7818
24	8097
25	8390
26	8805
27	
28	
29	9150
30	9299
31	9474

ENDING READING	9474
STARTING READING	Ø
MONTH TOTAL	

E-Test Alarm ✓

TRAFFIC COUNTER**After Hours**MONTH November YEAR 2009

DATE	COUNTER READING
1	188
2	415
3	610
4	
5	1028
6	1232
7	1465
8	1690
9	1880
10	
11	2278
12	
13	
14	
15	2903
16	3055
17	
18	3357
19	3505
20	
21	3820
22	4001
23	4
24	
25	4578
26	4778
27	
28	5356
29	5420
30	5538
31	

ENDING READING	
STARTING READING	0
MONTH TOTAL	

Test ALARM

TRAFFIC COUNTER**After Hours**MONTH December YEAR 2009

DATE	COUNTER READING
1	Reset counter late
2	198
3	291
4	391
5	490
6	574
7	
8	700
9	780
10	883
11	988
12	1054
13	1116
14	1235
15	1350
16	
17	1565
18	1665
19	1735
20	1842
21	2004
22	2146
23	2207
24	
25	2317
26	2470
27	2615
28	2836
29	2990
30	3184
31	3335

ENDING READING	
STARTING READING	
MONTH TOTAL	



TRAFFIC COUNTER**After Hours**MONTH January YEAR 2010

DATE	COUNTER READING
1	0-Closed
2	164
3	270
4	379
5	498
6	634
7	744
8	860
9	957
10	1042
11	1146
12	1259
13	1389
14	1487
15	1627
16	1768
17	1927
18	Closed
19	Closed
20	2159
21	Closed
22	2276
23	2345
24	2415
25	2519
26	2640
27	2776
28	2843
29	2915
30	2997
31	3070

ENDING READING	3070
STARTING READING	0
MONTH TOTAL	3070

TRAFFIC COUNTER**After Hours**MONTH February YEAR 2010

DATE	COUNTER READING
1	101
2	211
3	290
4	374
5	482
6	564
7	624
8	781
9	
10	888
11	1005
12	1127
13	1275
14	1421
15	1541
16	1662
17	1821
18	1961
19	2079
20	2170
21	2242
22	2332
23	2403
24	2548
25	2675
26	2791
27	2833
28	2950
29	
30	
31	

ENDING READING	2950
STARTING READING	0
MONTH TOTAL	

TRAFFIC COUNTER**After Hours**MONTH March YEAR 2010

DATE	COUNTER READING
1	Counter Broken
2	133
3	
4	429
5	583
6	752
7	857
8	983
9	1155
10	1278
11	1387
12	1585
13	1825
14	
15	2130
16	
17	2800
18	3100
19	3297
20	3415
21	3628
22	3873
23	4091
24	
25	4496
26	4744
27	4947
28	5289
29	5618
30	5927
31	6349

ENDING READING	6349 + 150
STARTING READING	0
MONTH TOTAL	

**APPENDIX C: SAMPLE TRIP ITINERARY
(POINT REYES NATIONAL SEASHORE)**

Point Reyes

EXPLORING BY TRAIL, BICYCLE, TRANSIT OR CAR

Bear Valley Visitor Center to Point Reyes Station/Olema

Point Reyes National Seashore
California

National Park Service
U.S. Department of the Interior



Legend

- Towns
- Trails
- Roads
- Bike & Drive
- Bike & Walk
- Bike
- Drive
- Walk
- Bus / Flag Stop



Hiking

- Two trail routes to choose from
- Both trails are approximately 3 miles long
- Each trail takes about 1 hour to hike
- Trail difficulty: Easy



Biking

- Two routes to choose from
- Both routes are approximately 3 miles long
- Each trail takes about 40 minutes to bike



Transit

- Take the West Marin Stagecoach North Route 68) from the Dance Palace or downtown Point Reyes Station to the Bear Valley Visitor Center.
- Travel distance is about 3 miles
- Travel time is approximately 10 minutes
- One-way fare price: \$2.00 for adults and \$1.00 for youth, seniors, and disabled. Children 6 years and younger are free.



Driving

- Two routes to choose from
- Both routes are about 3 miles long
- Approximate travel time is 10 minutes each-way.

EXPLORING POINT REYES HIKING TRAILS:

Bear Valley Visitor Center to Point Reyes Station/Olema

HIKING SUGGESTION:

Follow the Bear Valley Trail parallel to Limantour Rd. The trail crosses over Bear Valley Rd. and Sir Francis Drake Blvd., where it becomes the Olema Marsh Trail, before continuing onto SR 1 (the main access road that runs through the middle of Point Reyes Station). Also, try turning left just after the Green Bridge and follow the Giacomini Trail out and back parallel to Lagunitas Creek to view the wetland restoration firsthand. Follow the trail back through the Giacomini Wetland Restoration Project and to downtown Point Reyes Station. On the way back you can choose to take the West Marin Stagecoach back to the Bear Valley Visitor Center (bus stop is in front of the Dance Palace or downtown Point Reyes Station) or you can follow the trail down SR 1 and back onto Bear Valley Rd.

NOTE: The trail that follows SR 1, heading south into the town of Olema, is better suited for bikes and not pedestrians.

