

3/13/12

Presentation:

South

Denali

Visitor

Center

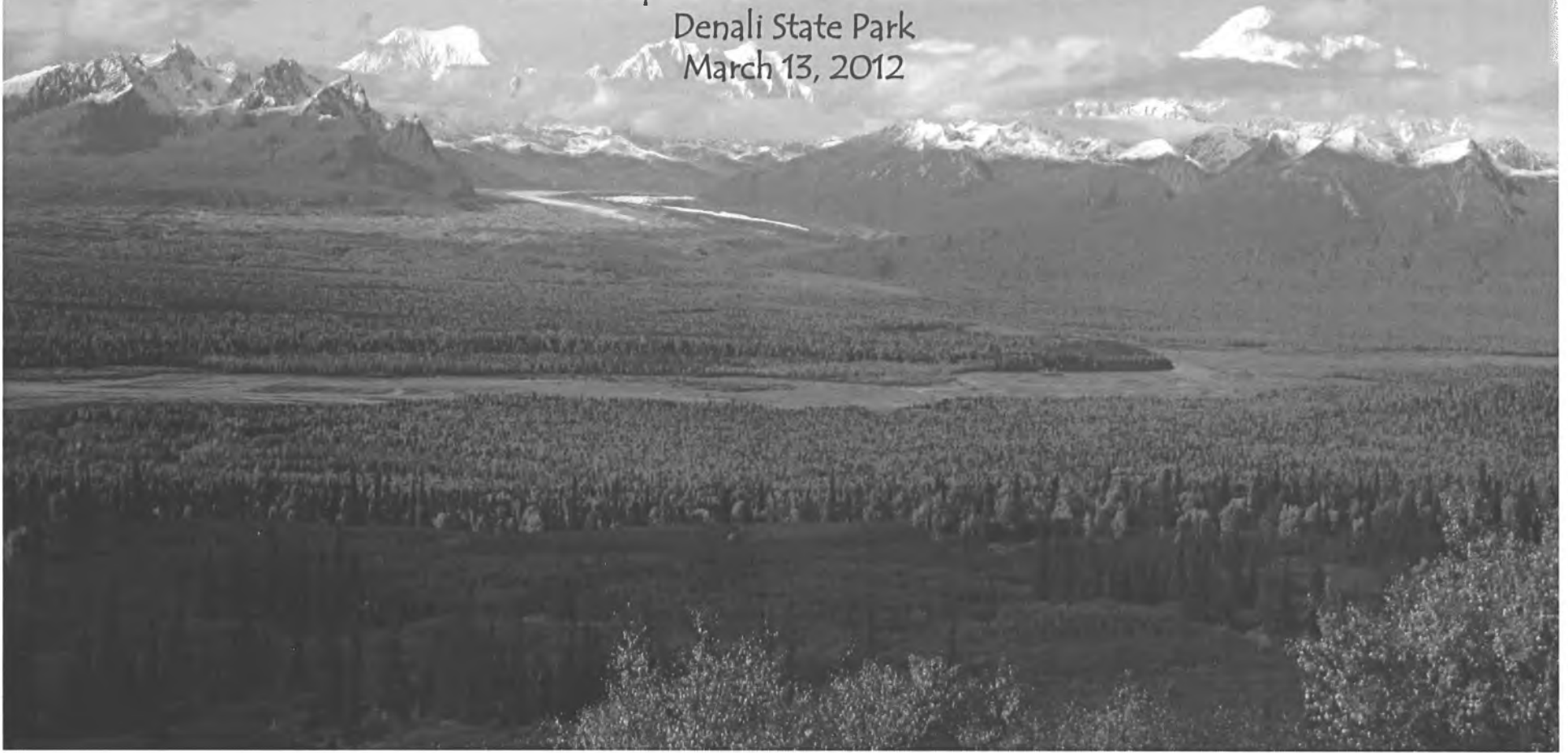
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Denali Visitor Center</SUBJECT><COMM>HEDT27</COMM></TARGET>

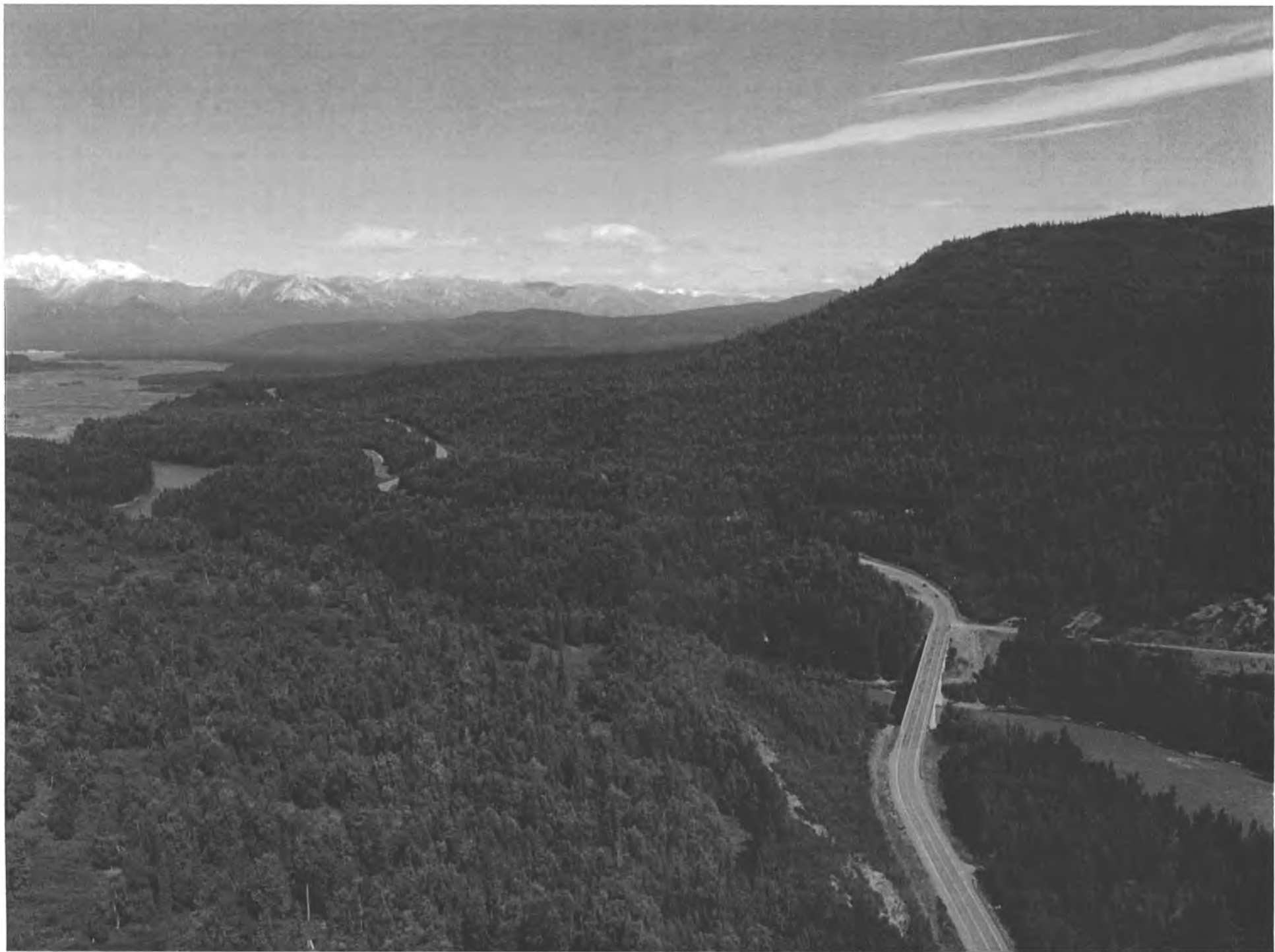
South Denali

A Visitor Center on the Horizon



Ben Ellis, Director
Division of Parks and Outdoor Recreation
Alaska Department of Natural Resources
Denali State Park
March 13, 2012





Denali State Parks Experiences



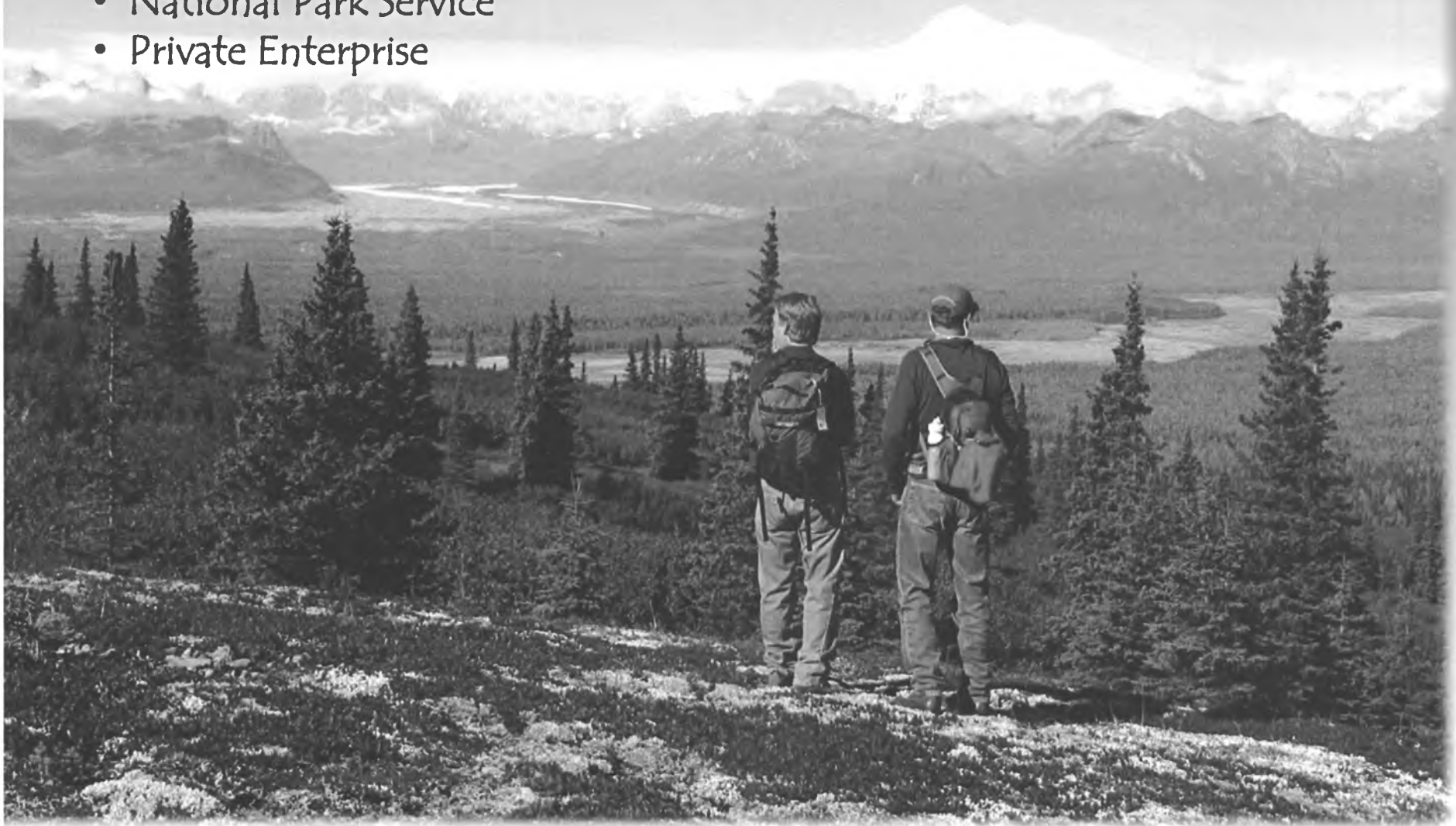






Cooperative Partnerships

- State of Alaska
- Matanuska-Susitna Borough
- National Park Service
- Private Enterprise



South Denali Visitor Center Complex Purpose

- Share the beauty of the South Denali Region
- Provide a unique visitor experience
- Enhance recreational opportunities
- Provide educational and interpretive activities



