

APPENDIX J.

Cheyenne Mountain State Park Financial Plan

The Cheyenne Mountain State (CHM) Park Financial Assessment presents a financial model that projects the incremental new operational costs and potential additional revenue generated by select park enhancement opportunities (EOs) over a 30-year analysis period. EOs for CHM State Park include a prioritized list of:

- Improvements to existing facilities and infrastructure;
- New facilities and infrastructure;
- Rehabilitation efforts and natural resource restoration projects; and
- Management initiatives critical to the long-term operational success of the park.

The complete list of EOs is included in Chapter 5 of the CHM Management Plan. In general, EOs evaluated in the Financial Assessment include those that may impact park visitation, operations and revenue. The purpose of the financial analysis is to provide insight on some of the short- and long-term financial considerations associated with various EOs.

Included in this assessment is: 1) a summary discussion of current CHM visitation characteristics and market considerations; 2) a financial model for each park EO; and 3) a documentation of assumptions that underlie the financial analysis.

Market Considerations

The following is a discussion of CHM elements and visitation characteristics that informed the selection of park EOs.

Park Characteristics. CHM State Park opened in 2006 and is the only state park in El Paso County. The 1,680-acre park is located on the Rocky Mountain front range about 7 miles southwest of Colorado Springs. The current park offers about 16 trails for hikers and bikers totaling about 20 miles.

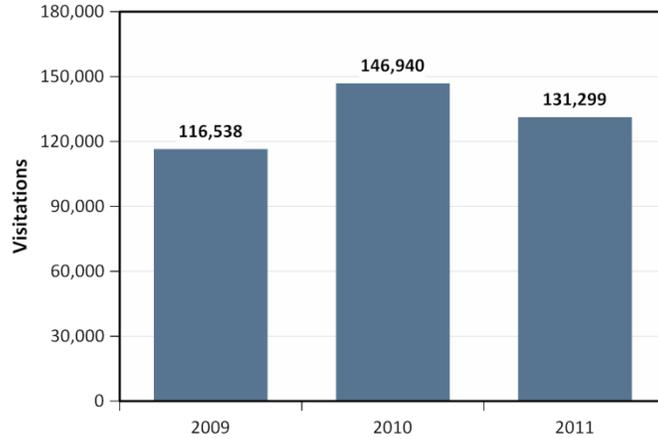
CHM offers a variety of diverse mountain-prairie ecosystems that include short-prairie grasses, Gambel oak woodlands and ponderosa pine/Douglas-fir forests. Due to its natural amenities, ecological diversity and proximity to a large population center, the park provides a series of educational and interpretive programs, which include children's activities, guided hikes, wildlife interpretive programs and geocaching.

In addition to the natural amenities, the park provides 41 day-use picnic sites; 10 walk-in tent sites; a 13-site group camping area; and 51 full hook-up recreational vehicle (RV) sites. There is a campground services building that is open seasonally (April 15th –October 15th) and sells camper goods. The park visitor center offers a gift shop and a public meeting room. Other event centers include the Prairie Skipper facility and the Prairie Falcon outdoor amphitheatre.

Visitation. In 2011, the park attracted approximately 131,000 visitors, which is slightly lower than 2010 visitation (147,000 visitors). Overall visitation since 2009 (117,000 visitors) has increased. The following exhibit shows CHM State Park visitation between 2009 and 2011:

Figure 1.
Exhibit Cheyenne Mountain State Park
Visitation, Calendar Year 2008 to 2011

Source:
Colorado Parks & Wildlife.



Overnight use. The following figure shows the portion of park revenue supported by camping and gate fees at CHM State Park in between Fiscal Year (FY) 2009 and FY 2011. The park offers tent and full service camping sites at \$16 and \$24 per night, respectively. Camping is a popular activity that contributes a relatively large amount of revenue to the park’s accounts.

Figure 2.
Camping and Gate
Revenue, Cheyenne
Mountain State
Park, Fiscal Year
2010 to 2011

Source:
Colorado Parks & Wildlife.

Fiscal Year	Total Revenue	Camping Revenue		Gate Revenue	
		Amount	Percent	Amount	Percent
FY 2011	\$ 357,796	\$ 217,408	61%	\$ 140,388	39%
FY 2010	\$ 352,512	\$ 198,869	56%	\$ 153,643	44%
FY 2009	\$ 222,858	\$ 74,051	33%	\$ 125,636	56%
Average	\$ 355,154	\$ 163,443	50%	\$ 139,889	46%

On average, camping and gate revenue account for about 96 percent of CHM State Park revenue. Between FY 2009 and FY 2011, camping revenue has increased from \$74,051 to \$217,408. Camping revenue increased by 85 percent between FY 2009 and FY 2011. These data indicate that camping is a significant revenue generator and overnight use at the park is popular. Campers also contribute to gate revenue at the park in addition to their nightly rental fees.

Since 2009, there has been a decline in the proportion of gate revenue to the total revenue and an increase in the proportion of camping revenue to total revenue. This trend illustrates the importance of overnight park use in producing revenue for the park.

Proposed Revenue-Generating Park Improvements

In general, EOs evaluated in the following financial assessment include those that will likely impact park visitation, operations and revenue. Data were obtained from CHM State Park operations, estimates from Colorado Parks and Wildlife (CPW) staff and comparable state parks. Capital expenditure data were obtained from CPW staff.