TRANSIT SUGGESTION:

The Stagecoach North Route 68 travels between Inverness and the San Rafael Transit Center, with stops at the Point Reyes Station Dance Palace and downtown Point Reyes Station (walking distance to Giacomini Wetland Restoration Project and trails), Olema Post Office, and Bear Valley Visitor Center. The Stagecoach Coastal Route 62 travels between Downtown Point Reyes Station and Stinson Beach (Tuesday, Thursday, and Saturday), with stops at Downtown Point Reyes Station, the Point Reyes Station Dance Palace and the Olema Post Office. Transit fare can be purchased onboard in cash, and are as follows: \$2.00 one-way for adults and \$1.00 one-way for youth (18-6 yrs.), seniors (65+ yrs.), and people with disabilities. One day pass is \$5.00 for adults and \$2.50 for youth, seniors, and disabled. See Stagecoach driver or <http://www.marintransit.org/stage.html> for additional passes available and schedule.

DRIVING/BIKING SUGGESTION:

Bear Valley Rd. SB connects to SR 1 in the town of Olema, while NB connects to SR 1 via Sir Francis Drake Blvd. in the town of Point Reyes Station. From the Bear Valley Visitor Center, both Point Reyes Station and Olema are about a 10 minute drive, depending of traffic.

NOTE: Roads tend to be very congested on weekends and Holidays. Expect delays.

1 BEAR VALLEY VISITOR CENTER

The Bear Valley Visitor Center is located near the Park Headquarters. At the Visitor Center you will find Park Rangers that can help you with:

- Information on the weather, tide conditions, road and trail closures, safety, and regulations.
- Information on programs, exhibits, camping and self-guided tours.
- Directions to campgrounds outside the Park, motels, eating places, riding stables, and bicycle shops.
- A bookstore and souvenir shop.



More Information:
Point Reyes National Seashore
Point Reyes Station, CA 94956-9799
415-464-5100
www.nps.gov/pore

Visit the National Park Service
Website at:
www.nps.gov

2 OLEMA CREEK

Olema Creek is the largest tributary to Lagunitas Creek and is the home to a number of threatened and endangered species including coho salmon, steelhead trout, California redlegged frogs, and California freshwater shrimp. The stream can be seen running through a restored riparian wetland before it reaches Lagunitas Creek at the Giacomini Wetlands.

3 GIACOMINI WETLAND RESTORATION PROJECT

Since the 1940s, levees constructed to create irrigated pastures for dairying changed the tidal dynamics of Tomales Bay. As a result, what was once the largest tidal marsh complex in Tomales Bay (Waldo Giacomini Ranch and Olema Marsh) had been greatly reduced. In 2000, the National Park Service acquired the Waldo Giacomini Ranch for the wetland restoration, with the purpose of restoring natural tidal dynamics, floodwater retention, water quality improvement, wildlife habitat, and recreational opportunities to the area. The restoration was completed in 2008. The restored wetlands have become home to countless wildlife species, including the bald eagle and river otters. (photo right)

4 TOWN OF POINT REYES STATION

The over a century old town first came into existence with the railroad that ran through the heart of it for nearly 59 years. Originating in 1874, the town was first named Olema Station, but was changed in 1881 to Point Reyes Station. A majority of the old buildings still stand with their original same facades, taking visitor back to the early 1900s when the town was in its prime. Point Reyes Station is 2.9 miles north of the Bear Valley Visitor Center, and is a popular location for food service in the area.

5 LAGUNITAS CREEK BRIDGE (GREEN BRIDGE)

Known as the Green Bridge by local residents, it is a Riveted Warren pony truss design that was built in 1929. Standing 151.9 feet long and 24 feet wide, with the longest span extending 100.1 feet long, the bridge can be found on the Historical Bridges of the United States registry. The bridge carries an average daily traffic of 2,750 vehicles.



* Robert Gussell

6 TOWN OF OLEMA

Olema, meaning coyote, was named after the approximate 110 former Coast Miwok Indian settlements, which once took residency on the Point Reyes Peninsula. The town became popular in the late 1800s during the logging boom on Inverness Ridge. The Olema Inn & Restaurant was first opened in 1876 by the area's original Spanish land grantee, Rafael Garcia. Olema is known as the "gateway" to the National Seashore, with the Bear Valley Visitor Center being only a half-mile from the town. Located within the San Andreas Fault zone, Olema was long thought to be the epicenter of the 1906 San Francisco earthquake. This has since been disproven.

**APPENDIX D: SAMPLE COOPERATIVE AGREEMENT
(GLACIER NATIONAL PARK)**

Cooperative Agreement

between

**The United States Department of the Interior
National Park Service**

the

State of Montana

and

Flathead County, Montana

This Cooperative Agreement is entered into by and between the State of Montana, Montana Department of Transportation (MDT); Flathead County Montana, Eagle Transit; and the Department of the Interior, National Park Service, by and through the Superintendent, Glacier National Park.

ARTICLE I – BACKGROUND AND OBJECTIVES

A. Background:

The National Park Service (NPS) is currently preparing for a major reconstruction of the Going-to-the-Sun Road (GTSR) in Glacier National Park (GNP). Reconstruction, led by the Western Federal Lands Highway Division (WFLHD) Federal Highway Administration, will be ongoing for a minimum period of eight years based on current funding levels. A Congressionally mandated Citizens Advisory Committee, the Final Environmental Impact Statement (FEIS) and Record of Decision (ROD) for the project all mandate that the NPS is charged with the responsibility of mitigating construction impacts to the visitor experience and the corresponding impact to local communities during the construction period.