Mt. Foraker

Mt. McKinley

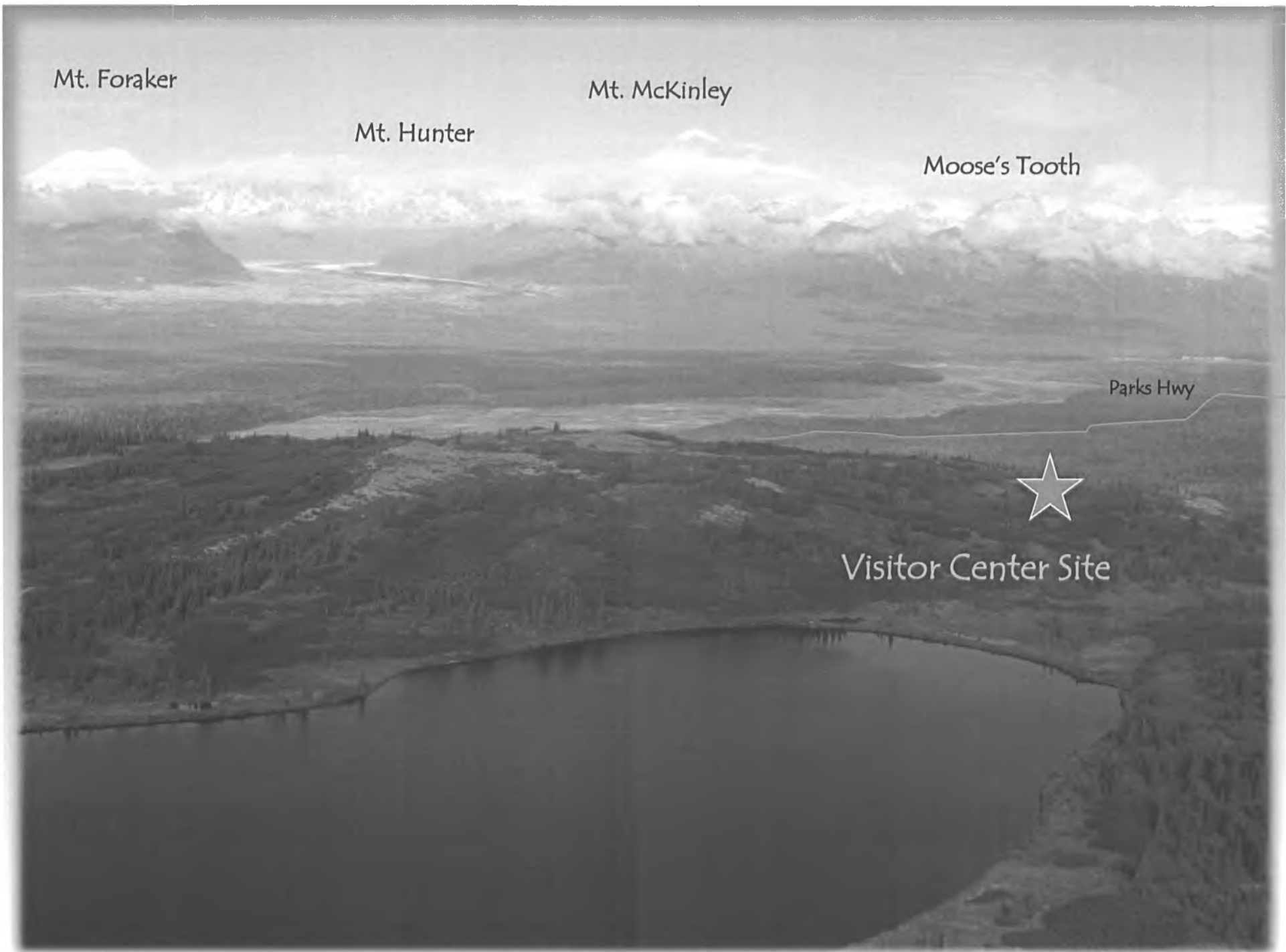
Mt. Hunter

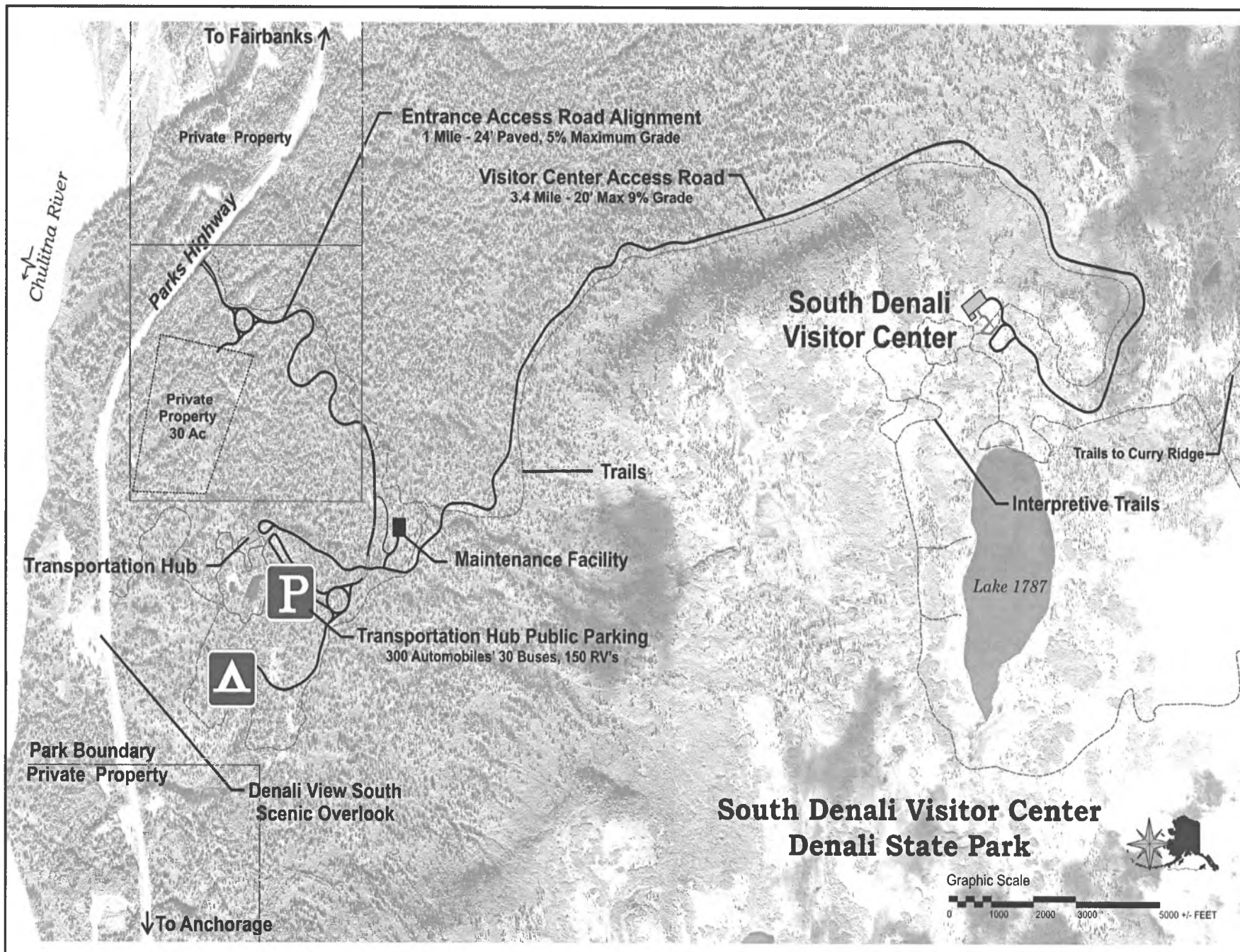
Moose's Tooth

Parks Hwy



Visitor Center Site



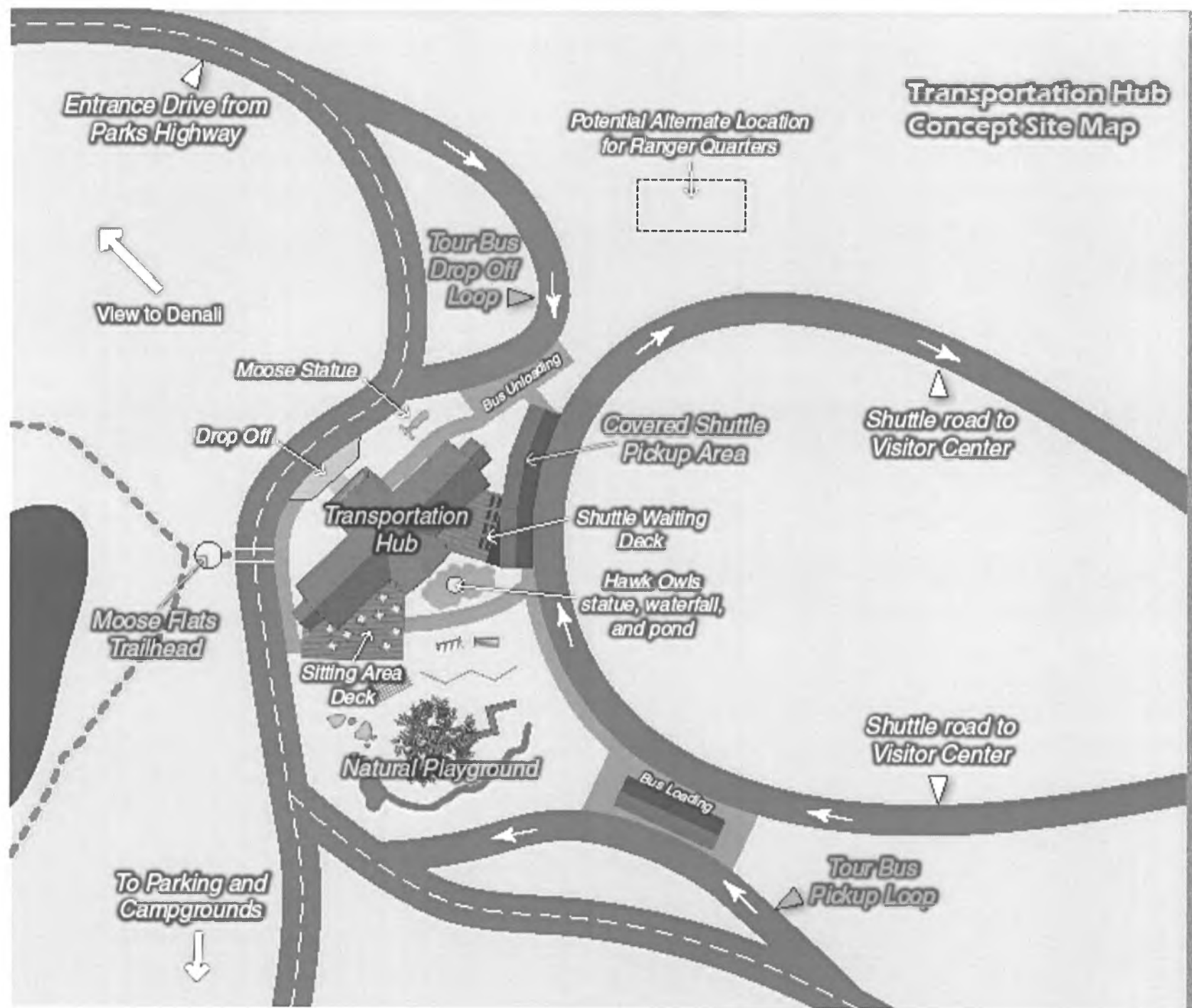


South Denali Visitor Center Denali State Park



PREPARED BY: BE
DRAWN BY: BE
REVIEWED:
DATE: 09/15/11

SHEET
1
OF 1 SHEETS



Estimated Construction Costs

Total Project Cost \$36 million*

Lower Access Road \$1.5 million

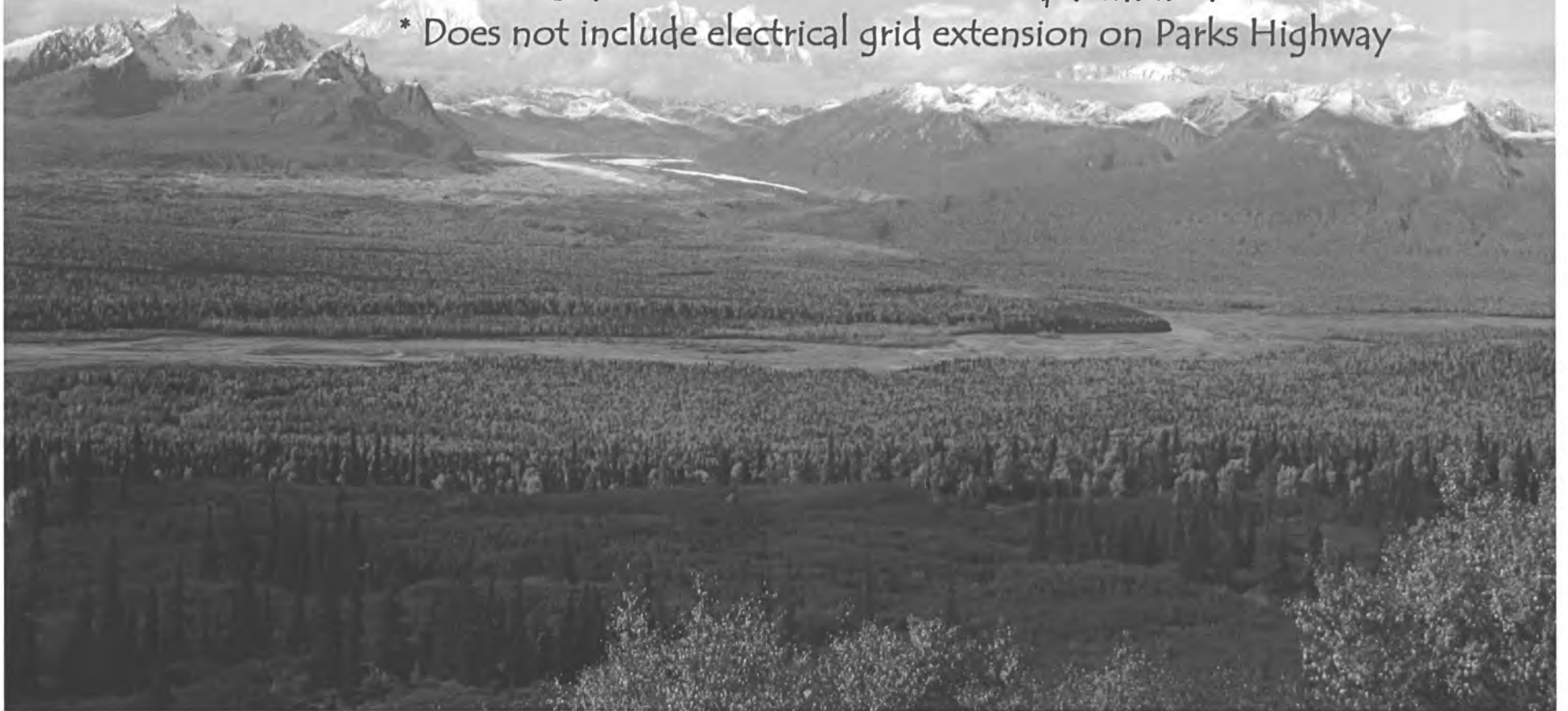
Transportation Hub \$8.5 million

Campgrounds/Trails \$2.5 million

Road to Visitor Center \$4.5 million

Visitor Center \$19 million

* Does not include electrical grid extension on Parks Highway



Funding to Date & Remaining Needed

Total Funding to Date \$12.89 million

FY09 (GF) Lower access road/transportation hub building \$8.9 million

FY12 (GF) Design \$3 million

FFY12 Scenic Byways grant \$950,000

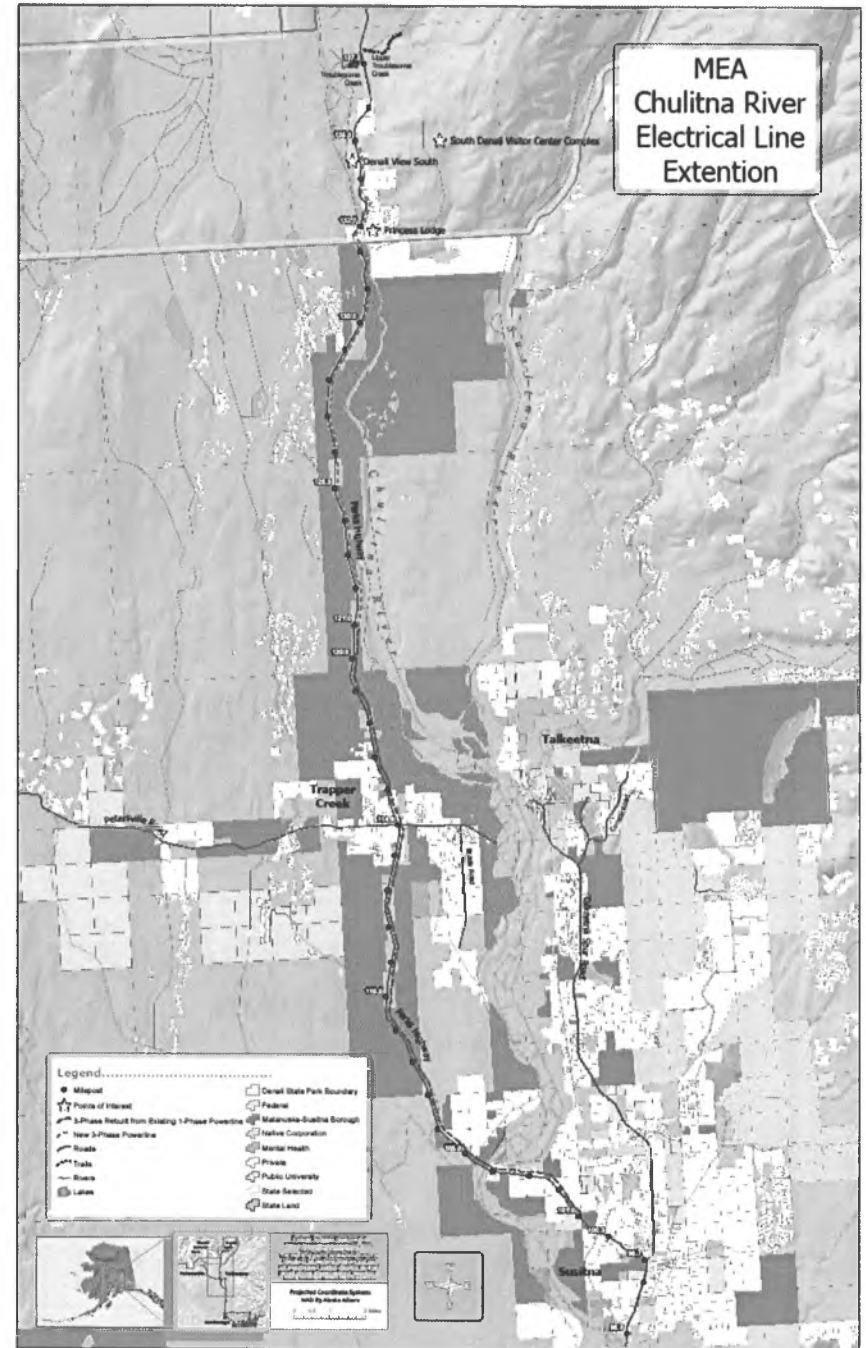
Remaining Funding Needed \$23 million



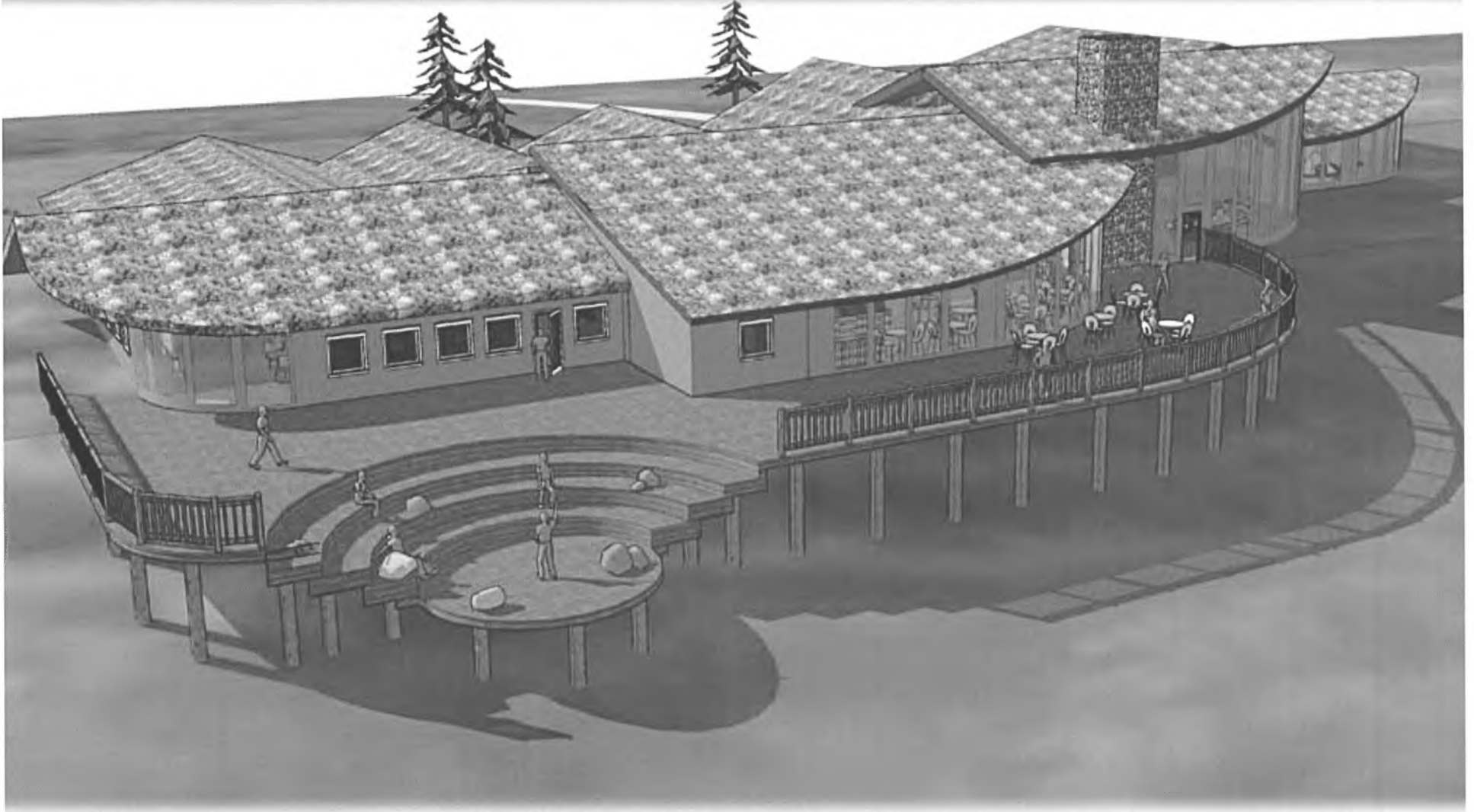
Electrical Extension Cost

Total \$6 million
 Private donation \$1 million

Funding needed \$5 million



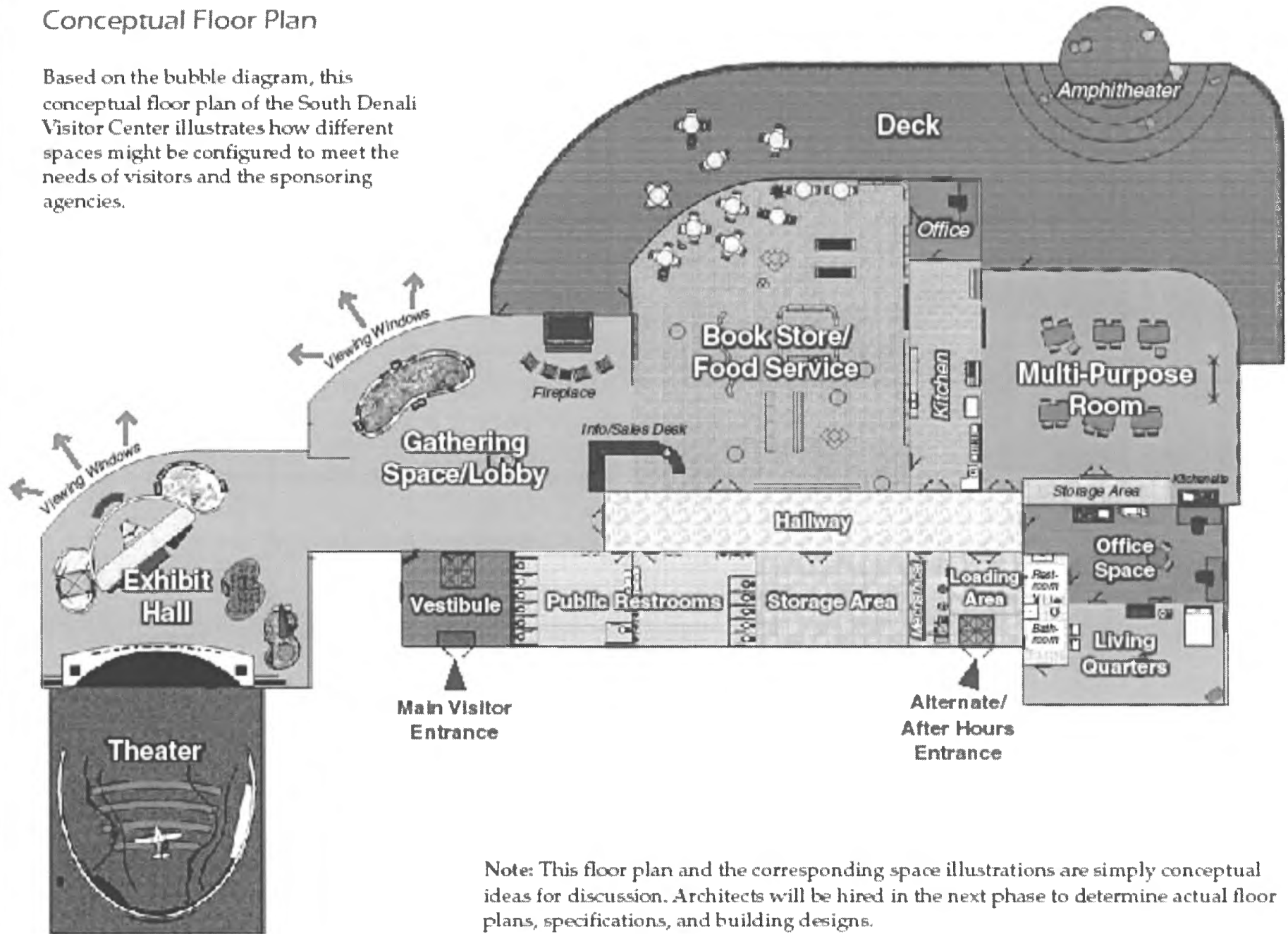
Visitor Center Design Concept



Back of Building

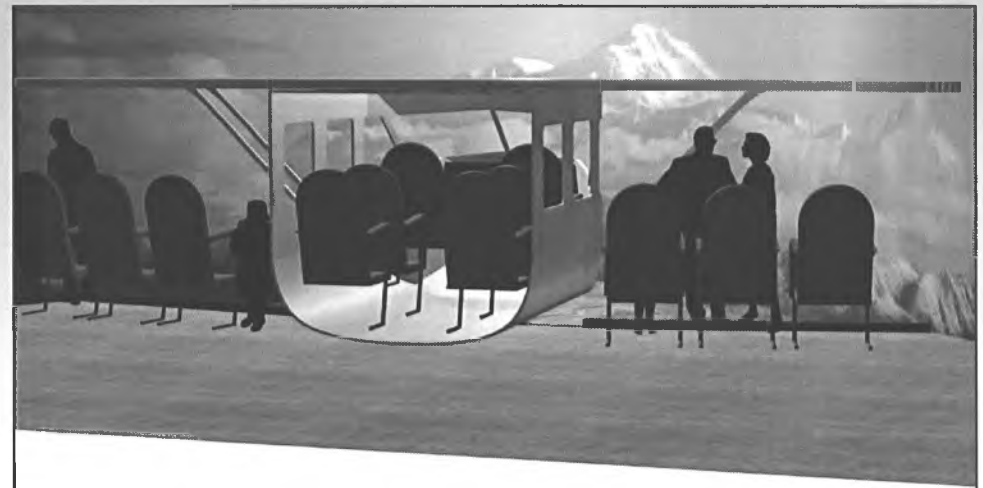
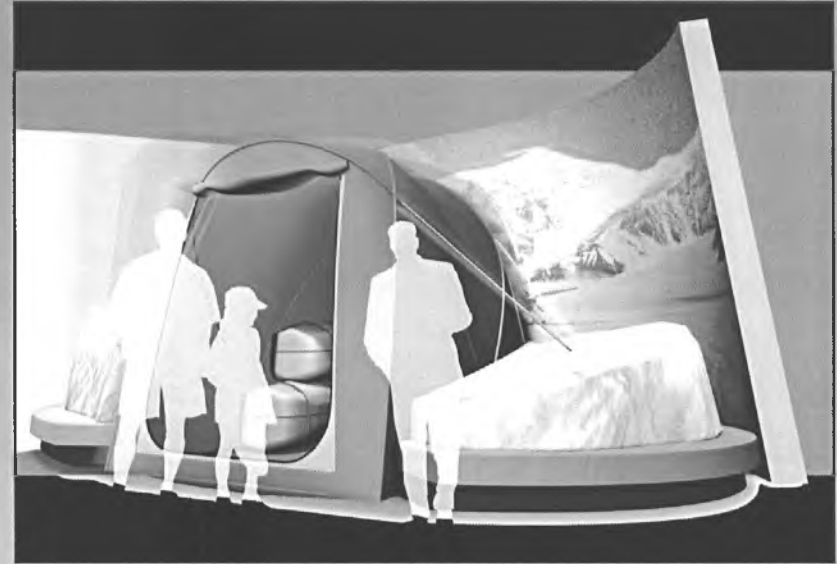
Conceptual Floor Plan

Based on the bubble diagram, this conceptual floor plan of the South Denali Visitor Center illustrates how different spaces might be configured to meet the needs of visitors and the sponsoring agencies.



Note: This floor plan and the corresponding space illustrations are simply conceptual ideas for discussion. Architects will be hired in the next phase to determine actual floor plans, specifications, and building designs.

Interactive Exhibits





Relief Map of Alaska Range

Access to Viewing Deck

Fireplace Sitting Area

Projection Map of Denali State Park

Universally Accessible Information Desk

Feasibility/Economic Impacts Studies

University of Alaska Center for Economic Development

- Used a composite forecast model methodology (Gramann, 2003)
- Baseline visitation is projected at 230,600
- This forecast is based 2010 visitor counts at four other popular south central national park visitor facilities.
- Conservative estimate when compared with the 303,000 visitors that Denali National Park (2010).
- Especially considering greater accessibility to both Anchorage and Talkeetna.



Receipts

- Primarily transit fees - \$2.375 million
- Receipts from campgrounds, tour operators, food and bookstore concessions an additional \$625,000
- Does not address other potential receipts from winter or shoulder season visitors including conferences, camping & tours.



Operations Costs

- Facility maintenance costs \$1 million
- Staffing at \$491,000 (22 positions including State, NPS, Mat-Su Borough employees and volunteer stipends)
- Utilities and operations \$240,000



Margin/Surplus

- Projected at nearly \$1.25 million
- Contingent on timely start up and marketing
- Why such a large surplus?
 - No debt service
 - Debt svc, assuming \$45 million at current rate of AA rate of 5%, \$2.25 million (annually)



Overall Economical Impact of the SDVC

- Impacts are measured by projected expenditures by
 - Government
 - Private/individuals
 - Multiplier (indirect & induced spending)
- To State of Alaska, Region (MatSu) & Local
- Construction and Operations Phase Impacts
 - Expenditures
 - New Jobs



Estimated Economic Impacts of SDVC

Substantial during construction through operations

- Construction \$13 million annually; 230 new jobs
- Operations \$1.9 million annually; 39 new jobs
- Additional Spending by visitors, residents and business development \$30.6 million annually; 600 new jobs



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Feasibility Study for the Proposed South Denali Visitor Center

Prepared for the State of Alaska, Department of
Natural Resources, Division of Parks and Outdoor
Recreation

By The Center for Economic Development
at the University of Alaska Anchorage

March 2011

This study examines the feasibility of the proposed South Denali Visitor Center in Denali State Park. We find that the proposed facility would generate significant operating margins annually from about \$1.2 million in the initial year to \$2.8 million annually by 2023 under modest assumptions and 3% visitor growth. The study includes projected construction costs, various revenues from operations, and facility costs projected annually from completion in 2014 out ten years to 2023.

Feasibility Study for the South Denali Visitor Center
Prepared by the University of Alaska Center for Economic Development
Final Report: March 21, 2011

Executive Summary

This analysis examines in an economic context the feasibility of the proposed South Denali Visitor Center in Denali State Park. The analysis focuses on direct economic measures associated with the project; thus, qualitative or non-pecuniary aspects of the proposed project are evaluated. The analysis is based primarily on updated estimates of construction costs provided by the Department of Natural Resources (DNR), operational revenue, and cost data provided by Denali National Park, Princess Tours, Alaska Geographic, and visitor traffic projections from modeling visitation to similar Park sites located in South Central Alaska.

Our principal findings are as follows:

- (1) Once the Center is fully operational we project the proposed Visitor Center will be a viable economic driver for the State of Alaska and its operating partners-the National Park Service and Matanuska Susitna Borough. Under fairly modest assumptions, our projections indicate that the South Denali Visitor Center will generate surplus receipts in excess of \$1 million annually.
- (2) Several visitor scenarios were considered for the analysis as well as future tourism growth rates based on historical trends. In all cases the analysis is robust in predicting that revenues will greatly exceed operating costs. In fact, the center will break even - exactly cover operations costs - with just 121,400 annual visitors, or just 52.6% of our projected annual visitor traffic.
- (3) Baseline visitation is projected at 230,600 annually based on a model of 2010 visitor counts at four other popular south central national park visitor facilities. This estimate is somewhat conservative when compared with the 303,000 visitors that Denali National Park received in 2010. With greater accessibility and shorter driving distance to both Anchorage and Talkeetna the proposed South Denali Visitor Center could, over time, exceed the visitation of Denali National Park.
- (4) Operating revenues will largely come from the \$10 per visitor entrance fee projected at \$2.38 million. Concession receipts for food, gifts and books, campground fees, and contract tour operations add an estimated \$.7 million. It is important to note that these revenues are highly contingent on packaged tour operators whose business is dependent on general economic conditions. That said, even with the slight declines in visitation experienced during 2009 these numbers of visitors would easily cover the proposed South Denali Center's operating costs.
- (5) Assuming a long term average 3% increase in annual visitors strengthens the financial performance of the proposed center resulting in surplus receipts to exceed \$2 million annually by 2019.
- (6) The annual operations costs are dominated by projected long-term maintenance expenditures. Assuming approximately 1% of the total project's construction costs will be required annually, after the initial startup period, maintenance activities represent nearly \$1.3 million or 2/3 of our

projected total annual operations cost. We believe this amount is a conservative estimate of long-term maintenance costs, costs which could be further reduced if an asset management plan is developed and implemented by the State of Alaska upon completion of the project.

- (7) Construction of the proposed visitor center would bring substantial economic development to the area known as “Denali Country” of the Matanuska Susitna Borough. This development would lead to additional hotel room capacity, utilities expansion, and increased employment year-round, but especially during the summer season. Support for the visitor industry would expand, creating additional employment and economic opportunities for area residents, as well as additional bed tax receipts.
- (8) Finally, possible revenues derived from meetings and conferences have been excluded from the analysis. While a comprehensive study of MatSu infrastructure indicated that the Matanuska Susitna Borough needs expanded meeting facilities we felt that incorporating these activities into the present analysis would be too speculative (MCDowell Group, Inc., June 2006).

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○ Meetings/conferences	

Introduction

Our analysis examines the feasibility of the proposed South Denali Visitor Center to be constructed in Denali State Park. The center as proposed would be a world-class facility located near Curry Ridge, approximately four miles off the Parks Highway at mile 136. The project includes extensive facilities and infrastructure components as the proposed site lacks any development or existing utilities. This study was commissioned for use by the State of Alaska Department of Natural Resources and its project partners-National Park Service and the Matanuska Susitna Borough –for advancing the project through the funding process. It is expected that the State of Alaska Department of Natural Resources, the National Park Service, and the Matanuska Susitna Borough will share responsibility for operating the facility once construction is completed and the center is operational.