Each CHM State Park financial model allows for the integration of assumptions regarding project construction; facility-based revenue generation; and demonstrates the degree to which park enhancements contribute to the financial viability of the park. Descriptions of park improvement capital, incremental operating costs, and associated revenue are briefly described after each financial model.

Average gate revenue per visitor is used to calculate the incremental revenue gained for each of the following enhancements. In the following figure the average is calculated from CHM State Park data from FY 2009-FY 2011.

Figure 3.
Average Gate Revenue per Visitor,
Cheyenne Mountain State Park,
2009 to 2011

Source:
Colorado Parks & Wildlife.

Year	Gate Revenue	Park Visitors	Gate Revenue per Visitor
FY 2011	\$ 140,388	131,299	\$ 1.07
FY 2010	\$ 153,643	146,940	\$ 1.05
FY 2009	\$ 125,636	116,538	\$ 1.08
Average	\$ 139,889	131,592	\$ 1.06

Enhancement opportunities that will significantly alter park operating characteristics are assigned incremental operating costs and revenues according to past CHM and comparable park performance and input from CPW staff. In these models there are four main components: capital costs, operating costs, operating revenue and an investment analysis. The investment analysis includes standard financial measures such as annual net cash flow, net present value, payback period, return on investment and self-sufficiency. (Also see the financial analysis notes on pg. 20 for a detailed description of the investment analysis measures).

EO1: Trail extension to top of Cheyenne Mountain. CPW currently manages 16 trails at CHM State Park with a combined length of 20 miles. Trail use is currently limited to hiking and biking. In the winter months, some of the trails are groomed to allow for snowshoeing and cross-country skiing.

CPW is proposing development of an additional 5.2 miles of trail that will eventually extend from North Talon Trail to the top of Cheyenne Mountain (TOM). The proposed trail development would increase overall trail mileage in the park by 26 percent. Trail construction will rely heavily on a volunteer workforce and will need to occur after July 15th and into the fall to comply with federal mitigation requirements to protect vulnerable species existing in the area. Therefore, trail construction is anticipated to take several years to complete.

The entire TOM trail will be open to hikers. Equestrian users and mountain bikers will have access to the first 1.4 miles of trail up to the “saddle” area. All other previously existing trails in the park will maintain hiking and mountain biking as primary uses. Use of the remaining portion of the trail is limited to hikers due to steep grades and safety concerns.

In order to provide service to these new users, limited equestrian parking will need to be made available in the lowermost parking lot at the main trailhead. From here, equestrians would take the Sundance Trail (outermost loop) to the Talon Trail and North/South Talon Trail to access the TOM trail. These existing connector trails will need to be improved where necessary prior to opening to equestrian use to stabilize and reinforce the trail surface. Additional signage would also be needed on the newly extended trail to inform visitors of the trail user groups and proper trail etiquette.

Overall trail use is expected to increase as a result of the TOM extension, and also as it proposes to expand park access to a wider array of users. The extension will offer visitors a new outdoor experience with expansive views of the Front Range.

The following figure provides a list of the capital costs for TOM trail construction.

Figure 4.
EO1. Capital Costs for
Top of the Mountain Trail

Source:
Colorado Parks & Wildlife.

Item Description	Unit Price	Unit	Number	Total
CXT Toilet	\$ 35,000	EA.	1.0	\$ 35,000
Equestrian Adaptations				
Parking Lot	\$ 7,500	EA.	1.0	\$ 7,500
Existing Connector Trail Improvements	\$ 41,000	MI.	0.5	\$ 20,500
Scenic Overlook				
Interpretive Signage	\$ 5,000	EA.	1.0	\$ 5,000
Storage Building on Top	\$ 959		1.0	\$ 959
Contingency (20%)				\$ 13,792
Total Capital Costs				\$ 82,751

- The parking lot estimates include signage and other necessary lot improvements for equestrian use.
- Interpretive signage costs include TOM site development, rails and trail signs.
- The proposed storage building is a low-end estimate based on informal web research by BBC staff on basic shed costs (6X8 7'4"). The storage shed will allow for equipment storage space at the trail summit.
- Improvements to existing connector trails are included in the cost estimate above.

The following figure provides ongoing operational cost and revenue generation estimates for the TOM trail.

**Figure 5.
EO1. Financial
Analysis for TOM**

Source:
BBC Research & Consulting;
Colorado Parks & Wildlife.

Financial Model - Operations	Value
Incremental Labor Cost	
New Full Time Staff	
<i>Average Annual Salary</i>	\$ -
<i>Benefits</i>	\$ -
Incremental Full Time Labor Cost	\$ -
New Seasonal Staff	
<i>Hourly Wage</i>	\$ -
<i>Increased Annual Hours</i>	-
<i>Annual Expense Volunteer Program</i>	5,000
Incremental Seasonal Labor Cost	\$ 5,000
Incremental Operating Cost	
<i>Utilities</i>	-
<i>Annual Operations and Maintenance</i>	3,241
Total Incremental Costs	\$ 8,241
Incremental Revenue	
<i>Incremental Annual Visitation</i>	13,465
<i>Avg. Gate Rev. per Visitor</i>	\$ 1.06
Subtotal Gate Revenue	\$ 14,331
Investment Analysis	
Annual Net Cash Flow	\$ 6,090
Initial Investment	\$ 82,751
Break-Even Revenue	\$ 13,027
Pay Back (years)	14
Return on Investment	7.4%
Net Present Value (NPV) (includes initial investment)	\$23,000
Net Present Value (NPV) (excludes initial investment)	\$105,000
Self-Sufficiency	174%
Overall Self-Sufficiency	71%
Change in Park Self Sufficiency	1%
Discount Rate	4%
Analysis Period (YRS)	30