The GNP/WFLHD project team identified Transit, Intelligent Transportation Systems (ITS) and other visitor services to ensure mitigation goals are met during the construction period:

1. During peak season, visitors will encounter no more than 30 minutes of cumulative delays driving the GTSR; and
2. Park visitation levels will remain at a minimum of 94% of regular visitation.

The project team briefed a comprehensive mitigation concept to the NPS Developmental Advisory Board (DAB) in June of 2005 that included a Transit System, new Transit Center near Apgar Village on the west side, upgraded Visitor center to incorporate Transit operations at St Mary on the east side, transit stops along the route, an ITS system focused on Work Zone, Transit, Communications and Visitor Information capabilities and general enhancements along the GTSR in coordination with the planned road work. The entire concept was recommended for approval by the DAB. The Director of the National Park Service signed the approval in April 2006.

Glacier National Park, the Montana Department of Transportation, and Flathead County believe it is critically important to complete the GTSR reconstruction project on schedule with minimal negative impacts.

The State and County have a vested interest in maintaining and promoting visitation to Glacier National Park, which is one of the goals outlined in the mitigation plan. In addition to being geared toward providing visitors an opportunity for a favorable experience, there are significant economic benefits in the County and throughout the State directly related to park visitation.

The State, in cooperation with Flathead County, has expressed an interest in partnering with the park toward the goal of increasing the availability of public transportation in and around the park. The County has identified a need for additional vehicles to serve the rapidly growing public transportation requirements. State funding provides an unprecedented opportunity to expand the transportation system beyond park boundaries.

Flathead County has gained experience and expertise in public transportation as demonstrated by having operated Eagle Transit, a local service provider, for the past 20 years. Eagle Transit has the capability to utilize their experience in transit operation to provide a fully operational system with the flexibility necessary to accommodate changing park requirements.

B. Objectives:

- Benefit the public by providing better access to services, reduced private vehicle use, and expanded access to public transportation in Montana both in and beyond the boundaries of the GNP.
- Best meet the travel needs of visitors to GNP and along the GTSR during the reconstruction by delivering transportation services and supporting adaptive management practices.
- Maximize the efficiency of the transit system by taking advantage of transit planning, management and operations capabilities of existing area transit providers.
- Maximize the effectiveness of funding by pooling multiple sources of funding and meeting fund matching requirements.

- Maximize resource protection and environmental sustainability by using readily available biodiesel fuels for the operation.
- Maximize the transportation service to all road users by coordinating road construction, traffic management and transit operations to minimize congestion and maximize information availability to visitors for travel planning.

C. Public Purpose:

This Agreement provides for an alternative source of transportation for park visitors and includes the potential to expand public transportation throughout Flathead County and the State of Montana. In addition to meeting mitigation goals, the project stands to produce significant resource benefits relative to the environment through reduced vehicle emissions and pollutants.

By combining available resources, the agencies party to the Agreement, will create or strengthen existing transit services available to the public. Inside of GNP, the transit system is a vital component of the overall mitigation capabilities to enable successful reconstruction of the GTSR in accordance with the provisions of the FEIS / ROD.

Within Flathead County, and other locations in Montana, the State of Montana is supporting this agreement to create and strengthen a wide range of transit services and to support one of its most treasured resources: Glacier National Park. Efficient use of financial and management resources are a prime advantage achieved through this cooperative agreement. Each organization reduces capital and operational costs through this cooperative effort. Equally, each organization gains increased capabilities and responsiveness to serve the public during a very dynamic period.

ARTICLE II - AUTHORITY

16 U.S.C 1(g) provides that the National Park Service may enter into cooperative agreements that involve the transfer of National Park Service appropriated funds to State, local and tribal governments, other public entities, educational institutions, and private, nonprofit organizations for the public in carrying out National Park Service programs pursuant to section 6305 of Title 31.

Now therefore, as authorized by 16 U.S.C. 1(g), in consideration of the above premises, and in the interest of the mutual advantage in attainment of common objectives, the parties hereto express a desire to cooperate and mutually agree to substantial involvement as detailed in the following statements of work.