Our analysis includes all proposed construction costs but not the business plan or startup costs. An assumption underlying all of the analysis presented is that the facility will achieve full operation upon completion. The validity of this assumption depends on construction completion and implementation of a business plan that includes promotion and marketing of the facility.

Our analysis is based on a number of data sources for construction costs, operations expenditures, visitor projections, and revenue estimates from various project components. Due to the uniqueness of the project and lack of comparable facilities our study relies extensively on modeling of revenue and cost estimates from other visitor facilities in South Central Alaska. The basis for our modeling of projected visitation is an established methodology (Gramann, 2003), which takes into account qualitative factors that are consistent across various sites and facilities.

Our study is organized as follows: Visitor projections and the modeling assumptions are discussed in the following section. These projections form the foundation for our revenue forecasts that are developed in section 3. Facilities and infrastructure construction cost estimates are presented in Section 4. The operations costs and expenditures are developed in Section 5. The final section identifies other ancillary activities associated with the proposed project.

Figure 1 on the following pages presents a summary schedule of the feasibility analysis for the Visitor Center. The schedule provides evidence from the initial forecast year that the Visitor Center revenues exceed operating costs by a considerable amount. The summary table can be interpreted several ways. The first column, designated Year T, represents the first full year of operations. Under the assumption that there is no growth in visitor volumes over future periods this initial year is representative of the expected annual revenues and cost for all future years.¹

¹ The forecast of static receipts and costs relies on the additional assumption that revenues and costs increase equally in proportion over future periods (e.g. price level changes).

The dominant driver (or factor) for the strong operating margin is visitor volume. Under relatively modest assumptions discussed more completely in Section 3 Visitor Forecasts, projected annual visitation during the initial opening year (2014) is 230,600 people. This forecast is derived from a composite weighted average of 2010 actual visitation to qualitatively similar National Parks located in South Central Alaska. By way of comparison our initial year forecast's visitation is just 76% of Denali National Park's front country visitor total for 2010 of 303,085. With greater accessibility and shorter driving distance to both Anchorage and Talkeetna the proposed South Denali Visitor Center could, over time, exceed the visitation of Denali National Park.

To examine the sensitivity of our projections to changes in actual visitor traffic we conducted break-even analysis to determine the minimum level of visitation required to cover the proposed center's annual operating cost. While not presented in Figure 1, the number of visitors required to generate sufficient revenues to cover expenses is just 121,400, or 52.6% of the projected annual visitation.

Assuming that visitor traffic increases at an annual rate of 3%, the additional columns present the forecasted amounts of revenues and expenditures nine years hence-year 2015 to year 2023. Our 3% estimated growth rate is quite conservative. By comparison, the historical growth trend in visitors to Denali National Park for the 10 years ending in 2007 was 3.8%. It is interesting to note, that under this assumed annual growth of visitor traffic the predicted surplus operating margins nearly double by 2023, the tenth year forecasted, to more than \$2.8 million from the base year's 1.25 million dollars. As discussed more completely in Section 2 in our modeling of visitation, our predicted visitor numbers are a composite estimate of similar facilities in the region. It is likely that the actual visitation numbers will be greater given that our base year estimate is just 76% of Denali National Parks' 2010 visitor counts.

Under a higher assumed growth rate of 6%-which reflects the longer 20-year visitor growth rate to Alaska-the 2023 revenues are forecasted at \$6.7 million with associated expenditures of \$1.9 million producing a surplus margin in excess of \$4.7 million. We consider this growth trend optimistic and recognize that it relies on continued growth in tourism capacity-namely, cruise ships and strong economic growth both nationally and internationally-that has been forecasted for 2011. However, in the longer term this growth may not be sustainable given national economic conditions.

Our analysis excludes winter season visitation of the proposed center. While the area is in close proximity to Alaska's largest city and 66.6% of the State's population, very little data is available to predict what level of usage will occur during the winter season. The Parks Highway is the most heavily traveled transportation corridor in the State. It is likely that residents will use the proposed facility in numbers at least as great as Denali National Park, which in recent years has been 1% to 4% of the total annual visitation. If the South Denali Visitor Center is built, it will advance the development of infrastructure in the Denali country region of the Matanuska Susitna Borough. These facilities will boost overall availability and usage of the area through the expansion of hotels, restaurants, and independent tour activities. It is likely that many residents and nonresidents will take advantage of off-season recreational experiences. Finally, this development will provide additional jobs and economic opportunities for residents from construction on through operations.

Figure 1 - Feasibility Summary (assuming 3% growth)

	<u>Year T</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
Visitor #s	230,626	252,011	259,572	267,359	275,379
Revenues					
Entrance Fees	\$ 2,375,448	\$ 2,674,756	\$ 2,796,323	\$ 2,923,416	\$ 3,056,285
Concessionaire	193,152	217,490	227,375	237,709	248,513
Bookstore	138,200	155,614	162,686	170,080	177,811
Campgrounds	110,943	114,322	116,036	117,777	119,544
Tour Operators	<u>185,168</u>	<u>190,807</u>	<u>193,669</u>	<u>196,574</u>	<u>199,522</u>
Total Revenues	\$ 3,002,911	\$ 3,352,987	\$ 3,496,089	\$ 3,645,556	\$ 3,801,675
Expenditures					
Operations	\$ 57,569	\$ 59,322	\$ 60,212	\$ 61,115	\$ 62,032
Bldg Utilities	56,650	58,375	59,251	60,139	61,041
Sewer/Trash	92,700	95,523	96,956	98,410	99,886
Shuttle	32,396	33,382	33,883	34,391	34,907
Staffing	491,310	506,270	513,864	521,572	529,396
Maintenance	<u>1,025,593</u>	<u>1,025,593</u>	<u>1,025,593</u>	<u>1,025,593</u>	<u>1,025,593</u>
Total Costs	\$ 1,756,217	\$ 1,778,465	\$ 1,789,758	\$ 1,801,221	\$ 1,812,855
Projected Surplus	<u>\$ 1,246,694</u>	<u>\$ 1,574,522</u>	<u>\$ 1,706,331</u>	<u>\$ 1,844,335</u>	<u>\$ 1,988,820</u>

T = the assumed initial year of operations and the annual projected revenues and associated expenses under a no growth of visitation in future years.

Figure 1 - Feasibility Summary (continued)

	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Visitor #s	283,641	292,150	300,915	309,942	319,240
Revenues					
Entrance Fees	\$ 3,195,194	\$ 3,340,415	\$ 3,492,237	\$ 3,650,959	\$ 3,816,895
Concessionaire	259,808	271,616	283,961	296,867	310,359
Bookstore	185,892	194,341	203,174	212,408	222,062
Campgrounds	121,337	123,157	125,004	126,879	128,782
Tour Operators	<u>202,515</u>	<u>205,553</u>	<u>208,636</u>	<u>211,766</u>	<u>214,942</u>
Total Revenues	\$ 3,964,746	\$ 4,135,082	\$ 4,313,012	\$ 4,498,879	\$ 4,693,040
Expenditures					
Operations	\$ 62,963	\$ 63,907	\$ 64,866	\$ 65,839	\$ 66,826
Bldg Utilities	61,957	62,886	63,830	64,787	65,759
Sewer/Trash	101,384	102,905	104,449	106,015	107,606
Shuttle	35,430	35,962	36,501	37,049	37,605
Staffing	537,337	545,397	553,578	561,882	570,310
Maintenance	<u>1,025,593</u>	<u>1,025,593</u>	<u>1,025,593</u>	<u>1,025,593</u>	<u>1,025,593</u>
Total Costs	\$ 1,824,664	\$ 1,836,650	\$ 1,848,816	\$ 1,861,164	\$ 1,873,699
Projected Surplus	<u>\$ 2,140,080</u>	<u>\$ 2,298,432</u>	<u>\$ 2,464,196</u>	<u>\$ 2,637,715</u>	<u>\$ 2,819,341</u>

Visitor Projections

As noted in the earlier section, visitor projections are the most important component underlying this feasibility analysis because they drive most of the projected revenues and some of the projected costs. Our study models visitation consistent with established methodology followed in other feasibility studies (Gramann, 2003). Since there are no exact comparable facilities to use as a reference we selected four qualitatively similar facilities with which to construct a composite weighting of visitor traffic. These four centers include Denali National Park (front country), Wrangell-Saint Elias National Park, Begich Boggs, and Kenai Fjords National Park. All are located in South Central Alaska, within 200 miles of the proposed visitor site. Each of these facilities offers viewing of wild life and spectacular scenery.