- No additional CPW staff or work hours are anticipated for TOM trail operation. Additional patrol of TOM will be absorbed by current staff.
- Annual expenses to support the volunteer program in the construction of the TOM trail include \$2,000 from the CHM volunteer program budget and \$3,000 from other CPW volunteer support funds.
- Trail improvement cost estimates provided by the Colorado State Trails Program and factor in clearing, grading, and application of granular sub-base, surfacing and seeding, where necessary.
- Annual maintenance is an estimate for ongoing trail and facility maintenance at 1.5 percent of the initial investment. This line-item also includes pump truck operations to maintain CXT toilet use at the top of the trail.
- Incremental annual visitation was calculated as an average of current CHM State Park trail users in 2009-2011, with a projected 20 percent increase in trail use due to expanded park trail mileage that will attract additional hikers, equestrians and mountain bikers.
- Average gate revenue per visitor is calculated based on CHM State Park gate revenue between 2009 and 2011 and is \$1.06.

EO2: Establish an archery range. CPW is considering constructing a 3-D archery range in the southeast area of the park. The range would include approximately 20 to 30 3-D targets situated along a 1.5-mile soft-surface walking trail. Development plans also include a smaller adjacent range outfitted with excelsior bales and paper targets. Additional proposed facilities for the range include storage for maintenance equipment and targets; and gazebos and picnic tables for social functions and instruction classes.

The range will be open nine months out of the year, excluding use in December, January, and February due to weather conditions. The range is proposed to be open to the public without shooting supervision, except during hunter education classes and organized archery events. Park rangers will monitor range activity to assure compliance with CHM State Park rules and regulations.

Currently, nearby archery ranges that provide this type of recreational opportunity are found at the Air Force Academy and Fort Carson. However, range accessibility at the Air Force Academy is often limited to military personnel and is small in size. The Fort Carson Range has been shuttered indefinitely according to Fort Carson staff.

There are approximately 3,000 licensed bowhunters in El Paso and Teller Counties, which indicates market potential for the range. Creating an outdoor archery range will diversify park recreation offerings and will potentially attract new user groups.

The Colorado Bowhunters Association (CBA) has been active in working with CPW staff to identify funding sources for range development. The CBA has offered to organize shooting and safety instruction classes for youth (under 16 years); organized youth groups (i.e. Boy and Girls Scouts, Boys & Girls Club, 4-H, etc.); and to arrange for instruction and/or group use of the range for special events and field training. Partnering with the CBA could also improve outreach and increase use of the archery range.

The archery range would provide new opportunities to engage more youth and families in outdoor activities and generate an increased interest in bow hunting. There is a high demand in the local region for archery ranges as further evident in the Archery in the Schools program already being administered in several middle schools in El Paso County. Furthermore, national trends show that popular appeal of current youth books and movies have increased youth interest in archery and have influenced several state parks to implement archery programs across the country.¹

Other archery range users could potentially come from Fort Carson, located near CHM State Park. The military base has indicated interest in the range as part of their wounded warrior rehabilitation efforts for soldiers returning home from efforts overseas.

¹ ""The Hunger Games' Fuels Interest in Archery Programs." Athletic Business. Web. 10 Apr. 2012. <http://athleticbusiness.com/articles/lexisnexis.aspx?lnarticleid=1640210633>.

Panola State Park in Georgia operates a similar 3-D archery range. Panola Park management provided information regarding site development, safety management, operating costs, pricing structure, and management. Panola State Park utilized Pittman Robertson grant funding to construct the site. The park fee structure is as follows: \$5 park pass; \$10 archery range pass; and \$100 for an adult annual pass. Overall, Panola has had a positive experience with their range without considerable overhead costs, although they have only been open a year. Their most significant resource cost is in staff supervision. The park directly manages the range and provides a self-pay kiosk at the range entrance.

CPW does not plan to request Pittman-Robertson (PR) grant funds for archery range construction. Grant stipulations require that fees collected by range users be directly applied for maintenance and operations of the range itself. By using general revenues to fund archery range construction, CPW would have the added flexibility of using revenues for purposes other than archery range maintenance and operations.

The following is an analysis of the capital costs for an archery range (Figure 6), which is followed by an analysis of operations financial impacts (Figure 7).

Figure 6.
EO2. Capital Costs
for Archery Range

Source:
Colorado Parks & Wildlife;
McKenzie & Delta Sports Products LLC..