ARTICLE III - STATEMENTS OF WORK

A. NPS agrees to:

1. Provide initial funding in an amount not to exceed \$861,000 for the acquisition of transit system buses.

2. Provide approximately twenty-two small transit buses as government-furnished equipment necessary for the implementation of the transit system.
3. Provide funds identified in Article VI to match the MDT supplied funds that are eligible to be used for match in the Federal Transit Administration (FTA) Section 5311 and 5309 programs as consistent with all applicable Federal statutes, rules, and guidance.
4. Seek additional funding beyond the current fiscal year obligation to support the operation plan outlined in Attachment A.
5. In cooperation with MDT and Eagle Transit, determine the specific number of buses to be purchased, timing of the purchases, and equipment configuration consistent with and in support of GNP's Transit and ITS Implementation Plans.
6. Provide adequate staffing to work with MDT and Eagle Transit to develop a specification that meets the requirements of mitigation goals.
7. Provide an alternative form of transportation (i.e. leased buses) should equipment acquired under this Agreement not be delivered timely, and it is determined by the park superintendent that it is necessary in order to deploy the transit service in advance of the receipt of purchased buses.
8. Ensure that vehicles purchased through this agreement include prominent display of MDT logo in recognition of funding partnership.
9. Develop a delivery and inspection schedule in coordination with MDT.
10. Provide Transit Centers - a new transit center at the west terminus, and improvements to the existing visitor center at the east side terminus to accommodate the transit system, both to include driver break rooms and transit / ITS operations areas.
11. Develop transit stops along the primary route and supplementary feeder loop stops along planned routes.
12. Provide for bus and operator parking and driver reporting area located in the near vicinity of the west side park maintenance area with the possibility of parallel facilities on the east side.
13. Provide a bus wash and minor maintenance facility (vacuuming and general cleaning) to be located in the general area of the west side park maintenance complex. The location will be determined by an environmental assessment.
14. Develop a management plan addressing the condition and appearance of the bus fleet for daily operation, and upon return to the park at the beginning of each season.
15. Modify the Agreement in subsequent years to contribute to the operations and

maintenance of the transit system. Any modification will be subject to the availability of funds and be based upon the Transit System plan, schedule, and proposed budget (Attachment A) requirements to ensure the system remains sustainable. Level of service and costs will be reviewed and revised annually.

16. Provide an Intelligent Transportation System (ITS), if approved by the NPS Chief Information Officer, designed in accordance with national ITS Architecture standards.
17. Coordinate daily, or as needed, with MDT and/or Flathead County to modify or adapt to changing transit operational requirements.

B. State of Montana agrees to:

1. Provide funding in the amount not to exceed \$2.9 million for the acquisition of the transit fleet. Not more than 66 percent of the total state supplied funds shall be expended in any single fiscal year. Make funds from FTA Sections 5311 and/or 5309 programs available to support transit services planned to begin in May 2007.
2. Support the purchase of buses that meet all Federal Transit Administration requirements including all applicable Federal Acquisition Regulation requirements including, but not limited to, the Buy American Act, (41 U.S.C. 10a – 10d), Executive Order 10582, and the Americans with Disabilities Act.
3. Provide a review team knowledgeable in the procurement of buses utilizing best-value practices and lead in the development of specifications in coordination with the park to ensure GTSR operational and all FTA requirements are met.
4. Strive to meet the May 2007 delivery date for State furnished FTA eligible vehicles subject to the partners to the agreement reaching consensus relative to specifications within a timeframe that provides for delivery at this schedule.
5. Assist in selecting and screening potential additional transit users for this system to ensure compliance with FTA requirements for the Section 5311 and/or 5309 programs.
6. Ensure that all actions and acquisitions are consistent with FTA requirements and correctly submitted for FTA approval.
7. Ensure that all vehicles purchased with FTA funds provide year around service for transit services consistent with FTA Section 5311 program requirements.

C. Flathead County agrees to:

1. Commit Eagle Transit as the primary service provider for the Glacier National Park Transit System requirement.
2. Cooperate with the GTSR Project team to refine the developed transit system operational concept to meet existing conditions and expectations. Implement the

transit operations plan outlined in Attachment A to meet the 2007 transit level of service requirements.

3. Provide for daily presence in the facilities during the operating season. Service capabilities for 2007 will be refined as construction progresses, visitor use patterns are refined, and other ridership factors are identified.
4. Operate and maintain the bus fleet in accordance with FTA requirements as well as MDT and Flathead County standards. Ensure services meet evolving requirements. Provide bus and on board ITS maintenance and required off season storage operations and facilities.
5. Operate and maintain vehicles in accordance with manufacturer guidance and MDT inspection requirements. In addition, vehicles shall meet specific requirements for vehicle operation, maintenance, and appearance for operation in Glacier National Park.
6. Develop and sustain a driver training program to ensure the availability of qualified drivers for the challenges of a transit system along GTSR operating seasons.
7. Comply with the requirements of HSPD-12 for Grants/Cooperative Agreements.
8. Coordinate with Glacier National Park to integrate and accommodate outside and inside the park tour and transit requirements. These may include park concessionaires, such as Glacier Park Incorporated (GPI) and Sun Tours, other services coming from outside of the park, such as the Glacier Park International Airport, services from the Amtrak stations at West and East Glacier and services that bring visitors to lodges inside the park. Remain flexible to accommodate other shuttle services or feeder loops that may be created. Also remain flexible to accommodate requirements changes due to changes in the road status such as construction and naturally caused impacts.
9. Act as the primary clearing house and initial coordinator for any additional transit users of the fleet resource. Ensure Glacier National Park has priority for fleet use. Coordinate with partners to the agreement any additional user operational plans to continue or enhance a sustainable overall system. Ensure the fleet supplements or expands transit services in Flathead County and other areas in Montana when not engaged in support of Glacier National Park, and that the fleet or its operation will not supplant existing coordinated transit service in any community.
10. During the GTSR operational season, provide east and west side transit system supervision, bus wash and daily maintenance, and custodial services at the Apgar Transit Center.
11. Deliver buses to the park each operating season in a well maintained condition meeting mechanical requirements and in new appearance condition defined in the annual inspection plan.