Annual visitation data was collected for 2009 and 2010 for each site. Visitation at Denali National Park front country offers what is arguably a comparable experience to that at the proposed South Denali Visitor Center with the minor exception that the developed facilities and infrastructure will be much less at the proposed site. For this reason a double weighting of Denali National Park visitor counts was employed in constructing our composite average for calendar year 2010. This composite projection forms the basis for our base year visitor projections used throughout this analysis.

Other methodologies were considered including the historical trend of exit passengers compiled by the State of Alaska's Department of Commerce and Economic Development. Historically, 33% of the nonresident visitor volume spent at least a day in Denali National Park.² However, 2010 visitor statistics were not available at the time our analysis was assembled. The 2009 statistics resulted in higher predictions than our composite average visitor projections. For this reason we feel that our methodology is conservative in terms of estimating the number of annual visitors to the proposed visitor center.

An important caveat to interpreting our projections: visitation levels are highly dependent on national economic climate. For the first time in more than a decade of steady increases, visitor traffic to Alaska declined in 2008. We can only speculate on economic conditions in two or three years, when the proposed South Denali Center could be completed and opened for visitors.

² Source: Alaska Department of Commerce, Community and Economic Development, Alaska Visitor Statistics Program V, Data file 2007. These nonresident visitor volume estimates are based on exit mode surveys.

Revenues/Receipts

This section presents our modeling and assumptions used to project the proposed visitor center's revenues. Our revenue projections are largely driven by forecasted visitor levels. Besides visitor entrance fees our revenue projections include food, bookstore, campground, and independent tour operator concession receipts. A majority of the forecasted revenue is generated through admission receipts assumed to be similar to the \$10 entrance fee charged at Denali National Park during 2010.³ Based on the projected visitor counts at the \$10 per person fee, we predict total admission receipts of at least \$2.375 million annually. Fees will be collected at the shuttle terminal ensuring that all visitors will incur the fee. Either a contract operator or kiosk will administer ticket sales.

It is important to note that the projections presented in Figure 1 can be interpreted two ways: Year T reflects a steady state of approximately 230,600 visitors annually, generating nearly \$2.4 million in annual revenues. Allowing for a 3% increase in visitation and fee increases consistent with predicted price level changes produces annual revenue increases of about 7% per year through 2021. At 77% of total projected revenues, this source of revenue is by far the dominant source for the proposed center.

Further, our revenue forecasts assume that visitor spending and activities at the proposed South Denali Visitor Center will be similar to those at Denali National Park's front country. Camping fees are also assumed to be comparable to those at Denali National Park.

Most services at Denali National Park are provided to visitors through an exclusive concessionaire contract with Doyon/ARAMark joint venture. This contract operator provides food services, tour bus operations, manages the various campgrounds, and other incidental services. For our study we assume similar visitor spending levels and base our forecasts using actual 2010 expenditures data.⁴ During 2010, a typical visitor spent an average of \$5.28 each on food items (this amount excludes bus ticket fees, bookstore purchases and camping fees). Using this amount and assuming a similar concessionaire contract arrangement at the South Denali Visitor Center, 15.4% of gross receipts, we predict annual receipts from food service operations of at least \$205,000. Similar to our projections for visitor entrance fees, we expect these receipts to grow at the current 1.5% price index rate during the forecast horizon.

We assume that the visitor bookstore at the proposed center will be operated by Alaska Geographic under a contract similar to its other park operations and that it will generate sales comparable to those at Denali National Park. Alaska Geographic currently operates stores at twelve other park visitor facilities. Approximately 50% of the net receipts are shared with the park under these operating agreements. Based on actual receipts for Denali National Park⁵, adjusted for differential visitor volumes under our forecasted visitation numbers, we projected receipts of approximately \$138,200 for year T.

³ We assume for this analysis that all visitors will pay the \$10 fee. In actual practice the entrance fee may be reduced or waived for seniors, families, season pass or golden pass holders and others. Application of these considerations does not impact the conclusions of this study.

⁴ We are grateful to the National Park Service for sharing this proprietary data with us.

⁵ Data provided by Alaska Geographic.

Our predicted bookstore receipts increase each year based on our increasing projected visitor counts and by general price level changes.

Our forecasts for campground and independent tour operator receipts are intertwined with a key assumption regarding occupancy rates for the proposed campground facilities. The campground at South Denali will have 47 sites. We assume a similar annual occupancy rate as Denali National Park, which was 85% during the 2010 season.⁶ We further assume that only campers will engage in independent tour excursions. This assumption is based on the expectation that most of the visitors to South Denali will already be part of an organized tour package. Accordingly, these visitors will arrange tours with these independent operators before arriving at South Denali.

Our forecasted receipts for campground fees are \$185,000 annually with increases in annual camping fees consistent with general price level changes in years through 2023. The campgrounds are assumed to be operated by Alaska State Park staff. Independent tour receipts are based on the assumption that every camper will undertake one tour per day. Data provided by Princess Tours, which operates the Mt McKinley lodge just three miles from the proposed South Denali Visitor Center, suggest that all of their guests participate in at least one tour each day and these tours range in cost from \$69 to over \$300 each. We assumed an average margin from these tour operators of just \$25, a conservative estimate given the possible volume of independent visitors that may stop at the South Denali Visitor Center. Forecasting these receipts out to 2023, we only assume an increase for general price increases, not increases in visitation volumes (we assume only campers will participate and this number is fixed at 47 spaces over the entire forecast period).

It is important to note that all of our forecasted revenues are predicated primarily on summer⁷ operations of comparable facilities. We don't consider possible winter revenues, which makes our forecast conservative with respect to off season operations. A number of possible shoulder and off-season activities could be incorporated into the facility's final business plan. These might include winter camping and hosting of retreats and conferences. Currently, Denali State Park experiences a large number of winter recreational users that might utilize camping facilities operated by the South Denali Visitor Center. Further, there may be significant demand for meeting space available at the proposed visitor center if off-season accommodations were available in close proximity.

⁶ We thank Denali National Park for sharing this data with us. Camping fees are assumed to be identical to Denali National park.

⁷ For this study summer season is defined identical to the time period used by the Department of Commerce, Community and Economic Development's Alaska Visitor Statistics Program from May 1 to September 30.

Construction/Project Costs

Construction cost estimates for each component of the facility and infrastructure requirements are identified below. These cost estimates were developed for the South Denali Environmental Impact statement (National Park Service, April 2006) and have been updated using a price index to reflect estimated 2010 construction costs.⁸

South Denali Visitor Center

Component	Component Estimate	Total Cost	Life Cycle in Years	Estimated Annual Cost
Site Development	\$211,400	\$211,400	Indefinite	\$0
Main Facility	\$10,781,400	\$10,781,400	50 years	\$215,628
Fixtures, Furnishings & Equipment	\$1,638,350	\$1,638,350	15 years	\$109,223
Utilities Infrastructure	\$988,295	\$988,295	50 years	\$19,766
Transportation Hub Facility	\$3,012,450	\$3,012,450	50 years	\$60,249
Fixtures, Furnishing & Equipment- Transportation Hub	\$404,275	\$404,275	15 years	\$26,952
Utilities Infrastructure Transportation Hub	\$4,228,000	\$4,228,000 ^A	50 Years	\$121,977
Parking & Access Roads	\$7,399,000	\$7,399,000	20 years	\$369,950
Shuttle (4)	\$194,430	\$777,720	15 years	\$51,848
Landscaping	\$211,400	\$211,400	Indefinite	\$0
Campground Facilities	\$1,000,000	\$1,000,000	20 years	\$50,000
Design (15%)	\$4,611,823	\$4,611,823 ^B	Indefinite	\$0
Construction Administration & Contingency (15%)	\$4,611,823	\$4,611,823 ^B	indefinite	\$0
Project Total	\$39,293,646	\$39,875,936		\$1,025,593

Notes on Cost Estimates presented: (A) \$4 million of electrical extension to be paid by private partners; (B) 15% administration and contingency reserve is based on the estimated total project costs.

⁸ Facilities construction cost estimates generated by the State of Alaska, Department of Natural Resources (ADNR) were developed using 2003 RSMeans Square Foot Costs, 24th Annual Edition; historical data from previous Alaska State Parks construction projects for similar facilities; and cost estimating worksheets provided by the State of Alaska, Department of Transportation and Public Facilities (ADOT&PF)

Operations Costs

Forecasting the proposed facilities operations costs was tenuous. There are not comparable facilities other than the front country center at Denali National Park, and this facility operates only during the summer visitor season.⁹ The proposed South Denali Visitor Center is located in a remote area. It will have highway access but will still be more than 100 miles from any large city. The proposed facility will be operated under an agreement with project partners: the National Park Service and the Matanuska Susitna Borough.

By far the largest operations cost of the proposed visitor center will be the annual maintenance, which represents more than 58% of the total annual operation expenses. We estimated these at approximately 1% of estimated capital construction costs. If an asset management plan is developed for infrastructure maintenance activities, this estimated cost could likely be reduced substantially.

Visitor center staffing is a distant second at \$491,000, or 28% of total costs. A schedule of expected staff is presented in Figure 2 below. Some of these positions would be transferred from the National Park Service visitor center in Talkeetna, Alaska, and from existing positions in Denali State Park. These positions and associated salaries include employee benefits and taxes. Our annual forecasts to 2021 assume wage increases equal to predicted price level changes (1.5%).

Shuttle operations involve four units operating continuously during the peak summer visitor season and at a reduced schedule during slower periods. Shuttles will take 30 minutes to complete a round trip between the transportation hub and the Visitor Center, which includes loading and unloading of passengers. Operations costs include fuel and regular maintenance expenses.¹⁰ Maintenance will be performed offsite using contracted services. Depreciation costs associated with the shuttle vehicles and trailers amounts to \$52,000 annually and are included in total maintenance costs discussed above.

Finally, utilities and sewer/trash are projected to total approximately \$150,000 annually. These costs are based on operations costs provided by Princess Tours for the Mt McKinley lodge located 3 miles from the proposed site. These cost estimates are likely high because while the lodge operates only seasonally, it accommodates a total population, including guests and support staff, of nearly 900. As such, while the proposed visitor center will have higher rates of visitation, the duration and thus utility demand will be much lower. Additionally, this comparable facility is older, and was not built to the energy efficiency standards under which the South Denali Visitor Center will be constructed.

⁹ This period is defined as May 1 to September 30. See note 7 for additional information about how this period is defined.

¹⁰ Costs for shuttle operators have been omitted because it is assumed that the shuttles will be operated under contract with a private company. Driver costs will be recovered through fees. If DNR operates the shuttles the estimated additional operating costs would be approximately \$144,000 annually.

Figure 2: Proposed Visitor Center Staffing

Staffing Needs	
Natural Resource Manager I	1 position year-round
Park Ranger I	1 position year-round
Park Specialist	1 position seasonal (7 months)
Park Technician	3 positions seasonal (6 months)
Maintenance Worker I	1 position year-round
Laborer	1 position seasonal (6 months)
Park volunteer	1 position year-round
Park volunteers	8 positions seasonal (5 months)
Mat-Su Upper Valley Planner	1 position Year-round
NPS Biological Technician	2 positions seasonal (6 months)
NPS Interpretation Ranger	1 position seasonal (6 months)
NPS Visitor Use Assistant	1 position seasonal (6 months)
Total 22 positions	\$491,310

Other Considerations

This final section will identify and discuss additional considerations related to the South Denali Visitor Center. As mentioned earlier our analysis was limited in some areas due to the lack of reliable data.

Additional visitor facilities

Currently, two large hotels in the region generate significant economic development. These two properties account for most of the region's hotel rooms. Development of the proposed visitor center will likely result in significant expansion of visitor facilities and expand hotel capacity by 50%.¹¹ These facilities are projected to include an additional large hotel complex and a number of smaller Inns or B&B operations. These additional facilities will have two important impacts on the Matanuska Susitna Borough: increased tourism spending locally for lodging, meals, tours and incidentals, and increased bed tax revenues. The increased visitor activity will create a number of local jobs both directly and indirectly through supporting activities. Further, the increased lodging will increase the associated property tax receipts to the Matanuska Susitna Borough.

The proposed facility will offer an alternative land based destination for Alaska's visitor industry. Due to its proximity to Anchorage, land based tours to the South Denali Visitor Center would offer a more affordable alternative to the extended stay required to tour Denali National Park. Cruise operators may find strong demand for a land based tour that offers similar sightseeing yet does not require an overnight stay at the Park. Further, the National Park Service and others have acknowledged that Denali National Park is near its infrastructure's visitor capacity. The proposed South Denali Center may help reduce or mitigate the impacts of the future visitor growth on Denali National Park.

Meetings/conferences

The development of the South Denali Visitor Center will provide meeting space currently lacking in the MatSu area. A recent study commissioned by the Borough estimated that a conference or convention facility could produce increased visitor spending in the range of \$700,000 to \$1.6 million annually through a combination of lodging and other expenditures (MCDowell Group, Inc., June 2006). Despite its relatively remote location the proposed South Denali Visitor Center could provide an attractive meeting/conference facility for corporate and trade meetings due to the lodging in close proximity and all weather highway access just two hours from Anchorage's International airport. These off season activities would provide additional economic benefits during a traditionally slow fall and winter period. Promoting the area can lead to synergistic benefits by exposing attendees to available activities and facilities (like all-weather road system, trails, and visitor facilities).

¹¹ Source: Economic Impacts of the Proposed South Denali Visitor Center (Colt, 2008).

With little existing data available on these activities at comparable sites, we can only speculate on the amounts of net receipts that would accrue directly to the proposed South Denali Visitor Center. Thus, we have decided to omit estimates of the direct impacts that hosting meetings and conferences might generate.

Winter tourism

Currently, the upper Matanuska Susitna Borough is a popular area for a diverse number of outdoor activities. The nearby Petersville area boasts many popular snowmachine and ski trails. Construction of the South Denali Visitor Center will expand the number of winter activities available and attract additional visitors during the winter season. These increases in visitation would likely lead to additional year-round facilities and activities, and promote the area as a destination for both Anchorage and Fairbanks residents. Greater utilization of hotel and other visitor facilities would increase the economic viability for these services and increase year-round employment by these businesses.

Economic Development in Denali Country

Denali country, defined as the area between Willow and Denali, currently has 58% of the available rooms in the Matanuska Susitna Borough and accounts for 60% of total bed tax receipts annually¹². Construction and operation of the South Denali Visitor Center would add substantially to the area's economic base. The Center and the related build up of additional hotel capacity, infrastructure, and support businesses will significantly affect employment and economic opportunity for area residents. Construction of the visitor center will extend the existing electrical service north into Denali State Park, which will further development of existing private lands. There will be substantial spillover or indirect benefits from both the visitor industry and support businesses that service these additional visitors. Finally, this build up will increase the assessed value of property subject to property taxes in this region of the Matanuska Susitna borough.

¹² Denali country bed tax revenues from S. Colt et al., 2008, Total Matanuska Susitna Borough bed tax receipts for 2007 were provided by Chris Drashner, Borough Accounting Specialist.

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Economic Impacts of the Implementation of the Proposed South Denali Visitor Center

Prepared for the State of Alaska, Department of
Natural Resources, Division of Parks and Outdoor
Recreation

By the Center for Economic Development
at the University of Alaska Anchorage

March 2011

This study assesses the direct and indirect economic impacts associated with the proposed plan to develop a visitor center near Curry Ridge in Denali State Park. We project significant temporary and permanent economic impacts related to the proposed South Denali Visitor Center and associated facilities.

Executive Summary

Our study finds substantial temporary and permanent economic impacts associated with the proposed South Denali Visitor Center (Visitor Center). We identify and model the proposed spending activities and use these to project the direct and total economic impacts on the local Matanuska-Susitna Borough as well as the State of Alaska. Direct impacts are generated for spending on construction and operations; total impacts consider both the indirect and induced impacts that arise from the increased spending and employment that generate increased support activities and related businesses and the impacts from increased income/wages that households spend for goods and services.

The study focuses on the region known as “Denali Country” in upper Matanuska-Susitna Borough. This region begins at the Talkeenta Junction on the Parks highway and runs north to the Denali National Park border. We provide an inventory of the existing or baseline visitor facilities and visitation to the region.

We provide construction spending estimates for both the public and private sources. Our study assumes that construction of the proposed South Denali Center will spur significant private development of additional lodging capacity and related visitors’ services in the region. Our study models these impacts on the Matanuska-Susitna Borough, Anchorage, and State of Alaska economy.

Once the facilities are completed and operational, we forecast increases in visitor related direct spending to exceed \$18.4 million annually in the Matanuska-Susitna Borough alone. The total economic impacts for this increased visitation will generate almost \$30 million annually when the indirect and induced impacts are included. It is important to note that these impacts will continue in perpetuity, and will be sustainable or “green.” Tourism has a small environmental impact relative to other development related activities.

Our study updates an earlier analysis by (Colt et al., 2008). Similar to this earlier one, this study models and assesses the impact from several spending scenarios but the present study employs recent visitor data and the recently completed feasibility study for the proposed visitor center. One other important difference between the studies concerns the modeling of the economic impacts. This study assumes a multiplier of 1.62 to project the total-indirect and induced-economic impacts. The earlier study used the IMPLAN input/output to predict the effects on local and regional spending. The multiplier captures the total economic impacts from a direct spending change. For example, increased spending for operations of the visitor center generates direct impacts from increased wages paid to employees and increased contractor services for maintenance. The payments for maintenance and wages to employees create additional purchases by households that in turn generate indirect and induced economic impacts. The multiplier uses these related impacts to capture the total impacts from a given change in economic activity.

Introduction:

Strong tourism growth over the past decade has prompted interest in expanding visitor opportunities in Denali State Park. Our study examines the economic impacts of construction and operation of the proposed South Denali Visitor Center (Visitor Center) to be located east of the Parks Highway at mile post 135.6. As envisioned the Visitor Center, would be a world-class destination with panoramic views of the Alaska Range, Mt McKinley, and Denali State Park. The proposed development would include parking areas, a transportation hub, shuttles to transport visitors to and from the center, and a 16,000 sq ft facility capable of accommodating up to 400 people at a time. Our study updates an earlier study of the proposed Visitor Center by Steve Colt and Nick Szymoniak completed in 2008 (Colt et al.). The current study differs from the earlier one in several key respects: (1) revised visitor data, (2) updated construction costs, and (3) incorporation of the feasibility study of Visitor Center operations.