Item Description	Unit Price
Parking Lot 15-20 Spots	\$ 45,000
Archery Fencing	50,000
Fencing Gate	4,500
Signage	9,200
Storage Shed	5,000
Trail Construction	2,000
Shelter Facility	20,000
CXT Toilet	35,000
Self-service tube for fees	1,000
Miscellaneous	1,000
Subtotal Infrastructure/Facilities	\$ 172,700
Range Equipment	\$ 4,075
30 McKenzie & Delta 3-D Animal Targets	12,000
250 Paper Targets	375
Furniture, Fixtures, Equipment	3,700
Contingency (20%)	38,570
Total Capital Costs	\$ 231,420

- Parking lot costs include: asphalt surface, wheel stops and signage. An optional cost model for the parking lot would be \$20,000 for a gravel surface lot, and includes wheel stops and signage.
- Archery fencing costs are estimated for 2 miles of fence at \$4 per linear foot and include costs for surveyor services and other signage.

In the following operating scenario, CPW will collect gate and additional 3-D archery range fees (\$5 daily pass, \$50 annual pass) through a self-service tube. CPW is still exploring the appropriate price point for a fee. CPW staff will patrol the area to ensure compliance of self-service fee payment.

The following figure provides financial characteristics of the archery range operation.

Figure 7.
EO2. Financial Analysis for Direct Park Operated Archery Range

Source:
BBC Research & Consulting;
Colorado State Parks.

Financial Model - Operations		Value
Incremental Labor Cost		
New Full Time Staff		-
<i>Average Annual Salary</i>	\$	-
<i>Benefits</i>	\$	-
		-
Incremental Full Time Labor Cost	\$	-
New Seasonal Staff		1
<i>Hourly Wage</i>	\$	10.00
<i>Increased Annual Hours</i>		1,440
		1,440
Incremental Seasonal Labor Cost	\$	14,400
Incremental Operating Cost		
<i>Utilities</i>	\$	-
<i>Annual Operations and Maintenance</i>	\$	4,255
		4,255
Total Incremental Costs	\$	18,655
Incremental Revenue		
<i>Incremental Annual Visitation</i>		3,000
<i>Avg. Gate Rev. per Visitor</i>		1.06
<i>Incremental Gate Revenue</i>	\$	3,193
<i>Archery Fee Revenue (Daily Pass)</i>	\$	13,750
<i>Archery Fee Revenue (Annual Pass)</i>	\$	12,500
		29,443
Subtotal Incremental Revenue	\$	29,443
Investment Analysis		
Annual Net Cash Flow	\$	10,788
Initial Investment	\$	231,420
Break-Even Revenue	\$	32,038
Pay Back (years)		21
Return on Investment		4.7%
Net Present Value (NPV) (includes initial investment)		(\$45,000)
Net Present Value (NPV) (excludes initial investment)		\$187,000
Self-Sufficiency		158%
Overall Self-Sufficiency		102%
Change in Park Self Sufficiency		32%
Discount Rate		4%
Analysis Period (YRS)		30

Assumptions included in the operating model:

- Archery operations based on a nine month period as weather will restrict use in December, January and February.
- Seasonal staff costs are estimates from CPW and labor is projected at one full-time seasonal staff (40 hours/week) for nine months per year.
- The projected annual users are based on number of archers registered in El Paso and surrounding counties.

- Incremental revenue calculated based on the average gate revenue from FY 2009 to FY 2011 and equals to \$1.06.
- Annual maintenance includes supplies, materials, and purchase services related to annual operations and facility maintenance. Cost estimates are calculated at 1.5 percent of initial capital investment.
- Park will recruit an estimated 250 annual archery passholders with annual fees of \$50.
- Daily archery pass fee is modeled at \$5 per pass (the eventual fee may vary).
- No fee would be charged to use the standard excelsior bale archery range.

EO3: Sleeper Cabins. Providing cabins at CHM State Park would diversify overnight offerings and generate an additional source of park revenue. The original CHM master plan called for modern overnight cabins. Their size and scale would also be substantially reduced from the original concept. CPW desires to understand the financial impact of sleeper cabins given the popularity of overnight use at CHM State Park, and its significant role in generating revenue.

CHM data on current camping visitation and revenue between FY 2009 and FY 2011 (see pg. 2) indicates that it is likely cabins would be a popular park amenity. Currently camping revenue accounts for about 50 percent of total park revenue, and it has increased by 85 percent since FY 2009. Furthermore, there is likely significant demand for the cabins due to CHM State Park’s close proximity to a major metropolitan area and the likely use by Fort Carson soldiers and their families.

The proposed site for the cabins would be in the Meadows Campground. Most of the infrastructure for water and utilities is already present at the site. The cabins would sleep four to six people each, and would provide a liquid propane heating stove and electric lights. The 300-square foot cabins would offer a sink, flush toilet and shower.

There are currently no cabins at CHM State Park. Average historical performance at Golden Gate Canyon State Park is used as a benchmark to estimate cabin usage at CHM due to its proximity to the Denver metropolitan area. Figure 10 shows current cabin rental volume and occupancy between FY 2009 to FY 2011 for five camper cabins at Golden Gate Canyon State Park.

Figure 8.
Cabin Rental Nights, Golden Gate Canyon Park, Fiscal Year 2009-2011

Source:
Colorado Division of State Parks, Golden Gate Canyon Overnight Use, 2012.

Camper Cabins	Units	Potential Rental Nights	Nights Occupied	Annual Occupancy
FY 2011	5	1,825	856	47%
FY 2010	5	1,825	876	48%
FY 2009	5	1,825	882	48%
Average Number Nights Occupied			871	48%

Over the last two years, Golden Gate Canyon Park averaged 871 camper cabin rental nights. Annual occupancy for cabins is about 48 percent. These data form the basis for projecting cabin use and associated revenue at CHM State Park.