12. Maintain liability insurance consistent with Section 2-9-108, Montana Code Annotated. In addition to standard requirements, Eagle Transit shall carry an additional \$5,000,000 for any actions brought in a Federal Court.

D. The National Park Service, State of Montana, and Flathead County mutually agree to:

1. Pursue the incorporation of Intelligent Transportation System components into transit vehicles as described in Attachment F.
2. The initial year of the Agreement shall focus on acquisition of buses and the service required for the Transit System. Additionally, participants will be required to incorporate ITS components into their operations if/when approved.
3. Provide service in support of mitigation as the number one priority taking precedence over all other commitments or potential uses.
4. Meet together periodically, to coordinate project activities, track project progress and expenditures, and refine operations to ensure consistency with the project objectives and schedule.
5. Jointly develop and sustain a public communication plan that informs and involves the public in the benefits and advantages of this partnership.
6. Develop bus specifications that meet GTSR mitigation requirements and FTA requirements if FTA funding is used.
7. Develop and implement a system marketing plan that meets each organizations requirements and objectives.
8. Provide a coordinated public information program to ensure that consistent and correct information is provided to communities and visitors.
9. Allow Eagle Transit to use the vehicles during the off-season or lease the vehicles to other in-state eligible public transit providers for the public benefit. Any income derived as a result of this Agreement shall be managed in accordance with 43 CFR § 12.65.
10. Costs associated with operations, maintenance and repairs shall be fully funded by the benefiting party during any period the equipment is not in park supporting the GTSR mitigation project. No GTSR project funding shall be used for this purpose.
11. MDT will hold liens on all vehicles purchased with FTA funding (section 5311 or 5309) until 350,000 miles of travel or ten years after purchase, whichever occurs first.
12. Following the operating season each year, the cooperating agencies will review the service and plan changes for the following season to meet the key objectives. This planning effort will address routes; schedules; operating hours; operational

parameters; performance measures; communications; coordination of traffic operations, transit operations, and construction; and operating costs. The cooperative planning effort is an important element for adjusting the service to meet visitor needs and reflecting changing construction factors and will require substantial involvement on the part of each partner.

13. Use alternative fuels such as biodiesel when available and when such fuels meet the vehicle manufacturer's recommendations. Under no circumstances shall vehicles be operated and/or maintained in a manner that would void the manufacturer's warranty.

ARTICLE IV - TERM OF AGREEMENT

This Cooperative Agreement shall commence upon the date of the final signature and shall continue in full force and effect for a period of one year, unless terminated in accordance with Article XI. The Agreement may be renewed by written supplemental agreement for subsequent years not to exceed five years in total. At the conclusion of the five year term, a new five year agreement may be issued. All extensions of the agreement are subject to the availability of funding, existing requirements, and must be approved in writing by the appropriate signature authorities of the parties hereto.

The current estimated duration of the GTSR rehabilitation project is a minimum of 8 years dependent on funding levels. Initial service shall commence on or about July 1, 2007, and run through approximately September 3, 2007. Following the operating season each year, the cooperating agencies will review the service and plan changes for the following season to meet the key objectives. This planning effort will address routes; schedules; operating hours; operational parameters; performance measures; communications; coordination of traffic operations, transit operations, and construction; and operating costs. The cooperative planning effort is an important element for adjusting the service to meet visitor needs and reflecting changing construction factors and will require substantial involvement on the part of each cooperating agency.

ARTICLE V - KEY OFFICIALS

The key officials listed in this agreement are considered to be essential to ensure maximum coordination and communication between the parties and the work being performed. Upon written notice either party may designate an alternate to act in place of the designated key official in an emergency.

For the National Park Service:

Signatory/Administrative
Neil Brewster
Contracting Officer
Glacier National Park
West Glacier, Montana

Local/Coordinating
Michael O. Holm
Superintendent
Glacier National Park
West Glacier, Montana

Phone: 406-888-7870

Phone: 406-888-7901

Senior GTSR Program Manager
John Kilpatrick
Facilities Manager
Glacier National Park
West Glacier, Montana

Phone: 406-888-7977

GTSR Mitigation Project Manager
Gary Danczyk, PE
PM Mitigation
Glacier National Park
West Glacier, Montana

Phone: 406-888-7976

For the State of Montana:

Signatory/Administrative
Jim Lynch
Director
Montana Department of Transportation
Helena, Montana

Phone: 406-444-6201

Local/Coordinating
Dick Turner
Chief, Multimodal Planning Bureau
Montana Department of Transportation
Helena, Montana

Phone: 406-444-7289

For Flathead County:

Signatory
Robert W. Watne
Chairman
Flathead County Commissioner
800 N Main St
Kalispell, Montana 59901

Phone: 406-758-5507

Local/Coordinating
Cheryl Talley, PE
Program Manager
Eagle Transit
160 Kelly Rd
Kalispell, Montana 59901

Phone: 406-758-5734

Communications – The State shall address any communication regarding this agreement to the Contracting Officer, with a copy to the superintendent. Communications that relate solely to routine operational matters described in the current work plan may be sent only to the superintendent.