The economic effects of implementing the proposed development include increased levels of economic activity, particularly in the upper Matanuska-Susitna Borough region. This increased level of economic activity encompasses business growth driven by increased spending for construction of facilities, expansion and growth of businesses that provide visitor related services, and increased employment by the visitor industry and related support businesses. This increase in economic activity occurs primarily from public and private spending for facilities construction, and increases in annual visitor numbers and spending by those visitors. This study considers the following categories of spending:

Construction spending by the State of Alaska

Construction spending by private development to support the increased visitation to the region

Spending for operations costs of the facility

Spending by nonresident visitors

Spending by Alaska residents

An economic impact analysis traces the flows of spending associated with activity in a region to identify changes in income, sales, and jobs due to that economic activity. Our study estimates spending levels for each of these categories and then models the forecasted impacts on the Matanuska-Susitna Borough, Anchorage and the State of Alaska. Our study quantifies both income/sales and employment impacts for each region. However, our primary focus is on the “Denali Country” region immediate to the proposed visitor center that begins at the Talkeetna junction of the Parks Highway and extends to the border of Denali National Park. This area will experience the greatest development and economic impacts. The activities of this project primarily consist of construction and tourism. Other socio-economic impacts, while important to local residents, are beyond the scope of this study. Spending activities generate a number of impacts: a direct impact from changes in income and employment levels, and indirect and induced impacts. The indirect and induced impacts occur as a result of the increased economic activity that in turn generates growth in such support sectors of the economy as transportation, food service suppliers, utilities, and increased spending by households. These indirect and induced impacts are

captured by application of economic multipliers on the spending changes that are contemplated with an activity.¹

Project Activities/Construction

The South Denali Project Record of Decision and Environmental Impact Statement calls for the construction of Alternative C: Parks Highway of the South Denali Implementation Plan. We developed the following scenario to describe construction and changes in visitor and resident spending patterns as a result of the implementation of the Denali Implementation Plan.² Figure 1 provides an overview and map of the proposed development at milepost 135.6 of the Parks Highway. Construction costs and operations data were obtained from the Feasibility Study of the Proposed South Denali Visitor Center.³

Baseline Economic Activities

The baseline level of economic activity assumes by definition existing levels of visitor volumes and spending by those visitors. This spending and its associated economic impacts are tracked by the State of Alaska Department of Commerce, Community and Economic Development Division of Economic Development. These annual visitor surveys provide important assessments of the visitor sector of Alaska's economy. For this study we utilize the annual visitor statistics Program VI, produced annually for both summer and winter visitor periods; we also incorporate several additional studies that assess the economic impacts and survey visitor spending in Alaska that are identified below:

Feasibility Study for the Proposed South Denali Visitor Center 2011

Economic Impact of Alaska's Visitor Industry 2010

Economic Importance of Sportfishing in the Matanuska-Susitna Borough 2009

Economic Impacts of the South Denali Implementation Plan 2008

Alaska Visitor Statistics Program VI Interim Visitor Volume Report Summer 2010

Alaska Visitor Statistics Program VI Interim Visitor Volume Report Fall/Winter 2009-10

Summer 2006 Alaska Visitor Statistics Program (AVSP) Exit Intercept data file

The following sections provide details on relevant aspects of the visitation and related spending in Alaska. Following this is an overview of the existing visitor infrastructure that currently exists in the Denali Country region of the Matanuska-Susitna Borough. The next section develops our estimates of increased spending for construction, operations, and visitors related to the South Denali Visitor Center

¹ For example if the multiplier is 2, then every \$1 change in spending generates an additional \$1 of indirect and induced spending.

² The Implementation plan envisioned a number of development projects: construction of a visitor center and facilities near Curry Ridge, and the development of facilities including parking, river access, and campgrounds in the Trapper Creek and Petersville Road. This study focuses on the visitor center and facilities near Curry Ridge.

³ State of Alaska, Department of Natural Resources, Division of Parks and Outdoor Recreation, Feasibility Study for the Proposed South Denali Visitor Center, March 2011.

implementation plan. Alaska residents are also anticipated to visit Denali Country more frequently as a result of the construction of the Visitor Center; these impacts are discussed as well. The last section presents our analysis of the predicted economic impacts-direct and indirect-from the proposed construction and related build-up of visitor facilities at the proposed Visitor Center, and the impacts of both increased numbers of visitors and increased visitor spending associated with the operations of the proposed Visitor Center.

Present Facilities

Existing Facilities/Infrastructure: As discussed previously, this study focuses on the region beginning at the Talkeetna junction of the Parks Highway extending to the southern boundary of Denali National Park. Existing facilities in this area include approximately 900 rooms. Almost 700, or 60%, of these rooms are contained in two hotels-the CIRI Talkeetna Alaskan Lodge and the Princess Mount McKinley Wilderness Lodge. These rooms generate substantial revenues-\$12 million in 2007 alone⁴-that impact the regional economy through operations, employment, and bed taxes. The remaining 40% of rooms are in smaller establishments, including bed & breakfasts.

Tourism in Alaska has grown markedly over the past several decades. Table 1 provides a breakdown, by transportation method, of visitors from 2008 to 2010. The total number of visitors to Alaska in 2010 is estimated at just over 1.5 million. This total is off the record number of 1.7 million visitors, set in 2007. The statistics clearly show that the cruise market, at 878,000 visitors, is the largest participant in the visitor industry in Alaska despite the declines suffered in 2009 and 2010 as a result of the national economic downturn. Forecasts for 2011 predict a strong recovery for the cruise market with announcements of additional boats and increased numbers of cruises by existing vessels. The non-cruise visitor counts actually increased in 2010 relative to 2009.

Table 1: Visitor Volume, by Exit Mode and Cruise Market, Summers 2008-2010

Exit Mode	2008	2009	2010	% Chg 2009-10	% Chg 2008-10
Air	800,600	702,800	693,400	-1.3%	-13.4%
Cruise Ship	836,500	835,000	742,700	-11.1%	-11.2%
Highway	59,900	55,200	59,500	+7.8%	-0.7%
Ferry	10,400	8,700	10,000	+14.9%	-3.8%
Total	1,707,400	1,601,700	1,505,600	-6.0%	-11.8%
Cruise Market					
Cruise	1,033,100	1,026,600	878,000	-14.5%	-15.0%
Non-Cruise	674,300	575,100	627,000	+9.1%	-6.9%

Tables 2 & 3 present descriptive data on visitors to Denali National Park. This data was collected as part of a special survey in summer 2006 to assess visitor spending in Alaska in several popular destinations. For the purposes of this analysis it is important to note that of the total number of visitors to Alaska during summer 2006, 31% took a ground excursion to Denali National Park with 28% electing an overnight stay; 5% were only day visitors.

⁴ S Colt et al., 2008 p10.

Table 2: Characteristics of Denali National Park and Preserve Nonresident Visitors, Summer 2006.

Denali National Park		
	Overnight	Day Visitor
Number of Visitors	456,820	81,575
% of total Alaska Visitors	28%	5%
Mean # of Nights at Denali NP	2.9	
Frequency of Nights Stayed	Percentage	
1	10.3	
2	34.5	
3	31.0	
4	10.3	
5	3.4	
6	10.3	
Exit Mode	Percent	
Domestic Air	49.7	56.5
International Air	18.8	17.4
Ferry	5.4	6.5
Cruise Ship*	13.2	3.3
Highway	12.9	16.3
Male	53.1	60.9
Female	46.9	39.1
Retired?		
Yes	50.9	46.7
No	47.6	52.2
Children living in household?		
Yes	18.7	18.5
No	79.9	80.4
Average age (years)	56	55
Average party size	2.4	2.2
Average length of stay - days	13.5	12.7

Source: Alaska Department of Commerce, Community and Economic Development, Alaska Visitor Statistics Program V, Data file, 2007.

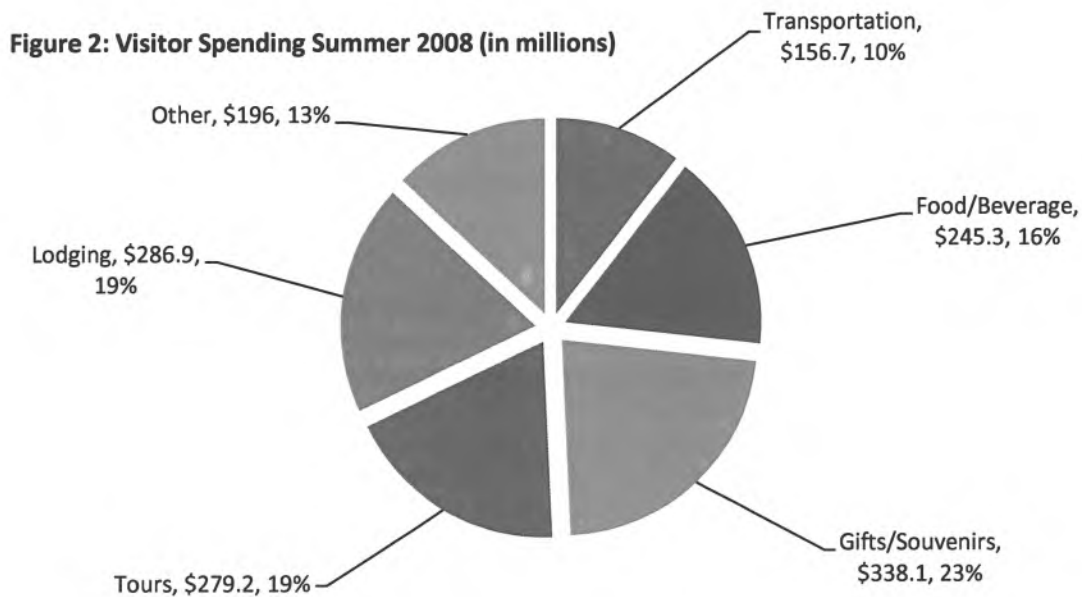
The same survey collected data on visitor spending during their Alaska visit; this information is presented in Table 3. Spending data for visitors who traveled to Denali National Park is important for our analysis. It is one of the few sources documenting the expenditures of visitors for ground-based excursions and features a wealth of data on lodging, meals, transportation and other spending activities. This data indicates that average spending per day by overnight and day only visitors was \$132 and \$90, respectively.⁵

⁵ These amounts are in 2006 dollars. For our analysis we adjust these amounts for changes in general price levels to reflect prices changes since 2006.

Table 3: Expenditures by Denali National Park and Preserve overnight and day Visitors, Summer 2006.

Persons Who Visit Denali National Park		
In-State Expenditures	Overnight	Day Visitor
Total Alaska per Party	\$4,279	\$2,512
Total Alaska per Person	\$1,783	\$1,142
Total Alaska per Person per Day	\$132	\$90
Expenditures per Party by Location		
Denali-Healy-Cantwell Average		
Lodging	\$180	\$0
Tours	\$156	\$61
Gifts/Souvenirs/Clothing	\$62	\$14
Food-Beverages	\$84	\$14
Rental Cars-Fuel-Transportation	\$28	\$6
Other	\$60	\$0
Total	\$569	\$96
Portion total Alaska trip expenditures	13%	4%
Denali per party per day expense	\$196	\$96
Half day Increase	\$98	\$48
Talkeenta Average		
Lodging	\$158	\$93
Tours	\$147	\$75
Gifts/Souvenirs/Clothing	\$36	\$30
Food-Beverages	\$60	\$77
Rental Cars-Fuel-Transportation	\$13	\$125
Other	\$0	\$12
Total	\$	\$
Portion total Alaska trip expenditures		
Palmer-Wasilla Average		
Lodging	\$60	\$55
Tours	\$14	\$6
Gifts/Souvenirs/Clothing	\$17	\$31
Food-Beverages	\$54	\$62
Rental Cars-Fuel-Transportation	\$71	\$60
Other	\$0	\$0
Total	\$216	\$216
Portion total Alaska trip expenditures	5%	8%
Anchorage		
Lodging	\$267	\$265
Tours	\$52	\$74
Gifts/Souvenirs/Clothing	\$118	\$101
Food-Beverages	\$140	\$168
Rental Cars-Fuel-Transportation	\$396	\$376
Other	\$91	\$157
Total	\$1,063	\$1,141
Portion total Alaska trip expenditures	25%	45%

Figure 2 (presented below) illustrates visitor spending by the economic sector during summer 2008. These expenditures totaled \$1.5 billion and contributed significantly to Alaska’s economy-both in rural and larger communities. This spending has an estimated total economic impact of \$3.4 billion to Alaska’s economy when both direct and indirect impacts are considered.⁶



Source: Economic Impact of Alaska’s Visitor Industry (2010).

Alaska Resident Travel

It is anticipated that the proposed Visitor Center will also attract Alaska residents to the Matanuska-Susitna’s Denali region. Table 4 presents data on residents collected for the Alaska Resident Statistics Program. A review of the table indicates that about 50% of the population residing in South-central and interior communities make at least one trip to the Mat-Su Borough each year. Popular activities include snow machining, fishing, wildlife viewing and hiking. The data, however, doesn’t provide information on the duration of these visits. To address this, we follow the similar assumptions made by the previous Colt et al. study when spending projections are discussed in the impact section of this study.

Table 4 provides data on the numbers of Alaska residents visiting Mat-Su Borough from South-central and Interior regions, number of visits, and frequency of activities while visiting. This data was collected as part of a special Resident Visitor Statistics program that is ongoing.⁷

⁶ Total impacts on the Alaskan economy were derived using the IMPLAN input/output model of local and state economies. The difference between the direct and total impacts implies an economic multiplier of 1.619. This is the multiplier we use for all of our impact analyses.

⁷ Since this study has yet to be published, we by necessity have reproduced the table from the Colt et al 2006 Study.

Table 4: Numbers of Alaska residents visiting Mat-Su Borough from Southcentral and Interior regions, number of visits, and frequency of activities while visiting

Population base (18+)	333,066		
Total people making visits		159,848	
Total Visits (lower bound estimate)	736,222		
Total Visits (best estimate)	1,021,852		
Activity Frequency:	Lower bound Estimate		Best estimate
Visit developed campgrounds		99,790	138,330
Visit developed trail systems		196,827	270,466
Hike		190,633	262,895
Camp		148,653	208,527
Wildlife viewing		180,310	249,819
Fishing (freshwater)		131,448	181,687
Boating (non-motorized)		48,863	66,068
Ski and snowshoe		62,627	86,026
Snowmachine riding		109,336	126,796
Note: The columns "lower bound estimate" and "best estimate" reflect the range of values obtained from the same raw data but using two different methods for tabulating the raw data.			
Source: Alaska Resident Statistics Program, preliminary results. People living inside the Mat-Su Borough are excluded from these counts			

Source: Economic Impacts of the South Denali Implementation Plan 2008.

Proposed South Denali Visitor Center Impacts:

Our Study considers the economic impacts of the proposed Visitor Center on both the Matanuska-Susitna Borough and the State of Alaska. As discussed earlier, our focus is on the immediate construction-related impacts and the longer term impacts from increased non-resident and resident visitors to the Visitor Center. In this section we develop estimates of spending by these categories and then discuss our predicted changes in sales, income, and employment associated with the project. It is important when interpreting our forecasts to emphasize that visitation and the visitor industry are sensitive to changes in the national economic condition.

Alternative 1: No South Denali Visitor Center.

We develop our analysis by considering first the construction related impacts associated with the proposed Visitor Center. Under the baseline scenario there would be no South Denali Visitor Center constructed, Denali State Park would continue to attract visitors with existing facilities, and enhancements and expansion of visitor facilities would occur largely through private funding and construction. There would not be significant additional employment and no changes in the numbers of nonresident visitors to the region or Denali State Park. Finally, Alaska residents would continue to travel to the Matanuska-Susitna Borough for recreational activities year round.

Alternative 2: Construction of South Denali Visitor Center

Construction activities: The current projected construction cost for the proposed Visitor Center is \$39.2 million. The project is expected to take three years to complete, so we assume that these costs are expended evenly over the construction period. These costs are further divided equally among labor, material, and project management costs. The labor and management costs are assumed to stay within Alaska while materials costs would predominantly be paid to out of state suppliers. It is further assumed that most of the project's labor would be paid to workers residing in the Matanuska-Susitna Borough. Project management costs would be split 75:25 between the Matanuska-Susitna Borough and Anchorage.

We also assume private construction would occur as well to provide the lodging and services capacity necessary to support the increased visitation the Visitor Center would attract. Following Colt et al. (2008), we assume that private spending will fund at least one large hotel complex-75 rooms- and smaller lodges, eateries, and stores will generate additional private construction spending of \$44.6 million. For simplicity we make similar assumptions about how spending on these projects will occur and the allocation of spending between regions within Alaska and out-of-state suppliers.

Table 5 presents proposed construction spending plans for the Visitor Center and private developments over the three-year construction period for the Matanuska-Susitna Borough, Anchorage, and State of Alaska. These are only representations of the possible spending activities for modeling the economic impacts associated with construction of these facilities. The construction of private facilities may not begin until construction of the Visitor Center is near completion; however, this fact does not alter the magnitude of our predicted economic impacts, only their timing and duration.

Operational Impacts Associated with the Proposed Visitor Center

Once completed, the Visitor Center will employ a large staff to support operations and maintain the facility. We model these longer term permanent impacts using the projected receipts the Visitor Center will collect from visitors annually. This data is contained in the Feasibility Study for the Proposed South Denali Visitor Center (2011). We use forecasted expenditures for the initial year of operation (excluding depreciation). We use this amount instead of the 2006 visitor spending survey data reported earlier in Table 3 because these receipts represent additional amounts that visitors are predicted to spend at the Visitor Center.

We follow Colt et al. in assuming that the proposed Visitor Center will increase both the number of non-resident visitors who opt for a ground-based tour to Denali Park and extend the duration of existing (baseline) land-based visitors.⁸ While these assumptions are supported by discussions with cruise industry executives, they are also intuitive. The proposed center's proximity to Anchorage will allow for day trips from Anchorage at a much lower cost than existing land-based tours. In addition, the new facility will be a major attraction for existing land based tours to Denali National Park resulting in visits of longer duration. Both of these changes will result in increased spending by non-resident visitors.

⁸ See Colt et al. 2006 for additional discussion regarding this assumption.

We assume that the proposed Visitor Center will result in 20,000 more visitors who opt for land-based tours. We further assume that these visitors will stay an average visit of three days and two nights, leading to an additional \$8.8 million of visitor spending annually. Further, we assume that 10% of all existing visitors opting for the land-based Denali National Park tour will increase the duration of their total visit by an additional full day, resulting in an additional spending of \$7.5 million annually.