The following depicts the capital investment for five sleeper cabins.

Figure 9.
EO3. Capital Costs for Sleeper Cabins

Source:
Colorado Parks & Wildlife.

Item Description	Number of Items	Unit Price	Unit	Unit Number	Total
Sleeper Cabins	5	\$ 280	S.F.	300	\$ 420,000
Contingency (20%)					\$ 84,000
Total Capital Costs					\$ 504,000

- Cabin cost estimates include: toilet, sink and utility hookup.
- Site work is also included in the above cost.

The following financial model projects sleeper cabin-related revenue and facility operation costs based on average performance at Golden Gate Canyon State Park and CPW input on expected operation costs. Revenue projections in the financial model for the cabins are based on average camper cabin occupancy and a rental rate of \$100 per night (\$90 rental fee and \$10 reservation fee). Actual performance at Cheyenne Mountain State Park may vary from historic conditions or comparable parks.

Figure 10.
EO3. Financial Analysis for Sleeper Cabins

Source:
BBC Research & Consulting.

Financial Model - Operations	Value
Incremental Labor Cost	
New Full Time Staff	-
Average Annual Salary	\$ -
Benefits	\$ -
Incremental Full Time Labor Cost	\$ -
New Seasonal Staff	1
Hourly Wage	\$ 10.00
Increased Annual Hours	960
Incremental Seasonal Labor Cost	\$ 9,600
Incremental Operating Cost	
Utilities	\$ 1,600
Annual Operations and Maintenance	\$ 7,560
Total Incremental Costs	\$ 18,760
Incremental Revenue	
Avg. Nights Occupied	871
Incremental Annual Visitation	2,178
Incremental Annual Cabin Revenue	\$ 87,133
Average Gate Revenue per Visitor	\$ 1.06
Incremental Gate Revenue	\$ 2,318
Subtotal Incremental Revenue	\$ 89,452
Investment Analysis	
Annual Net Cash Flow	\$ 70,692
Initial Investment	\$ 504,000
Break-Even Revenue	\$ 47,906
Pay Back (years)	7
Return on Investment	14.0%
Net Present Value (NPV) (includes initial investment)	\$718,000
Net Present Value (NPV) (excludes initial investment)	\$1,222,000
Self-Sufficiency	477%
Overall Self-Sufficiency	83%
Change in Park Self Sufficiency	13%
Discount Rate	4%
Analysis Period (YRS)	30

- CPW staff estimates that the cabins will require adjusting a part-time seasonal staff member to full-time seasonal (40 hours/week) during the high use period of the year (April-October).
- Utility cost estimates include: electric, gas and water/wastewater.
- Annual facility operations and maintenance costs are estimated at 1.5 percent of the initial facility construction costs. This is an annualized estimate of periodic facility reinvestment. At this annual rate CPW would reinvest approximately 45 percent of initial facility investment cost over a 30-year effective facility lifespan.
- Incremental revenue is calculated based on average CHM gate revenue from FY 2009 and FY 2011 at \$1.06 and multiplying this rate by average group size of about 2.5 persons per night occupied.

EO4: Additional full-service campsites. During initial construction of the park, CPW extended water, wastewater, and electrical infrastructure to accommodate an event facility building. This event facility was never constructed, and now CPW would like to consider if this area could instead accommodate approximately 15 additional full-service campsites given the popularity of overnight camping at the park.

There are currently 51 full -service campsites (also called “deluxe campsites”) at the following campgrounds: Raptor Glen Grove, Gobbler Grove, Swift Puma Heights, and the Meadows Campground. The sites includes picnic tables and electrical, water, and sewer hookups for RVs. Based on already strong camping visitation and associated revenue of full service campsites, CPW believes the proposed facility implementation will meet already significant demand. The following figure provides current deluxe campsite occupancy for CHM state park, which forms the basis of revenue projections for campground expansion.

Figure 11.
Cheyenne Mountain Deluxe Campsite Overnight Occupancy

Source:
Colorado Parks & Wildlife.

Camper Cabins	Number of Units	Potential Rental Nights	Nights Occupied	Annual Occupancy
FY 2011	5	1,825	856	47%
FY 2010	5	1,825	876	48%
FY 2009	5	1,825	882	48%
Average Number Nights Occupied			871	48%

Over the last two years, CHM State Park averaged 1,657 overnight stays for 15 “deluxe” campsites. Annual occupancy for deluxe camping at CHM State Park is about 30 percent.

The following is a capital cost estimate for the construction of 15 full service campsites.

Figure 12.
EO4. Capital Costs for 15 Full-Service Campsites

Source:
Colorado Parks & Wildlife.

Item Description	Unit Price	Unit	Number	Total
Full Service Campsites	\$ 40,000	EA.	15	\$ 600,000
Restroom Facilities	\$ 300,000	EA.	1	\$ 300,000
Contingency (20%)				\$ 180,000
Total Capital Costs				\$ 1,080,000

Full-service campsite capital cost estimates include grading and other site work. These costs are adjusted to account for already present utility hookups.

The following is an analysis of the financial impacts of construction and operation of 15 full service campsites. The financial model for full service campsites on the following page projects camping related revenue at CHM State Park based on average historical performance.