Changes in Key Officials – Neither the NPS nor the State or County may make any change in a key official without written notice to the other party reasonably in advance of the proposed change. The notice shall include a justification with sufficient detail to permit evaluation of the impact of such a change on the scope of work specified within this agreement.

Article VI - AWARD AND PAYMENT

The initial award establishes an obligation on behalf on the National Park Service to fund the first phase (bus acquisition) in the amount not to exceed \$861,000.00.

Initial Award:

Payment for the bus acquisition will be made in advance upon the State submitting an original Standard Form 270, Request for Advance or Reimbursement, to the Contracting Officer. The SF-270 shall be supported by an itemized account of all expenses outlined in the budget estimates. Requests for payment may be submitted not more often than monthly.

Subsequent Awards for Operation:

Following the initial phase of the Agreement relative to bus acquisition, the National Park Service anticipates developing a predetermined monthly payment schedule for all advance payments. Payments shall be processed in accordance with 43 CFR § 12.922. Financial reporting shall be accomplished by completing Standard Form SF-272 on a quarterly basis throughout the life of this Agreement.

All correspondence pertaining to requests for payment shall be addressed to the Contracting Officer, National Park Service, Glacier National Park, West Glacier, MT 59936.

A work plan and budget specifying tasks each partner will perform during the term of this agreement is attached. Should adjustments be required, each cooperator will participate in negotiations to ensure the transit system remains sustainable to meet capital, operations, and maintenance requirements.

Nothing in this agreement shall be construed as binding the National Park Service to expend in any fiscal year any sum in excess of the appropriation made by Congress for purposes of this agreement in that fiscal year. Furthermore, this Agreement shall not bind either the State of Montana or Flathead County to expend funds in excess of allotted appropriations for any fiscal year.

The availability of annual funding levels in subsequent years will affect project duration and sequencing. Road construction is the critical path for this Cooperative Agreement, which requires that the mitigation work highlighted by the transportation system must have the flexibility to stay ahead of changing road, construction and visitation conditions anticipated during a very dynamic period in Glacier National Park.

Article VII - PRIOR APPROVAL

Any proposed change that affects the scope of work, term of agreement, or level of funding shall be approved in writing by the signatory authorities prior to commencing with the proposed changes.

The State shall secure concurrence from the Contracting Officer prior to the expenditure of any funds provided not specifically identified under the scope of work outlined in this Agreement.

Changes are anticipated during the construction sequencing as well as in response to Gateway Community and visitor feedback. No changes will be implemented without full coordination between cooperators.

ARTICLE VIII – LIABILITY

The State of Montana agrees:

- A. To indemnify, save and hold harmless, and defend the United States against all fines, claims, damages, losses, judgments, and expenses arising out of, or from, any act or omission of the State of Montana, its officers or employees relative to activities authorized pursuant to this Agreement. This obligation shall survive the termination of the Agreement.
- B. To provide workers' compensation protection to the State officers, employees, and representatives.
- C. To pay the United States the full value for all damage to the lands or other property of the United States caused by the State, its officers, employees, or representatives.
- D. To cooperate with the NPS in the investigation and defense of any claims that may be filed with the NPS arising out of the activities of the cooperators, their agents, and employees.

The Flathead County (Eagle Transit) agrees:

- A. To indemnify, save and hold harmless, and defend the United States against all fines, claims, damages, losses, judgments, and expenses arising out of, or from, any act or omission of the Flathead County, its officers, employees, or participants (members, agents or representatives as appropriate) arising out of or in any way connected to activities authorized pursuant to this Agreement. This obligation shall survive the termination of the Agreement.
- B. To provide workers' compensation protection to the County officers, employees, and representatives.
- C. To pay the United States the full value for all damage to the lands or other property of the United States caused by the County, its officers, employees, or representatives.
- D. In the event of damage to or destruction of the buildings and facilities assigned for the use of Eagle Transit in whole or in part by any cause whatsoever, nothing herein contained shall be deemed to require the NPS to replace or repair the buildings or facilities. If the NPS determines in writing, after consultation with Eagle Transit, that damage to the buildings or portions thereof renders such buildings unsuitable for continued use by Eagle Transit, the NPS shall assume sole control over such buildings or portions thereof. If the buildings or facilities rendered unsuitable for use are essential for conducting operations authorized under this Agreement, then failure to substitute and assign other facilities acceptable to the County will constitute termination of this Agreement by the NPS.
- E. To cooperate with the NPS in the investigation and defense of any claims that may be filed with the NPS arising out of the activities of the cooperators, their agents, and employees.

ARTICLE IX - REPORTS AND / OR DELIVERABLES

A. Where to Submit - In accordance with 43 CFR Part 12, Eagle Transit in coordination with the park transportation manager, shall submit reports to the NPS Contracting Officer at the address specified in Article V. Eagle Transit shall also submit a copy of each report to the park superintendent at the address specified in Article V.

B. What and When to Submit – Eagle Transit will submit to the NPS required reports at frequencies as follows:

- a. Quarterly Financial Report – A quarterly financial report shall be submitted to the Contracting Officer on Standard Form 272.
- b. Quarterly Progress Report - A quarterly progress report, beginning thirty days from the effective date of this agreement, and every quarter thereafter throughout the life of the Agreement. During the GNP summer season, reports shall be monthly. Each progress report shall include:
 - i. A work plan summary including buses on hand, key personnel and driver status, maintenance facility status and bus or ITS maintenance issues.
 - ii. Emerging on or off season developments for transit systems that are planned to also use bus system resources already identified in this Agreement.
 - iii. Ridership statistics, funds status, key resourcing issues, capital replacement forecast and update.
 - iv. Status of communications program, recommended refinements, events, feedback and issues
 - v. Other information or key issues pertinent to this agreement.