Finally, we project an increase in the number of Alaska residents visiting the Mat Su borough for recreational activities as a result of construction of the Visitor Center. Based on the data presented in Table 4 the baseline for visitation by residents is approximately 1 million visits annually from communities outside of the Matanuska-Susitna Borough. We assume that this volume increases by 10% or 100,000 visits annually. For our spending estimates we rely on a study of sportfishing economic impacts commissioned by the Matanuska-Susitna Borough in 2009. This study surveyed both resident and nonresident angler spending. For our analysis we assume that resident visitors spend \$212 per day for transportation, meals and lodging/camping⁹ and generate an additional \$2.5 million of spending annually in the Matanuska-Susitna Borough. This spending estimate is based on an earlier survey of angler activities in the Matanuska-Susitna Borough (Haley et al 1999).¹⁰ It is important to note that this spending activity does not increase the overall level of economic activity within the State of Alaska; rather, it represents a shift to the Matanuska-Susitna Borough from other areas of the State.

Economic Impacts

Table 5 presents a summary of the spending impacts from construction activities and additional visitor spending on the level of economic activity including direct, indirect, and induced assuming a multiplier of 1.62.¹¹ The table also presents estimates of these spending forecasts on employment levels within the Matanuska-Susitna Borough, Anchorage, and State of Alaska. Generally, our findings are qualitatively similar to those reported by Colt et al. 2008. We find that the impacts on the Matanuska-Susitna Borough's economy are significant and positive. These impacts are discussed by the categories and for the Matanuska-Susitna Borough and the State of Alaska.

⁹ This study reported in Table 1 spending estimates: low \$212, medium \$399 and high \$550, per day, respectively. To be conservative, we base our resident spending projections on the low amount.

¹⁰ This study reported \$28 per day per person based on 1993 dollars. This figure is quite dated and thus is not likely a reliable estimate of resident spending.

¹¹ The magnitude of the economic multiplier used in other studies ranges from 1.35 to 2.0. We selected 1.62 because this was the multiplier implied in Colt et al. (2008). The 1.35 multiplier was advanced by Goldsmith (1989) but recent studies, including the Colt et al study, suggest that the multiplier has increased most likely as a result of Alaska's transition to a more mature, developed economic base.

Table 5 Economic Impacts from the South Denali Visitor Center

Activity	Spending			Employment		
	Direct Spending	Indirect & Induced	Total Impacts	Direct	Indirect & Induced	Total
Construction Spending (Per year)- Temporary						
Public						
MatSu	\$7,414,627	\$4,589,654	\$12,004,280	117	90	206
Anchorage	\$768,637	\$475,786	\$1,244,424	12	9	21
Alaska	\$8,183,264	\$5,065,440	\$13,248,704	129	99	228
Private						
MatSu	\$6,503,378	\$4,025,591	\$10,528,969	103	79	181
Anchorage	\$929,030	\$575,070	\$1,504,100	15	11	26
Alaska	\$7,432,408	\$4,600,661	\$12,033,069	117	90	207
Visitor Spending - Permanent						
Visitor Center Operations -MatSu	\$1,230,625	\$761,757	\$1,992,382	24	15	39
Longer Stays-MatSu	\$7,541,730	\$4,668,331	\$12,210,061	147	91	238
Additional Visitors						
MatSu	\$7,064,311	\$4,372,808	\$11,437,119	138	85	223
Anchorage	\$1,766,078	\$1,093,202	\$2,859,280	34	21	56
Alaska						
Alaska Residents	\$8,830,389	\$1,574,736	\$4,118,735	52	31	83

The public-funded construction direct impacts over the three year estimated construction period for the Matanuska-Susitna Borough (State of Alaska) are \$7.4 million (\$8.2 million) annually. Privately funded construction direct impacts are similar at \$6.4 million (7.4 million) for the Matanuska-Susitna Borough (State of Alaska). Combined projected economic impact from both public and privately funded construction on the Matanuska-Susitna Borough (State of Alaska) is \$10.5 million (\$12 million) when the direct and indirect/induced effects of this increased spending are considered. Employment gains are also very strong. We project an additional 209 (228) constructional related jobs to be created in the Matanuska-Susitna Borough (State of Alaska) over the three year construction period.¹²

South Denali Visitor Center Operational Impacts

Once the proposed Visitor Center is completed and operational, our analysis projects that it will have a substantial economic impact on the Denali Country region of the Matanuska-Susitna Borough. Table 5 presents predicted annual operational spending for the Visitor Center of \$1.2 million. The total economic impacts associated with these expenditures-including direct and indirect/induced-is estimated

¹² We based our employment impacts assuming that the additional jobs created as a result of the public and private build-up would pay the 2010 average construction wage of \$63,440 reported by the State of Alaska Dept of Commerce and Community Development, Division of Economic Development.

at \$2 million annually. The total projected increase in employment for the Matanuska-Susitna Borough associated with operation of the Visitor Center is 83, based on the 2009 median wage rate of \$51,221.¹³

The longer duration visits by nonresidents to Denali Country are estimated to generate an additional direct (total impact) economic impact of \$7.5 million (\$12.2 million). It is assumed that all of these impacts will be captured by the Matanuska-Susitna Borough. This change will generate employment increases of 238 positions using the same median wage rate as discussed above.

The increased number of nonresident visitors opting for a ground based tour to Denali Country is predicted to generate a direct economic impact of \$7 million (\$8.8 million) in the Matanuska-Susitna Borough (State of Alaska) and to increase Matanuska-Susitna Borough employment by 279 permanent positions.

Finally, the projected impact from increased visitation by Alaska residents is an additional \$2.5 million direct and \$4.1 million total annually to the Matanuska-Susitna Borough. These impacts represent a shift in spending from other regions of Alaska to the Matanuska-Susitna Borough's economy.

Summary

In summary, the proposed South Denali Visitor Center would provide strong economic benefits to the Matanuska-Susitna Borough and the State of Alaska. Our estimates indicate that following the buildup from construction-related activities, the Denali Country region of the Matanuska-Susitna Borough would enjoy permanent long-term growth of \$29.8 million annually, and employment gains of approximately 637 permanent positions. It is important to realize that these impacts will continue in perpetuity and will be sustainable or "green." Tourism has a small environmental impact relative to other development-related activities.

¹³ The median annual wage of \$51,221 is likely high for the employment sectors typically represented by the visitor industry. However, chose this amount because there is no composite wage benchmark available.

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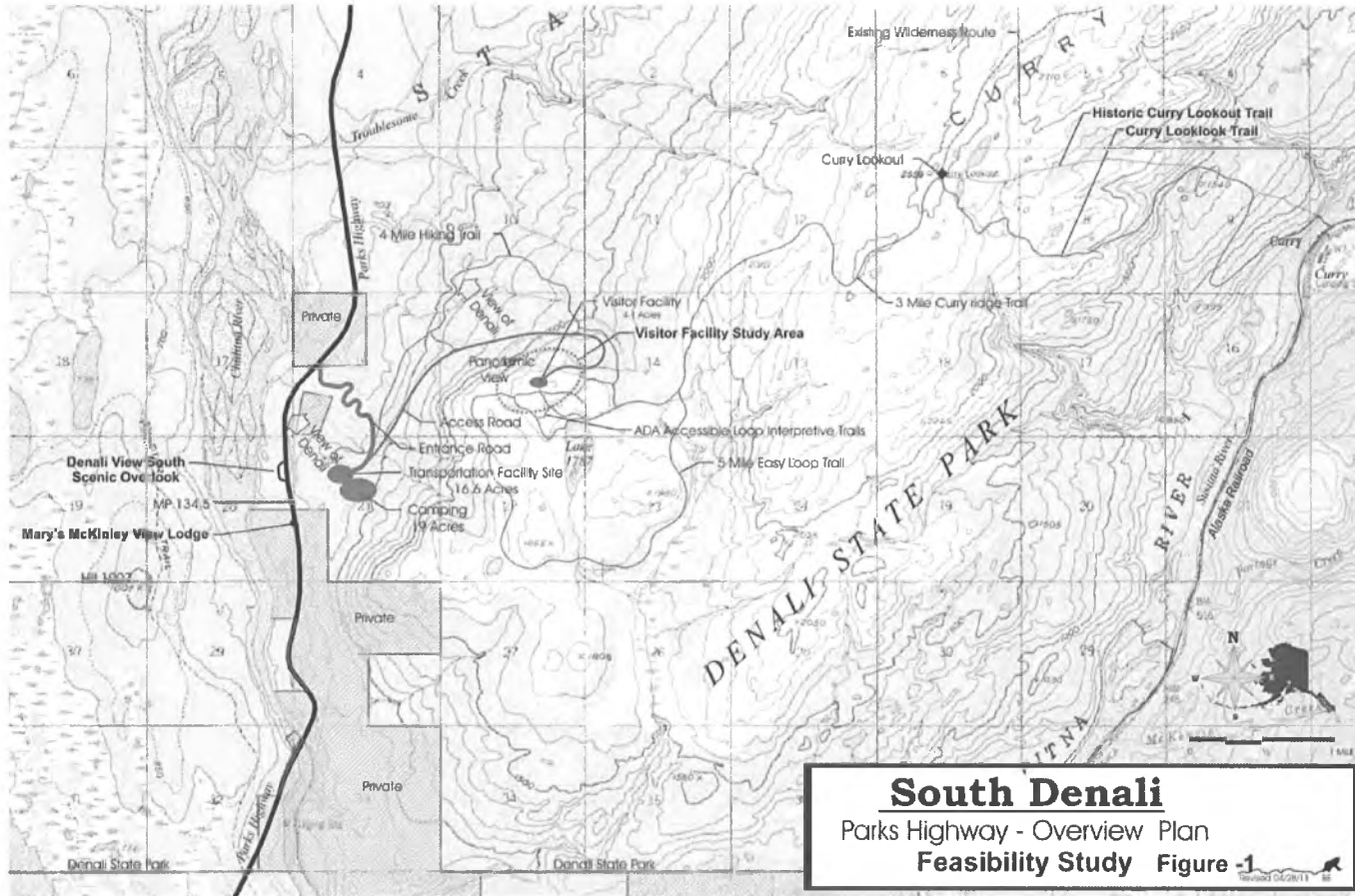
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South Denali Visitor Center Complex
Interpretive Master Plan

August, 2009

Front Cover: Denali and the Ruth Glacier rise above the braided Chulitna River, as seen from the visitor center site on Curry Ridge. November, 2007

Facing Page: The 20,320 foot summit of Denali, the tallest mountain in North America, is a must-see for Alaska visitors. November, 2007

South Denali Visitor Center Complex Interpretive Master Plan

August, 2009



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The completion of the South Denali Visitor Center Interpretive Master Plan marks one more milestone in a long process that started over 40 years ago when a vision to create a visitor center in the area was first proposed. A new visitor center in Denali State Park on Curry Ridge has the potential to allow both residents and visitors to have a "Denali experience" that would not otherwise be possible with existing facilities.

This plan is an exciting step in ensuring that the project is completed with the utmost consideration to providing quality opportunities for people to view Mt. McKinley and the spectacular subalpine around lake 1787. The plan recommends ways to minimize adverse affects on the natural resources as well as reducing visual impacts of the built environment. The research and thought that has been put into the location of the visitor center, road alignment, transportation, parking, trails, interpretive displays, building style and other details will help guide the development of a world class facility that will be enjoyed by millions of people.

In planning for additional recreational opportunities in the South Denali region the planners for this project conducted a thorough outreach with multiple public meetings, a discussion forum on their web page, and an open willingness to accept telephone and email comments, all in an effort to capture participant's comments for inclusion. We are pleased with the scope and quality of their work and believe that the resulting South Denali Visitor Center Interpretive Master Plan is an excellent document that will guide the development of the South Denali Visitor Center Complex. We extend a hearty thank you to everyone one who has participated in the process and encouraged this great project.

James King

James King

Date: July 30, 2009

Director
Alaska State Parks

Paul Anderson

Paul Anderson

Date: July 30, 2009

Suprintendent
Denali National Park

John Duffy

John Duffy

Date: July 31, 2009

Borough Manager
Matanuska Susitna Borough

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Narcissus-Flowered Anemone and spider on Curry Ridge. June, 2008



Frigid Arnica on Curry Ridge. June, 2008

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Tundra plants on the higher elevations of Curry Ridge. November, 2007



Lesser Yellowlegs on Curry Ridge. June, 2008



Alpine Azalea on Curry Ridge. June, 2008

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Chapter One

Introduction

South Denali Visitor Center Complex: Interpretive Master Plan



Alaska State Park staff enjoy the view of Denali on Curry Ridge. September, 2006

Importance of the South Denali Visitor Center

The South Denali Visitor Center on Curry Ridge promises opportunities for people to experience the iconic natural and cultural heritage of Alaska at one exquisite place. This location offers a premier view of the Alaska Range which stretches out as a backdrop behind the deep Chulitna River Valley. The Ruth Glacier glimmers down through the Range into the valley and leads the eye up to the shining peaks of Denali that loom majestically over the site.

A shuttle tram ride to the visitor center immerses travelers in the shelter of dark spruce forests, which provides a dramatic contrast to the sunlit alpine and bright views from the visitor center on the summit. The trails on the ridge provide people the unique opportunity to experience the mountain breezes, smells, and quiet solitude of this special place.

This site, which arguably offers the best view of Denali, is strategically located within the primary travel corridor to Denali National Park and to Fairbanks. It is within 150 miles of more than half of Alaska's residents and can serve diverse audiences in multifaceted ways. It has the enthusiastic support of agencies like the National Park Service, Alaska State Parks, and the Matanuska-Susitna Borough. Each has provided support and insight into the development of this plan.

Unlike many tourist attractions, this visitor center has the potential to serve the recreational needs of Alaska residents, especially in the shoulder and winter seasons. The facility is designed to serve multiple uses and to adapt to changing needs and audiences. In summer, it will accommodate thousands of Alaska tourists; in spring and fall it will provide a staging area for community festivals, weekend getaways for families, and an accessible facility for school outdoor programming. Its comfortable multipurpose room will draw conference and business meetings, providing a uniquely Alaskan theme and environment to their experience.

This facility is intended to stimulate economic growth in the region. It will attract visitors, both tourist and Alaskan resident. It will hold them in the area for extended periods and will motivate them to explore the region's other attractions and amenities. It will rely on concessionaires to provide food, beverage, lodging, and guiding services. The *South Denali Economic Impacts Assessment*, completed in 2008 by the Institute of Social and Economic Research (University of Alaska), projects major increases in regional employment opportunities, local business owner income, and tourism expenditures. The key findings are included in Appendix 3.

This project offers a singular opportunity to create a world class, multi-use visitor center that can adapt to the changing needs of the area and adjust to the ever evolving demands of the tourist industry in Alaska. It is designed as a dynamic and responsive place that will motivate people to return frequently.

Background Information

Since the 1960s there has been a shared vision among public land managers in the South Denali region that the area had potential for greater use and development for visitors. Various proposals and feasibility studies have been developed for sites in the Peters Hills and along the Parks Highway. The designation of Denali State Park in 1970 was intended to provide the land base and protections needed for a major public tourism facility. In 2006, Curry Ridge was selected as the preferred site for a South Denali Visitor Center Complex. The long planning history leading to this selection is documented in the Final South Denali Implementation Plan and Environmental Impact Statement.

Purpose of this Document

This conceptual plan has three primary purposes:

1. It documents the vision, mission and goals for this project, examines the public needs, and identifies the resources to be interpreted.
2. It communicates concepts and parameters for site, building, and interpretive media development to stakeholders to provide them with an opportunity to review and comment on the project before any construction begins.
3. It provides an architectural program and media concepts that will guide architects, engineers and media fabricators.





Sunrise over the Chulitna River from Curry Ridge. September, 2007

South Denali Visitor Center Complex at Curry Ridge

The 2000-2001 Denali National Park Business Plan recommends a South Denali development as a more easily accessed alternative tourist destination to Denali National Park and Preserve: "The area offers beautiful views of Mount McKinley and the Alaska Range, glaciers, streams, and much of the impressive array of wildlife for which the Denali Park Road is famous. This alternative visitor destination would be created through partnerships with the state, local communities, and native corporations."

The National Park Service received a fiscal year 2004 Congressional appropriation to develop facilities in the South Denali region, and a Notice of Intent to prepare a South Denali Implementation Plan was published in the Federal Register in February 2004. The South Denali Implementation Plan and EIS were developed between 2004 and 2006 with a rigorous public involvement process that identified Curry Ridge as the preferred alternative. In April 2006 the Final South Denali Implementation Plan and Environmental Impact Statement was published. As stated in the Introduction, "This implementation plan represents a cooperative effort between the State of Alaska, the Matanuska-Susitna Borough, and the National Park Service. The

visitor center proposed in this plan will be cooperatively managed by the State of Alaska and the National Park Service."

In July of 2007, a Memorandum of Understanding for Development of the South Denali Master Interpretive Plan was entered into by the DNR Division of Parks and Outdoor Recreation and Schmeckle Reserve Interpreters of the University of Wisconsin-Stevens Point. The purpose of the project was to "develop and produce a master interpretive plan for a new visitor center complex to be constructed in Denali State Park." A 2008 amendment expands the scope to provide design concepts for the base transportation facility.