Figure 13.
E04. Financial Analysis for
15 Full-Service Campsites

Source:
BBC Research & Consulting;
Colorado State Parks.

Financial Model - Operations	Value
Incremental Labor Cost	
New Full Time Staff	-
<i>Average Annual Salary</i>	\$ -
<i>Benefits</i>	\$ -
Incremental Full Time Labor Cost	\$ -
New Seasonal Staff	-
<i>Hourly Wage</i>	\$ -
<i>Increased Annual Hours</i>	-
Incremental Seasonal Labor Cost	\$ -
Incremental Operating Cost	
<i>Utilities</i>	\$ 2,767
<i>Annual Operations and Maintenance</i>	\$ 16,200
Total Incremental Costs	\$ 18,967
Incremental Revenue	
<i>Incremental Annual Visitation</i>	3,840
<i>Incremental Annual Camping Revenue</i>	\$ 92,153
<i>Average Gate Revenue per Visitor</i>	\$ 1.06
<i>Incremental Gate Revenue</i>	\$ 4,087
Subtotal Incremental Revenue	\$ 96,240
Investment Analysis	
Annual Net Cash Flow	\$ 77,272
Initial Investment	\$ 1,080,000
Break-Even Revenue	\$ 81,424
Pay Back (years)	14
Return on Investment	7.2%
Net Present Value (NPV) (includes initial investment)	\$256,000
Net Present Value (NPV) (excludes initial investment)	\$1,336,000
Self-Sufficiency	507%
Overall Self-Sufficiency	84%
Change in Park Self Sufficiency	14%
Discount Rate	4%
Analysis Period (YRS)	30

- CPW anticipates that current staff can absorb operations of the 15 additional full-service campsites.
- Utilities for the 15 additional full service sites is based on CHM State Park's current utility estimates and is based on seasonal cost of CHM "deluxe campsites" and includes water, electric for the seasonal months only (April 15th-Oct. 15th).
- Annual facility operations and maintenance costs are estimated at 1.5 percent of the initial facility construction costs. This is an annualized estimate of periodic facility reinvestment. At this annual rate CPW would reinvest approximately 45 percent of initial facility investment cost over a 30-year effective facility lifespan.
- Incremental annual camping revenue for full-service campsites is calculated based on average CHM current "deluxe" users between FY 2009 and FY 2011. The current rate of \$24 per night is used to generate camping revenue estimates.
- Incremental gate revenue associated with the additional full service campsites is calculated based on average gate revenue per person (\$1.06) and estimating about 2.5 persons per overnight occupancy.

EO5: Fuel mitigation. As of 2012, about 97 acres of forest have been treated/thinned to reduce fuels within the park. However, CPW staff needs to mitigate 158 acres of remaining areas of the park for fuels, insects, and other general forest health improvements. These areas include lower portions of the park near Blackmer Loop, Talon trails and the TOM area. Furthermore, the currently mitigated area and the newly mitigated areas (160 acres) will need ongoing fuel mitigation upkeep.

Figure 14.
EO5. Capital Costs
of Fuel Mitigation

Source:
Colorado Parks & Wildlife.

Item Description	Unit Price	Unit	Number	Total
Lower Portions of the Park	\$ 800	AC.	63	\$ 50,400
TOM Forest Thinning and Forest Health	\$ 1,100	AC.	95	\$ 104,500
Total Capital Costs				\$ 154,900

The following figures model the financial impacts of the fuel mitigation activities.

Figure 15.
EO5. Financial Analysis
for Fuel Mitigation

Source:
BBC Research & Consulting;
Colorado Parks & Wildlife.

Financial Model - Operations	Value
Incremental Labor Cost	
New Full Time Staff	-
<i>Average Annual Salary</i>	\$ -
<i>Benefits</i>	\$ -
Incremental Full Time Labor Cost	\$ -
New Seasonal Staff	-
<i>Hourly Wage</i>	\$ 10.00
<i>Increased Annual Hours</i>	-
Incremental Seasonal Labor Cost	\$ -
Incremental Operating Cost	
<i>Utilities</i>	\$ -
<i>Annual Operations and Maintenance</i>	\$ 16,000
Total Incremental Costs	\$ 16,000
Incremental Revenue	
<i>Incremental Annual Visitation</i>	-
<i>Average Gate Revenue per Visitor</i>	\$ 1.06
<i>Incremental Gate Revenue</i>	\$ -
Subtotal Incremental Revenue	\$ -
Investment Analysis	
Annual Net Cash Flow	\$ (16,000)
Initial Investment	\$ 154,900
Break-Even Revenue	N/A
Pay Back (years)	N/A
Return on Investment	-10.3%
Net Present Value (NPV) (includes initial investment)	(\$155,000)
Net Present Value (NPV) (excludes initial investment)	\$0
Self-Sufficiency	0%
Overall Self-Sufficiency	68%
Change in Park Self Sufficiency	-2%
Discount Rate	4%
Analysis Period (YRS)	30

- The annual Operations and Maintenance includes recurring cost of "mitigation upkeep" at \$400 per acre every 4 years and includes 97 current lower park acres and the upkeep of the additional 63 acres proposed in this enhancement.