C. Record Keeping – Eagle Transit will keep records concerning this Agreement in accordance with the requirements of Article XII, Paragraph A, General Provisions, and all applicable Office of Management and Budget Circulars.

D. Access to Records

- a. The State/County shall give the NPS and the Comptroller General of the United States, or any authorized representative, access to and the right to examine all records related to this agreement.
- b. The NPS will give the State/County or any authorized representative the right to examine any records related to this agreement that otherwise would be available to the State/County under the Freedom of Information Act, 5 U.S.C. § 552.

ARTICLE X - PROPERTY UTILIZATION

- A.** Title to Federal Government-furnished equipment shall remain vested in the Federal Government. All tools, equipment, and supplies that may be furnished by the National Park Service shall be on a loan basis. Loaned items remaining at the end of this Agreement shall be returned to the NPS within 20 days after completion of the project.
- B.** The NPS reserves the right to transfer title of Federal Government-furnished equipment to another Federal agency or to a third party named by the NPS when such a third party is otherwise eligible under existing statutes. Such transfers shall be subject to the standards set forth in A-110 or A-102, as applicable and as codified by 43 CFR § 12.92.
- C.** Equipment acquired through funding provided under this Agreement is to be transferred to Flathead County under the operational supervision of Eagle Transit. However, MDT shall hold the lien against all vehicles purchased with FTA funding (See Article III, D, 11.). The equipment shall be available for use within Glacier National Park for seasonal transit services each and every year as determined by the annual operating plan.
- D.** Property Records – Flathead County and Eagle Transit will maintain records of all property acquired and disposed of under this agreement, take a physical inventory of all remaining property, and reconcile the results of the inventory with the records at least once every two years in accordance with 43 CFR §12.934 and 12.9.

ARTICLE XI - MODIFICATION AND TERMINATION

This Agreement may be modified only by a written instrument signed by the appropriate signatory authorities of all parties.

Any party may terminate this Agreement by providing written notice to all other parties within 90 calendar days of the end of each operating season. In the event such notice is issued, the parties shall meet promptly to discuss the reasons for the notice and to try to resolve their differences amicably. The cooperators commit to using every reasonable means available, including the use of a neutral mediator if necessary to avoid terminating this Agreement.

In the event all possible means of reconciliation are exhausted, and the Agreement is terminated, transit system resources shall be partitioned based on resources invested.

ARTICLE XII - GENERAL AND SPECIAL PROVISIONS

A. General Provisions

- 1. OMB Circulars and other Regulations - The following OMB Circulars and other regulations are incorporated by reference into this agreement:
 - a. OMB Circular A-87, "Cost Principles for State, Local, and Indian Tribal Governments."
 - b. OMB Circular A-97, "Provisions for Specialized and Technical

Services to State and Local Governments.”

- c. OMB Circular A-102, as codified by 43 CFR Part 12, Subpart C, “Uniform Administrative Requirements for Grants-in-Aid to State Governments.”
 - d. OMB Circular A-133, “Audits of States, Local government, and Non-Profit Organizations.”
 - e. FAR Clause 52.203-12, Paragraphs (a) and (b), “Limitation on Payments to Influence Certain Federal Transactions.”
2. **Non-Discrimination** - All activities pursuant this agreement shall be in compliance with the requirements of Executive Order 11246; Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. §§ 2000d et seq.); Title V, Section 504 of the Rehabilitation Act of 1973 (87 Stat. 394; 29 U.S. C. §794); the Age Discrimination Act of 1975 (89 Stat. 728; 42 U.S.C. §§6101 et seq.); and with all other federal laws and regulations prohibiting discrimination on grounds of race, color, sexual orientation, national origin, disabilities, religion, age or sex.
3. **Lobbying Prohibition** - 18 U.S.C. § 1913, Lobbying with Appropriated Moneys - No part of the money appropriated by any enactment of Congress shall, in the absence of express authorization by Congress, be used directly or indirectly to pay for any personal service, advertisement, telegram, telephone, letter, printed or written matter, or other device, intended or designed to influence in any manner a Member of Congress, to favor or oppose, by vote or otherwise, any legislation or appropriation by Congress, whether before or after the introduction of any bill or resolution proposing such legislation or appropriation; but this shall not prevent officers or employees of the United States or of its departments or agencies from communicating to Members of Congress on the request of any Member or to Congress, through the proper official channels, requests for legislation or appropriations which they deem necessary for the efficient conduct of the public business.
4. **Anti-Deficiency Act** - 31 U.S.C. § 1341 - Nothing contained in this agreement shall be construed as binding the NPS to expend in any one fiscal year any sum in excess of appropriations made by Congress, for the purposes of this Agreement for that fiscal year, or other obligation for the further expenditure of money in excess of such appropriations.
5. **Minority Business Enterprise Development** – Executive Order 12432 – It is national policy to award a fair share of contracts to small and minority firms. The NPS is strongly committed to the objectives of this policy and encourages all recipients of its Cooperative Agreements to take affirmative steps to ensure such fairness by ensuring procurement procedures are carried out in accordance with 43 CFR § 12.944 for Institutions of Higher Education, Hospitals and Other

Non-Profit Organizations, and 43 CFR § 12.76 for State and Local Governments.