Bee on monkshood on Curry Ridge. August, 2007



The Planning Process

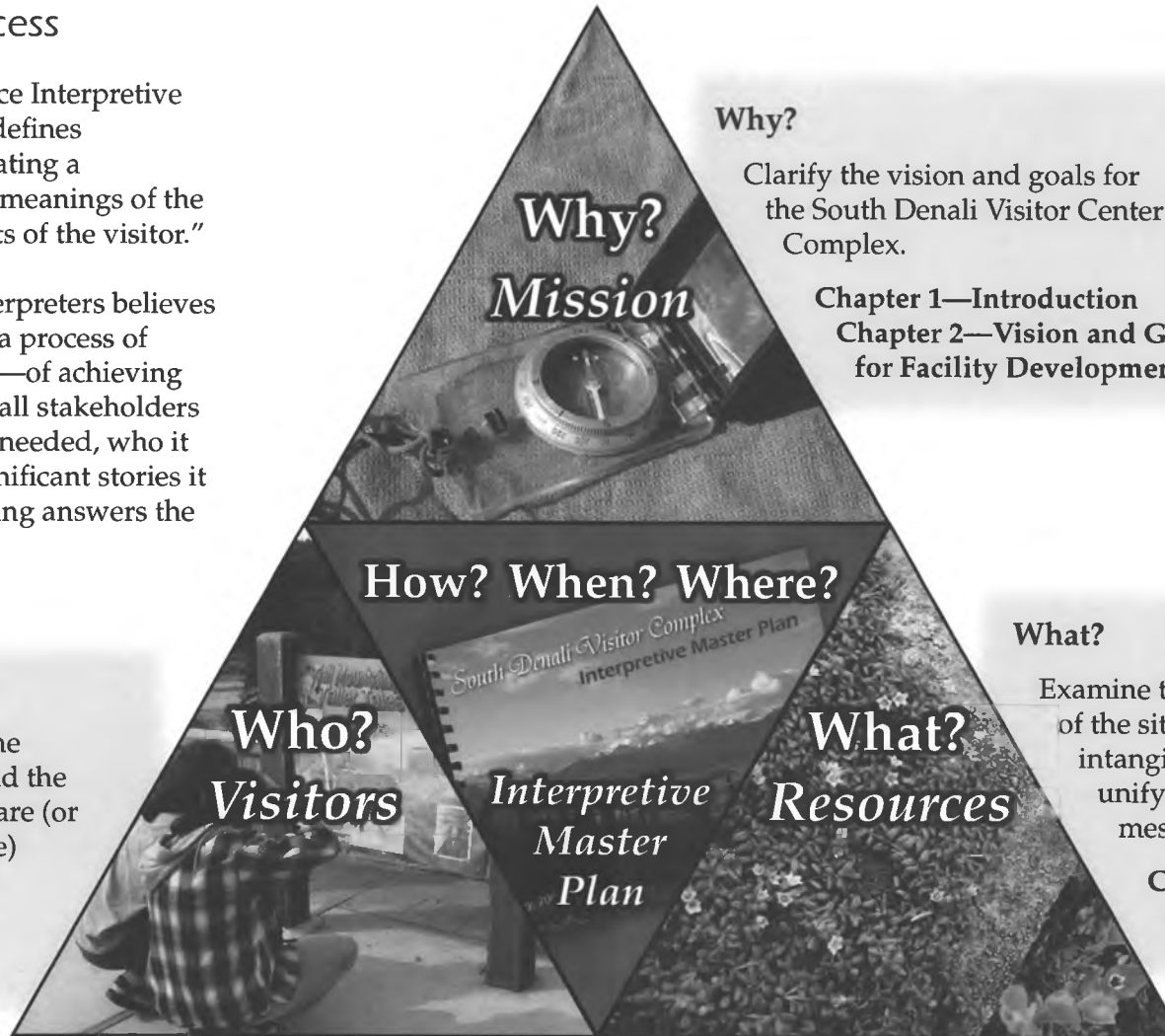
The National Park Service Interpretive Development program defines interpretation as “facilitating a connection between the meanings of the resource and the interests of the visitor.”

Schmeckle Reserve Interpreters believes interpretive planning is a process of consensus development—of achieving a shared perspective by all stakeholders of why interpretation is needed, who it will serve, and what significant stories it will tell. Effective planning answers the following questions:

Who?

Document who the visitors will be and the experiences they are (or will potentially be) seeking.

**Chapter 3—
The Audience**



Why?

Clarify the vision and goals for the South Denali Visitor Center Complex.

**Chapter 1—Introduction
Chapter 2—Vision and Goals
for Facility Development**

What?

Examine the tangible resources of the site, then distill their intangible meanings into unifying themes and messages.

**Chapter 4—Resources,
Themes, and Messages**

How? Where? When?

Based on the why, who, and what, develop conceptual plans for facilities and media that best promote visitor/resource connections.

**Chapter 5—Interpretive Facility and Site Development
Chapter 6—Interpretive Media
Chapter 7—Base Transportation Facility, Site, and Media Development**



Chapter Two

*Vision and Goals for
Facility Development*

South Denali Visitor Center Complex: Interpretive Master Plan



Visitors take in the interpretation at the Denali View South Viewpoint. August, 2007

Vision and Goals

Denali State Park Management Plan Vision Statement (2006)

The 2006 management plan documents the vision of the Alaska DNR Division of Parks and Outdoor Recreation for the South Denali Visitor Center Complex (page 81). This plan adopts the overall recommendations of the Final South Denali Implementation Plan and Environmental Impact Statement:

This destination facility will serve Alaskan and out-of-state travelers, local school groups and package tours. The vision is for a high quality facility that offers a range of opportunities for learning and recreating. It will provide visitors of various abilities a chance to experience alpine and subarctic tundra environments and opportunities to view Denali and the Alaska Range.

The visitor center and trail system could engage visitors for an hour, half-day or all day. Diverse opportunities (such as interpretation of natural and cultural resources, viewing Denali, short walks, long hikes, educational programs, hands-on exhibits and viewing films) and information about regional recreational opportunities, safety, and emergency assistance will be provided to accommodate diverse visitor interests and backgrounds. Opportunities for winter activities will be provided, though not at the same level of service as in summer.

Memorandum of Understanding Vision Statement (July 2007)

The Memorandum of Understanding for Development of the South Denali Master Interpretive Plan (July 2007) states the vision for the visitor center:

The South Denali Visitor Center will be a sustainable learning and recreation gateway, providing a welcoming and accessible interpretive transition for people of all ages, abilities, and backgrounds. The visitor center, trails, and viewing areas will be unimposing and harmoniously nestled within the surrounding landscape, furnishing venues for education, study, and wildlife and scenic viewing. Heritage interpretation will enhance visitor appreciation of, connection to, and care for area resources by offering an interactive program focusing on the key themes of transition, sustainable resource management, recreation, earth processes, and natural and cultural history. This year-round gathering place will enable visitors to experience migrating and resident wildlife, breathtaking views of Denali and the Alaska Range, and Alaskan nights painted with sheets of dancing aurora. Visitors will come to experience and stay to enjoy.

Visioning Workshop

To establish a clear direction for the visitor center project, a visioning workshop was held on August 16, 2007 with a cross section of project stakeholders. The purpose of the workshop was to determine:

- Specific goals of the project (reported below)
- Target and potential audiences (reported in Chapter 3)
- Important stories to be told (incorporated in Chapter 4, themes and messages)
- Development and activities that should and should not be planned for the facilities (incorporated in Chapters 5-7)

A full list of results from the meeting is included in **Appendix 1**. Workshop participants included representatives from the Alaska Department of Natural Resources, National Park Service, Denali Concessions, and private businesses.

Specific Goals of the Project

Numbers represent weighting by participants based on their perceived importance.

1. Demonstrate commitment to stewardship (Green architecture and development through LEED certification, alternative fuels, view shed preservation) (17)
2. Emphasize active use of Denali State Park through outdoor recreational activities. Provide information/infrastructure for recreational activities. Provide indoor hands-on media designed for multi-generational visitors with diverse abilities (15)
3. Incorporate a wide variety of viewpoints of the resource and facilitate understanding between user groups (10)
4. Exploit multi-modal opportunities (9)
5. Celebrate the stunning natural setting. People come for the view of Denali and landscape—emphasize view (8)
6. Connect cultural and recreational resources with the natural resources—celebrate community heritage. Connect local communities to the area—get communities involved along with tourists (8)
7. Make an education connection with local youth (7)
8. South Denali should release pressure from Denali NP, promote economic growth of communities and enhance the scenic byways experience (6)
9. Connect the people of Anchorage and communities north to year-round recreation and enjoyment (5)
10. Access and facilitate responsible use of resources- promote resource protection (5)
11. Make this a destination facility (5)
12. Promote casual enjoyment, affordable activities that people want (4)
13. Interpret stories that other centers have not addressed (mountains) (4)
14. Promote appreciation for the South Denali region and its unique natural resources (3)
15. Provide a central axis point for multiple agency land management cooperation (2)
16. Make a strong connection to the environment and environmental changes in the area (2)





Community meeting in Anchorage. November, 2007



Community Meetings

In November, 2007, information gathering sessions were held in Anchorage, Wasilla and Trapper Creek. The planning team recorded responses to the following questions:

1. What stories would you share with an out-of-town visitor? (About your community? About Curry Ridge and this region?)
2. What effects do you foresee the South Denali facility having on the region, your community, or Curry Ridge? (Potential benefits? Concerns?)
3. How can the South Denali facility be developed to benefit Alaska residents? (Specific features of the visitor center? Specific features of the site?)
4. What/who are some resources that we can investigate or interview to learn more about this area?

Complete responses to these questions are reported in **Appendix 2**.

Summary of Community Meetings

A review of the comments provides insights into the vision and concerns of local and regional citizens for the South Denali project:

- Anticipate and mitigate impacts to the alpine flora and wildlife. Conduct biological inventories and monitor wildlife (important area for bears and moose).
- All development should be sensitive to the viewshed and tranquility of the site and minimize environmental impact. Shuttle to the top strongly supported.
- Avoid “glitter gulch” developments along the Parks Highway.
- Minimize recreational impacts on Curry Ridge from trampling and motorized vehicles (strong consensus to restrict snow machine use to other areas).
- Provide non-motorized shoulder season and winter use of the facilities and site by locals and schools.
- Interpret local history (Town of Curry, railroad, indigenous Athabaskans, mountaineering, aviation, mining, homesteading, Parks Highway).
- Interpret the ecological and geological history and geomorphology.
- The center and trails will be an important recreational resource for Alaska residents and should be designed to meet their needs as well as out-of-state visitors.

Chapter Three

The Audience



South Denali Visitor Center Complex: Interpretive Master Plan



Denali View North Viewpoint. June, 2008

The Audience

The South Denali Visitor Center Complex will serve two primary audiences: out-of-state visitors and Alaska residents. Each of these audiences has different needs and expectations which make specific demands on facility design as well as staffing and operation of the facility. This chapter examines data for the various target markets within these categories and proposes ways to best meet the needs and expectations of these markets.

Out-of-State Visitors

The Alaska Visitor Statistics Program V: Summer 2008 report and Fall/Winter 2007-08 report provides the following key findings:

- From May 1 to September 30, 2008, Alaska received 1,707,400 out-of-state visitors. 87% of Alaska visitors come between May 1 and September 30.
- From October 1, 2007 to April 30, 2008, Alaska received 247,400 out-of-state visitors (13% of total).
- Summer trip purposes were 1,400,100 vacation/pleasure; 153,700 visiting friends/family; 85,400 business; 68,300 business/pleasure.
- Fall/winter trip purposes were 104,700 visiting friends/family;

96,500 business; 29,400 vacation/pleasure; 16,800 business/pleasure.

- Cruise ship market share was 1,033,100, 61% of total visitors. Approximately 200,000 exited Alaska by other modes. Cruise lines operate only in the summer.
- Summer visitation has been relatively stable for the past four years with slight increases from 2005-2007 (1,632,000 '05 to 1,714,100 '07) and a slight decrease in 2008 (1,707,400) attributed to higher fuel prices and the economy.
- The greatest growth in Alaska tourism has been through the cruise industry, with steady growth from 690,600 in 2001 to 1,033,100 in 2008.

Data from the AVSP Summer 2006 report includes profile data not included in the more recent reports:

- Ages of Alaska visitors were <18 6%; 18-24 3%; 25-34 7%; 35-44 10%; 45-54 22%; 55-64 28%; 65+ 23%. The average age was 51.6. 39% are retired or semi-retired.
- 34% have been to Alaska before.
- Six out of ten visitors were traveling in couples, while 18 percent were traveling alone, and 22 percent in parties of three or more.

- 6 of 10 are college graduates with 26% holding advanced degrees; average household income was \$103,000.
- 56% overall and 49% overnight Alaska visitors include South Central Alaska in their tour; 28% visit Denali.

The **Matanuska-Susitna Borough Tourism Infrastructure Study** (June 2008) reports the following estimates for out-of-state tourism:

- The annual volume of all visitors to the Mat-Su Borough was estimated to be nearly 780,000 visitors in 2006/2007.
- An estimated 332,000 out-of-state visitors traveled to the Mat-Su Borough. Summer visitation represented nearly 90 percent of the out-of-state visitor activity.
- The cruise market is anticipated to grow between 2 and 5 percent annually over the next five years. The percentage of passengers that spend time in Alaska before or after their cruise is also growing (including participation in tour packages and time spent on their own).

- About 12 percent of cruise passengers spend additional time in Alaska (outside of their tour package). This market segment is growing between 2 and 5 percent each year. It is anticipated that more of these cruise passengers will spend time in the Mat-Su Borough due to increased public and private investment in infrastructure and attractions.

- The independent visitor market that travels to and from Alaska by air is expected to grow steadily. Many of these visitors rent cars or RVs and have high potential for Mat-Su communities and attractions.

- Popular visitor activities included visiting friends and relatives, wildlife viewing, cultural activities, hiking and nature walking, camping, and flightseeing.



Train platform at Denali National Park. August, 2007



Roadhouse in Talkeetna. August, 2007



Gift shop at Denali National Park. September, 2008



Morino Grill food service at Denali National Park. September, 2008

The February 2008 report, **Economic Impacts of the South Denali Implementation Plan** estimates that 350,000 cruise customers in 2007 took the “Gulf crossing” and that up to 200,000 took Denali NP land tours. They estimate (based on information from the cruise companies) that there will be a 20% increase in cruise land tours because of the new opportunities and new tours developed to take advantage of the visitor center.

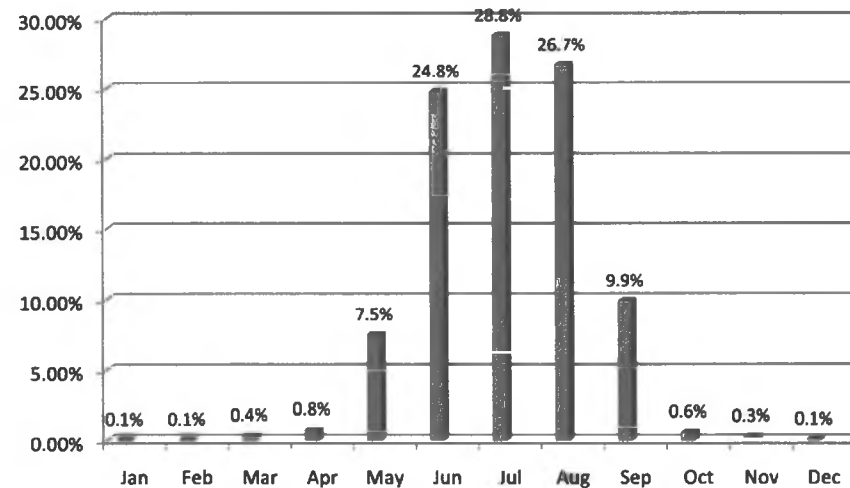
Denali National Park and Preserve Visitation (Source: DNPP fact sheet)

2008: 432,301 visitors
 2007: 458,307
 2006: 415,935

Visitation Scenarios for South Denali Visitor Center for 2010 and 2015 (Source: Final South Denali Implementation Plan and EIS, Appendix E, Visitor Projections)

	2010	2015
Low Growth Scenario (2%)	218,149	240,854
Medium Growth Scenario (4%)	245,105	298,208
High Growth Scenario (6%)	274,781	367,719

Denali NPP: 2004 Total Visitation percentage by month



(Source: Final South Denali Implementation Plan and EIS)

Discussion and Implications of Out-of-State Visitor Data

The data presented do not reflect the impact of the current economic recession on tourism in Alaska. The Alaska Visitor Statistics Program V reports that visitation to Alaska dropped by 0.4% between summer 2007 and summer 2008. It is difficult to make tourism projections for the immediate future, but past performance has shown that the tourism industry is resilient and rebounds quickly when the economic situation improves.

1. Cruise Package Tourists

Cruise package tours will comprise a large share of visitation to the South Denali Visitor Center in June, July, and August. In 2008 about 160,000 visited Denali National Park on a cruise land tour. However, this number is expected to decline to about 120-130,000 in 2009 and the number of cruise ships making regular Gulf crossings to Seward and Whittier will decline from ten to seven in 2010 (personal communication, Holland America/Princess-Alaska Land Operations).

The cruise industry is anticipating the development of the visitor center and will include it in many of their packages. A reasonable expectation is that about 100,000 cruise land package customers will visit South Denali annually with

growth potential into the future. Since about 85% of cruise visitation is in June, July, and August, this translates into approximately 1,000 cruise package visitors per day during this peak season. Special accommodation will be required for cruise package tourists. They will arrive in chartered buses with pre-paid shuttle tram tickets and a time limit on their visit. A separate loading zone is recommended. Cruise tourists are generally older, well educated and affluent, but there are an increasing number of families with children (personal communication, Holland America/Princess).

Cruise customers will appreciate the dramatic views, exhibits, and theater production which will provide welcome insights into the "spirit of Alaska." They will require time to shop for memorabilia. Many, if not all, will venture onto the Denali Vistas Trail, at least for a short distance to designated overlooks. When their allotted time is finished, they will board the shuttle tram as a group and return to their tour bus.



Star Princess Cruise courtesy of VASTrak Vacations.





Bus loading facility in Denali National Park. September, 2008

2. Independent Tourists

In the summer of 2008, 1.4 million Alaska visitors came for “vacation or pleasure.” One million were cruise customers and about 330,000 arrived by air. Since about 12% (120,000) of the cruise customers travel independently after their cruise, the total Alaska independent tourists in 2008 were about 450,000.

Independent tourists will rent cars and RVs, and in the case of those visiting South Central Alaska, most will drive the George Parks Highway to their tourist destinations. The data indicate that about half of the independent tourists, about 200,000, came to South Central Alaska in 2008. It is reasonable to expect that about 100,000 will visit

the South Denali Visitor Center. A small proportion, about 10,000 (based on the reported data), will come during the shoulder and winter seasons. Therefore, about 90,000 independent tourists can be expected at South Denali during the peak months of June, July and August. This translates into about 1,000 daily independent tourists during these peak months.

Since this target market is only under self-imposed time limits, they should be encouraged to plan for a day-long experience on-site. This would include the visitor center media and facilities and hiking the Denali Vistas and Beaver Meadows trails. Multi-day visits would allow hikes on the Curry Lookout Trail.



Alaska Railroad train platform in Denali National Park. August, 2007

Alaska Residents

Anchorage and Mat-Su Borough residents are all within a three hour drive of the South Denali Visitor Center Complex at Milepost 135. The "Metro Statistical Area" (comprising Anchorage and Mat-Su Borough) encompasses 53% of Alaska residents with a 2008 population estimate of 364,700. This compares to a total 2007 state population of 683,478. The Anchorage growth rate is 1.4% and the Mat-Su Borough 4.2% which promises an increasing resident tourism base into the foreseeable future.

The Matanuska-Susitna Borough Tourism Infrastructure Study of June 2008 reports the following facts about resident tourism:

- Population growth in Anchorage (11 percent over the past decade) is extremely favorable for year-round Mat-Su visitation.
- The study team estimated that 446,000 Alaskans visited the Mat-Su Borough in 2007, with the largest market being Anchorage residents. Summer visitors represented nearly 60 percent or 262,800 visitors; the number of fall/winter visitors totaled 183,400 Alaskans.