EO7: Strengthening relationships with key partners and neighbors. Despite being located 7 miles from downtown Colorado Springs, much of the population remains unaware of the unique attributes and recreational opportunities that CHM State Park has to offer. In an effort to expand awareness of the park to the greater Colorado Springs area, CPW recommends strengthening relationships with key partners and neighbors.

CHM is located between two neighborhoods, Pine Oaks and Broadmoor Bluffs. There are also nearby federal partners that include: NORAD, Fort Carson and Peterson Air Force Base. Additionally, there are several other agencies interested in outdoor volunteering and recreation. CPW staff seeks to identify interested groups and encourage them to visit the park. The following is categorized list of potential CHM State Park partners, their related interests, and a suggested park based opportunity.

Figure 16.
EO7. Cheyenne Mountain Park Potential Partners

Partners	Partner Interests and Activities	Park Based Opportunity
Government		
■ Fort Carson Morale, Welfare and Recreation	● General outdoor recreation; Family and children programs	— Archery range; Outdoor recreation; Camping
■ NORAD Morale, Welfare and Recreation	● General outdoor recreation; Family and children programs	— Archery range; Outdoor recreation; Camping
■ Peterson Air Force Base Morale, Welfare and Recreation	● General outdoor recreation; Family and children programs	— Archery range; Outdoor recreation; Camping
■ El Paso County	● Website promotions of local area activities for individuals and families; Children nature series; Environmental education in schools; Nature camps; Family outdoor clubs	— Currently CHM is not listed on their website
Schools		
■ D11 elementary schools	● Field days, hands-on learning	— Educational/Interpretive Center
■ D11 middle schools	● Field days, hands-on learning	— Educational/Interpretive Center
■ D11 high schools	● Field days, hands-on learning	— Educational/Interpretive Center
■ University of Colorado- Colorado Springs	● Student research, hands-on learning, event hosting, student group retreats	— Educational/Interpretive Center; Group camping
■ The Colorado College (and the Outdoor Recreation Committee)	● Student research, hands-on learning, event hosting, student "block-break" retreats	— Educational/Interpretive Center; Cabins; Group camping
■ Pikes Peak Community College	● Student research, hands-on learning, event hosting, student group retreats	— Educational/Interpretive Center; Group camping
Non-profits		
■ Volunteers for Outdoor Colorado	● Build trails, plant trees, battle invasive species or restore habitat	— Trail maintenance and construction
■ Outdoor Stewardship Institute (OSI)	● Stewardship for training and support for Volunteers for Outdoor Colorado	— Training for trail building, maintenance and restoration
■ Audubon Society	● Dedicated to connecting people with nature	— Educational/Interpretive Center management; Hosting educational classes/groups
■ Mile High Youth Corps - Colorado Springs	● Public land conservation and restoration	— Trail construction and maintenance
■ Trust for Public Land	● Land conservation, assists in raising money for parks	— Fundraising; Trail construction and maintenance
■ Palmer Land Trust	● Land conservation on the front range	— Fundraising; Trail construction and maintenance
■ Colorado Open Lands	● Land conservation and supporting public/private partnerships	— Fundraising; Trail construction and maintenance

Source: BBC Research & Consulting.

Figure 16. CONTINUED
EO7. Cheyenne Mountain Park Potential Partners

Partners	Partner Interests and Activities	Park Based Opportunity
Friends/Associations		
■ CO Wild	• Outdoor education	— Organize educational groups
■ Trails and Open Space Coalition	• Organizes training classes on trail maintenance and restoration; develops partnerships; other outdoor recreation education	— Good collaborator for CHM to identify and organize volunteers
■ Gill Foundation	• Committed to "building a better Colorado" donating money in this effort	— Funding and use of event facilities
■ Outdoor Club of Colorado Springs	• Organizes outdoor activities	— General use of the park
■ The Sierra Club	• Environmental exposure and education	— Group activities
■ Colorado Mountain Club- Pikes Peak group	• Organizes newcomers and beginner hikes	— Hiking and outdoor education
■ Pike Peaks Women's Club	• Hiking and retreats	— Hiking and retreats
Faith-based Organizations		
■ Faith-based organizations throughout the Colorado Springs area	• Facilities for retreats; facilities for events; volunteer opportunities	— Camping and event facilities
■ World Prayer Center	• Retreats	— Camping and event facilities
■ Christian Camp and Conference	• Outdoor ministry and connecting professionals with outdoor services	— Central source for accessing groups interested in CHM park resources
Other Organizations		
■ Bill Pellegrino's Archery Hut	• Archery related activities	— Archery range support
■ meetup.com (Colorado Springs, CO)	• Venue to advertise activities	— Promote CHM park activities

Source: BBC Research & Consulting.

EO11: Visitor center and camper services retail outlet. Cheyenne Mountain State Park currently offers retail services in two separate locations. The visitor center offers souvenirs, clothing and books. The retail operation at the camper services building offers firewood, food, beverages and other sundries.

Retail sales at the park are expected to increase in response to the visitation increases associated with the other park enhancement opportunities. The following Figure shows park retail sales between FY 2009 and FY 2011 and provides a calculation of average retail sales per visitor.

Figure 17.
EO11. Retail Sales

Source:
Colorado Parks & Wildlife.