B. Special Provisions

Publications of Results of Studies

No party will unilaterally publish a joint publication without consulting the other parties. This restriction does not apply to popular publication of previously published technical matter. Publication pursuant to this agreement may be produced independently or in collaboration with others, however, in all cases proper credit will be given to the efforts of those cooperators contributing to the publication. In the event no agreement is reached concerning the manner of publication or interpretation of results, either party may publish data after due notice and submission of the proposed manuscripts to the others. In such instances, the party publishing the data will give due credit to the cooperation but assume full responsibility for any statements on which there is a difference of opinion.

- C. Certifications** – The following certification is required in accordance with the above provisions and made a part of this Agreement:

DI-2010, U.S. Department of the Interior Certification Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirement and Lobbying.

ARTICLE XIII – ATTACHMENTS

In addition to the attachments previously specified in this Agreement, the following documents are considered an essential part of the Agreement and are incorporated by reference, attached, or will be included as they are finalized and approved by the parties hereto:

- A. Glacier National Park Operations Plan (July 11, 2006)
- B. Standard Form SF-424, "Application for Federal Assistance" (incorporated by reference)
- C. Standard Form SF-424A, "Budget Information" (incorporated by reference)
- D. HSPD-12 Grant/Cooperative Agreement Requirements
- E. Proposed budgets for years 2007 through 2011.
- F. ITS plan, schedule and budget for 2007. (NPS Lead)
- G. Communications plan, schedule and budget for 2007 (NPS Lead)
- H. Basis for Payment to Flathead County (Flathead County lead)

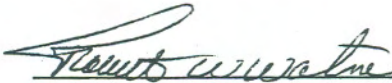
I. Terms of Reference and entry level for additional cooperators (Flathead County lead)

J. Annual Vehicle Inspection Plan (NPS Lead)

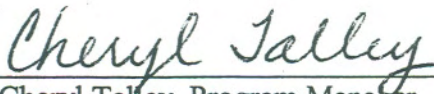
ARTICLE XIV - SIGNATURES

IN WITNESS HEREOF, the parties hereto executed this agreement on the date(s) set forth below:

For Flathead County:

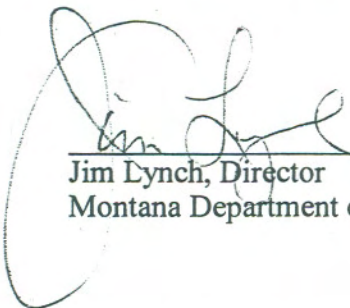

Robert W. Watne, Chairman
Flathead County Commissioner

Date: 10-16-06


Cheryl Talley, Program Manager
Eagle Transit

Date: 10/18/06

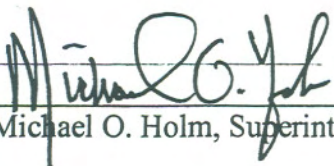
For the State of Montana:


Jim Lynch, Director
Montana Department of Transportation

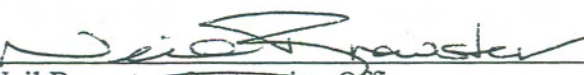


Date: 10/18/06

For the National Park Service:


Michael O. Holm, Superintendent

Date: 10/31/06


Neil Brewster, Contracting Officer

Date: 12/14/2006

AMERICAN AIRWAYS

NEW YORK TO LOS ANGELES

FLIGHT 100

Robert W. Johnson
President

John J. Johnson
Vice President

James H. Johnson
Secretary

John F. Johnson
Treasurer

John G. Johnson
General Counsel

John H. Johnson
Director of Operations

John I. Johnson
Director of Finance

**APPENDIX E: SAMPLE “E-BLAST”
(GLACIER NATIONAL PARK)**

From: EBLAST-Subscribers@dot.gov [mailto:EBLAST-Subscribers@dot.gov]

Sent: Wednesday, April 28, 2010 3:59 PM

Subject: Going-to-the-Sun Road Eblast, April 27, 2010

GOING-TO-THE SUN ROAD REHABILITATION UPDATE

Greetings from Glacier National Park

EBlast provides the most accurate Going-to-the-Sun Road traveler information forecast for the 2010 visitor season.

Read Eblast on the Western Federal Lands Highway website:

<http://www.wfl.fhwa.dot.gov/projects/gtsr/>

[Going-to-the-Sun Road – 2010: Top 10 Things You Need to Know](#)

SPRING/SUMMER/FALL

The alpine portion of the road remains closed while park crews continue annual snow-plowing operations. The road is partially open on both the east and west side (see the link below to view current plowing progress, what is open and hike-bike access information):

- For further information, visit <http://home.nps.gov/applications/glac/roadstatus/roadstatus.cfm>
- For plowing progress and hike-bike access information, visit <http://home.nps.gov/applications/glac/gttsroadplow/gttsroadplowstatus.cfm> or call 1-406-888-7800.