Year	Current Retail Revenue	Average Annual Visitation	Retail Revenue per Visitor
2011	\$ 41,115	131,299	
2010	\$ 44,469	146,940	
2009	\$ 33,990	116,538	
Average	\$ 42,792	131,592	0.33

Current retail sales per visitor is applied to the total annual visitation increase associated with all enhancement opportunities (approximately 27,143 new visitors) resulting in a total incremental sales of \$8,827. However, not all of these sales are profit. Currently, cost of goods sold comprises about 56 percent of retail sales (see Figure 23 below).

Figure 18.
EO11. Cost of Goods Sold as a Proportion of Retail Sales

Source:
BBC Research & Consulting; Colorado Parks & Wildlife.

Year	Current COGS	Current Retail Revenue	
2011	\$ 19,381	\$ 41,115	
2010	\$ 24,586	\$ 44,469	
2009	\$ 22,881	\$ 33,990	
Average	\$ 22,283	\$ 39,858	56%

Based on this percentage of cost of goods sold the overall estimated incremental profit from the revenue earned from new visitors as a result of a combination of enhancement opportunities would be about \$3,892. The figure on the following page shows this calculation. CHM State Park should continue to identify its most profitable goods and reduce inventory of goods that do not add to profitability. This would reduce the ratio of cost of goods sold to sales and increase park retail profitability.

Figure 19.
EO11. Evaluate Retail
Operations

Source:
 BBC Research & Consulting;
 Colorado State Parks.

Financial Model - Operations		Value
Incremental Labor Cost		
New Full Time Staff		-
<i>Average Annual Salary</i>	\$	-
<i>Benefits</i>	\$	-
		<hr/>
Incremental Full Time Labor Cost	\$	-
New Seasonal Staff		-
<i>Hourly Wage</i>	\$	-
<i>Increased Annual Hours</i>		-
		<hr/>
Incremental Seasonal Labor Cost	\$	-
<hr/>		
Incremental Operating Cost		
<i>COGS</i>	\$	4,934
<i>Utilities</i>	\$	-
<i>Annual Operations and Maintenance</i>	\$	-
		<hr/>
Total Incremental Costs	\$	4,934
<hr/>		
Incremental Revenue		
<i>Incremental Annual Visitation</i>		27,143
<i>Current Retail Revenue per Visitor</i>	\$	0.33
<i>Incremental Retail Revenue</i>	\$	8,827
		<hr/>
Subtotal Incremental Revenue	\$	8,827
<hr/>		
Investment Analysis		
Annual Net Cash Flow	\$	3,892
Initial Investment	\$	-
Break-Even Revenue	\$	4,934
Pay Back (years)		N/A
Return on Investment		N/A
Net Present Value (NPV) (includes initial investment)		\$67,000
Net Present Value (NPV) (excludes initial investment)		\$67,000
Self-Sufficiency		179%
Overall Self-Sufficiency		71%
Change in Park Self Sufficiency		1%
Discount Rate		4%
Analysis Period (YRS)		30

Summary of Financial Effects

The following summary exhibit displays the financial effects of implementation of park enhancement opportunities. The summary table combines financial characteristics from all enhancement opportunities.

Figure 20.
Summary of Financial Effects, Cheyenne Mountain State Park Management Plan

Category	Value
Capital Cost	\$ 2,053,071
Incremental Operating Cost	
Full Time Staff	\$ -
Seasonal Staff	\$ 29,000
Utilities	\$ 4,367
COGS	\$ 4,934
Other Operations and Maintenance Costs	\$ 47,256
Total Incremental Operating Costs	\$ 85,558
Incremental Revenue	\$ 238,299
Investment Analysis	
Annual Net Cash Flow	\$ 152,741
Initial Investment	\$ 2,053,071
Break-Even Revenue	\$ 204,287
Pay Back (years)	13
Return on Investment	7.4%
Net Present Value (NPV) (includes initial investment)	\$588,000
Net Present Value (NPV) (excludes initial investment)	\$2,641,000
Self-Sufficiency	279%
Park Self-Sufficiency if Implemented	98%
Change in Park Self Sufficiency	28%
Discount Rate	4%
Analysis Period (YRS)	30

Source: BBC Research & Consulting.

The combined capital cost of implementing all enhancement opportunities discussed in this section is nearly \$2.1 million. If all enhancement opportunities are implemented, the park can expect incremental annual revenue of about \$238,000 and incremental annual operating expense of about \$86,000. Net revenue is projected at \$153,000.

Financial Analysis Notes

The investment analysis includes several measures of financial performance, described below:

- Net cash flow is equal to annual operating revenue less operating expenditure.
- Initial investment is equal to the initial capital investment in the park.
- The break-even annual revenue is the annual revenue required over the thirty-year analysis period to break-even on the initial investment, at the given discount rate.
- Payback is the number of years it would take to pay back the initial investment at the project net cash flow. This number is not displayed if there is negative net cash flow.
- Return on investment (ROI) is the annual profit (or loss) on the initial investment, expressed as a percentage.
- Net present value (NPV) is the total present value of a time series of cash flows. It is a standard method for using the time value of money to appraise long-term projects. There are two calculations of NPV shown: one that considers the initial capital outlay in year 1 and one that does not.
- Self-sufficiency is the ratio of net cash flow to operating expenses. Self-sufficiency is displayed for each park enhancement and for the total park if the enhancement is implemented, assuming the current CHM self-sufficiency rate of 70 percent.