The Economic Impacts of the South Denali Implementation Plan (February 2008) reports that one half of Alaskans living in Anchorage, the Kenai, or the Interior (Fairbanks and Environs) make at least one visit with about one million total "visits" to the Mat-Su Borough per year whose primary activity was:

- 9% visit developed campgrounds
- 13% camp
- 17% visit developed trail systems
- 17% hike
- 16% view wildlife
- 11% fish
- 4% boat
- 5% ski and snowshoe
- 8% snow machine



Camping, hiking, and viewing wildlife are major activities that Alaska residents participate in. The South Denali Visitor Center will serve as a hub for these activities. Camping on Curry Ridge. September, 2007



Residents at the community meetings felt that a facility open year-round would best meet their needs. Many were looking for more non-motorized recreational opportunities, like hiking, cross-country skiing, and snowshoeing.

Photo courtesy of Jill Homer, "Up in Alaska—Jill's Subarctic Journal"

Community Meetings

In September 2007, the planning team held community meetings and received public input in Anchorage, Wasilla, and Trapper Creek. Selected responses to one question provide guidance to the development and management of the South Denali Visitor Center Complex:

"How can the South Denali facility be developed to benefit Alaska resident?"

- Keep the facility open year-round. Most of the winter the mountain is visible.
- Provide space for Mat-Su school classes. The shoulder seasons will be ideal for field trips to the site. Offer teacher training workshops.
- Provide space for meetings. Offer retreats and educational opportunities around the core values of the landscape and Alaska issues.
- Have a warming area with a fireplace. Make it comfortable for people who cannot be outside where they can linger and watch the expansive view of the Alaska Range.
- Development of hiking trails will benefit Alaska residents. Not many trails in the state just for hiking, most are multi-use. Encourage non-motorized recreation such as snowshoeing and cross-country skiing.

Discussion and Implications of Alaska Residents Visitor Data

1. Residents hosting out-of-state visitors

The South Denali Visitor Center will be a major attraction for Alaska residents entertaining out-of-state visitors. As reported in the Alaska Visitor Statistics Program 2008 data, during the summer, 153,700 (9% of total summer visitation) are visiting family and friends, and during the winter, 104,700 (42% of winter total). Since South Denali will be easily accessible to more than half of Alaska residents, will be open year-around, and offers a "real Alaska" experience, it can be expected that this will be a significant market. Most important, this is a significant market winter and summer.

Residents are always looking for places to entertain their guests. It will be important to offer shoulder season and winter hours and perhaps a winter snow coach shuttle to the visitor center.

2. Residents on weekend and day-trip recreation excursions

The South Denali Visitor Center will be an ever-growing recreation venue for Alaska residents. As reported above, more than 75% of the 446,000 annual Alaska resident visitors to Mat-Su Borough are for outdoor pursuits including camping, hiking, snowshoeing, skiing and wildlife viewing. South Denali is easily accessible for more than half of Alaska residents and offers these recreational activities in one of the most scenic locations in the world. This will be a significant shoulder and winter season target market before and after the summer onslaught of tourists in June, July and August. A winter weekend snow coach shuttle to the visitor center would make this a popular winter destination for snowshoeing, skiing or simply enjoying the views.

As reported in the community meeting data, there is a strong sentiment that Curry Ridge in the vicinity of the visitor center be designated as a non-motorized recreation zone to preserve the quiet and serenity that the majority of residents are seeking and a place to enjoy the views from the trails and visitor center. The South Denali trails and visitor center will offer family-friendly recreational and learning experiences. This will be a popular venue for parents to bring their children.

3. Schools of Mat-Su Borough

The Mat-Su Borough School District currently has 37 schools ranging in size from 25 to over 1,000 students. The larger schools are in urban settings while some of the outlying schools are located farther north at the base of Denali. The Mat-Su Borough School District has an enrollment of 15,500 students, employing 1,005 teachers. It is the second largest and the fastest growing school district in the State of Alaska.

Participants in the community meetings envision the South Denali Visitor Center as ideal for class field trips and teacher training, especially in the shoulder season. The center educational exhibits and interpretive trails can be readily incorporated into the curriculum of the Borough School District. Coordinating field trips will require significant time for one or more staff members. Field trip visits could be independent of staff leadership, but online materials should detail how teachers can effectively use the visitor center exhibits, theater program, and interpretive trail. Special programs could be offered in the multi-purpose room.



The South Denali facility will be an ideal place for school field trips that focus on the natural history of the region.

Photo at Kachemak Bay National Estuarine Research Reserve, courtesy of NOAA

Chapter Four

Resources, Themes, and Messages

South Denali Visitor Center Complex: Interpretive Master Plan



Erratic boulders on Curry Ridge. September, 2007

Site Resources

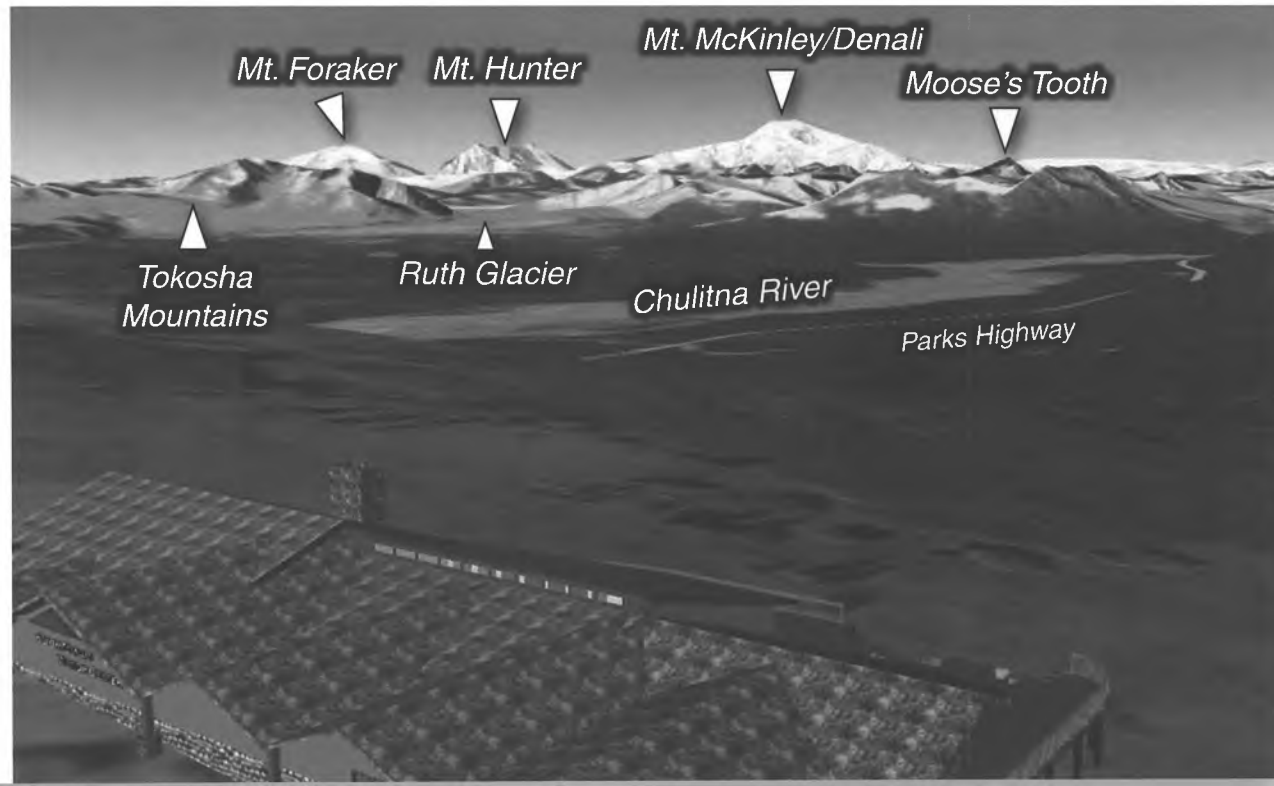
Resources are at the core of an interpretive experience. **Tangible resources**, those things that can be seen or touched, are important for connecting visitors physically to a unique site. **Intangible resources**, such as concepts, values, and events, facilitate emotional and meaningful experiences for visitors. Effective interpretation occurs when tangible resources are connected with intangible meanings.

The visitor center site on Curry Ridge maximizes access to resources that serve as tangible connections to the natural and cultural history of the region.

Tangible Natural Site Features

1. Granite outcroppings and erratic boulders (glacial striations)
2. Panoramic views of surrounding landscape
 - Peaks of the Alaska Range (include Denali/Mt. McKinley, Mt. Foraker, Mt. Hunter, Mt. Huntington, Mt. Dickey, Moose's Tooth, Broken Tooth, Tokosha Mountains)
 - Peters Hills
 - Talkeetna Mountains
 - Braided Chulitna River and valley
 - Ruth Glacier
 - Curry Ridge

The stunning views from the visitor center site reveal a plethora of tangible features that can be interpreted. This shot from Google Earth shows some of the major ones.



3. Diversity of habitats and uniquely adapted vegetation

- Lake 1787 (alpine lake)
- Alpine Tundra (specially adapted plants, stunted trees)
- High Brush (scrub/shrub)
- Spruce Forests
- Numerous beaver ponds and streams
- Sedge meadows and muskegs

4. Diversity of wildlife species

- Infrequent large mammals (include moose, black bears, grizzly bears)
- Small mammals (including beaver, mink, red fox, pine marten, weasels, snowshoe hare, porcupines, collared pika)
- Large birds (including trumpeter swans, sandhill cranes, bald eagles, golden eagles, northern harriers, gyrfalcons, hawk owls)
- Water birds (including Pacific loons, common loons, horned grebes, harlequin ducks, buffleheads, lesser yellowlegs, red-necked Arctic terns)
- Migratory birds (include northern flickers, white-crowned sparrows, northern shrikes)

5. Unfettered views of the open sky

- Aurora Borealis/Northern Lights
- Storms, clouds, and other weather patterns
- Sun halos and sun dogs

Tangible Cultural Site Features

1. Historic Curry Lookout and trail (connection to Curry and the Alaska Railroad, artists)
2. Wreck of an Air Force C-47 plane on K'esugi Ridge (connection to bush pilots)
3. Panoramic views of surrounding landscape
 - Denali/Mt. McKinley and the Ruth Glacier (connection to exploration, mountain climbing, and Alaska Native stories)
 - Peters Hills (connection to gold mining and settlement)
 - Chulitna River (connection to early Dena'ina transportation and settlement)
 - Parks Highway (connection to development of interior access)



Themes and Messages

Themes are the important ideas that organize the messages to be communicated at the South Denali Visitor Facility. They create a framework for planning and help place resources and events into meaningful contexts for visitors. Once these significant concepts are identified, decisions can be made about what site resources and media are most appropriate to tell these stories. Compelling interpretive themes link a tangible resource to the interests of visitors.

A theme statement, the main idea of an interpretive opportunity, should contain universal concepts. A **universal concept** is an intangible meaning that has significance to almost everyone, but may not mean the same thing to any two people. They are the ideas, values, challenges, relationships, needs, and emotions that speak to the human condition.

Interpretation is most effective when media and other interpretive opportunities allow visitors to grasp the meanings expressed in themes and apply them to their own lives. Visitors may not parrot the themes we write—but if they are provoked, inspired, or can relate to something within themselves, we have been successful.

- A **primary theme** expresses the main idea and unifying concepts that tie together the stories of South Denali. To provide a cohesive visitor experience, all interpretation at the facility complex should relate to this holistic theme.
- **Sub-themes** split the primary theme into several more specific and workable ideas. These broad storylines guide visitors to discover deeper meanings and relationships with the resources of the site.
- **Messages** break down the broad sub-themes into specific, discrete stories that can be told with interpretive media and programming.

Primary Theme

South Denali is a gateway to the Alaska wilderness, offering intimate experiences in tundra, taiga, and alpine lake habitats, showcasing sweeping vistas of the Alaska Range and Chulitna River Valley, and revealing the natural and cultural forces that have shaped this rugged landscape.





Rainbow over Curry Ridge. September, 2007



Alpine bearberry and lichen. November, 2007

Sub-theme 1

Curry and K'esugi Ridges are the backbone of Denali State Park, harboring dynamic ecosystems of specially adapted wildlife and plants.

Messages for Sub-theme 1:

- 1.1 Alpine Tundra, found in the higher elevations of Curry and K'esugi Ridges, is a miniature world of plants adapted to harsh conditions of sunlight, wind, cold, drought, and a short growing season.
 - a. Alpine environments are characterized by short, cold, and unpredictable growing seasons. Soils are thin, nutrient poor, and dry out quickly.
 - b. The principle characteristic of an alpine environment is its lack of trees which allows high wind and intense solar penetration into the ground vegetation and soil.
 - c. Alpine plants are usually slow-growing, long-lived perennials. They store energy in a good year to make it through a bad year. They often reproduce vegetatively rather than sexually. Many are evergreen; they don't grow stems, leaves, flowers and fruit each season.
 - d. Tundra plants are specially adapted to the harsh conditions of high elevation. Dark colors absorb more heat. Many leaves are small, needle shaped, or silver colored to reduce stress from intense alpine sunshine. Some plants have hairs, which allow them to trap heat and diffuse the harmful solar radiation. Hairy undersides of leaves may also trap and retain moisture, such as those found on Labrador tea. Other plants, like mountain cranberry, store water in their waxy leaves, which also prevents desiccation from drying winds.
 - e. Most alpine plants are matted against the earth, away from the harmful wind. They cling to rocks which retain warmth better than the soil. Many have renewal buds close to the ground where they are protected from cold and wind.
 - f. Crowberry, dwarf blueberry, and low-bush cranberry attract a variety of animals, including black and grizzly bears. Other wildlife species that inhabit this association at some time during the year are ptarmigan, fox, coyote, ground squirrel and moose.

- g. Many “trees” in the tundra grow stunted and horizontally instead of standing upright. This alpine phenomenon is termed “krummholz,” or twisted wood.
- h. Hardy alpine trees often demonstrate “flagging”—branches only grow on the leeward side of the trunk and point the wind direction.
- i. Lichens are well adapted to the rocky substrate and proliferate. They initiate the process of soil accumulation that will allow other pioneer plant species to succeed them.
- j. The alpine tundra association is fragile—it is easily damaged and recovers very slowly. Thin soils, short growing seasons, high winds, and low moisture contribute to the sensitivity of this habitat.

- 1.2 The High Brush (scrub/shrub) system is a transition zone between treeline and alpine tundra that provides significant browse and cover for large mammals.
 - a. Vegetation cover in this association ranges from very dense to open with widely scattered spruce trees. Dominant

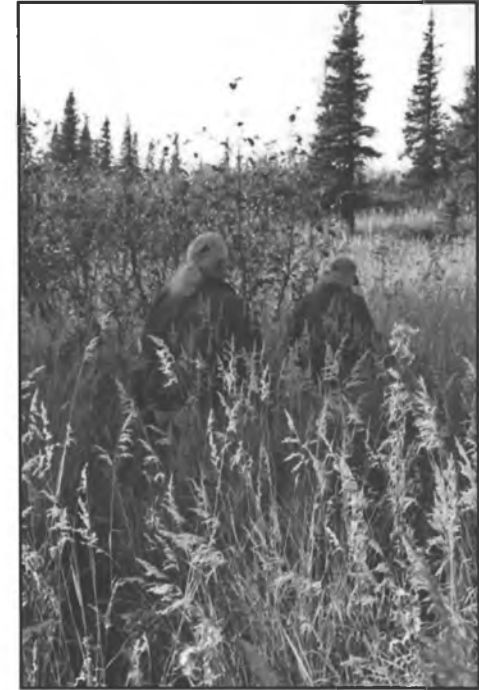
species are willow and alder, intermixed with a groundcover of berry plants (blueberry, soapberry, lingonberry, thimbleberry, salmonberry, currant) and devil’s club.

- b. High Brush systems provide important browse and cover for large mammals in the park. The large number of berries supports black and brown bear populations.

- 1.3 Upland Spruce/Hardwood Forests are fairly dense forest systems that provide cover for many of the larger mammals in the park.

- a. This forest type is a mixture of white spruce, Alaska paper birch, quaking aspen, black cottonwood, and balsam poplar. It covers most of the lower elevations within Denali State Park.
- b. Understory species provide browse for moose and cover for larger mammals found within the park.

- 1.4 Bottomland Spruce/Poplar Forests are productive, dense forest systems found on level floodplains, low river terraces, and thawed south-facing slopes.



High Brush habitat near visitor center site. September, 2007



Spruce Forest habitat near beaver ponds east of the visitor center site. September, 2007



Beaver streams east of the visitor center site on Curry Ridge. September, 2007



Sedge meadows and streams at the northern edge of Lake 1787. June, 2008

- a. The dominant species of these forests are white spruce mixed with black cottonwood and balsam poplar. Large cottonwood trees are located in areas adjacent to river channels or less active flood plain zones.
- b. This association provides understory brush used as browse by moose. Moose often congregate in this association for cover and feeding.
- c. The high productivity of these sites is promoted by frequent flooding that adds nutrients to the soil and removes the accumulated litter layer.

1.5 Wetlands on the Ridges (streams, sedge meadows, bogs, and muskeg) support distinct vegetation and wildlife, while serving as important sources of water for all wildlife species.

- a. Wetlands are found in river bottom lowlands, along lake shores, upland terraces, and low-lying drainage systems throughout Denali State Park.
- b. In moist tundra meadows (muskeg), cottongrass tussocks, dwarf shrubs (birch, willow, alder, and black spruce) and sphagnum

moss are the dominant species.

- c. The Chulitna, Susitna, and Tokositna Rivers provide essential habitat for bald eagles, trumpeter swans, and other waterfowl. These rivers and associated creeks are essential habitat for several species of anadromous fish.
- d. A scenic chain of still ponds and swiftly flowing streams cut through a valley that separates the visitor center site from the rest of Curry Ridge to the northeast. Numerous dams, lodges, and fresh tree cuttings demonstrate the ability of beavers to change and diversify a landscape.

1.6 Lake 1787, an alpine lake perched on Curry Ridge near the visitor center site, attracts a diversity of waterfowl and supports a rich shoreline habitat.

- a. Lake 1787 is about 2,800 feet long by 1,000 feet wide.
- b. Alpine lakes are extreme habitats with cold temperatures, a lack of nutrients, and alternating periods of intense UV radiation contrasting with months of darkness.
- c. Due to their isolation, simple food chains, and extreme conditions, alpine lakes have been used as

early warning systems for global environmental changes.

- d. Around its shore, the lake harbors sedge meadows, flowing streams, alder and willow thickets, and stands of spruce. The diversity of habitat coupled with a constant water supply is a wildlife magnet.
- e. Lakes provide important feeding habitat for the Arctic Tern, Long-tailed Jaegers, and Ospreys.
- f. The haunting yodel and excited laugh of loons adds a primal atmosphere to Lake 1787. Groups of Pacific Loons were observed on the lake in August and September, 2007. Swans and a swimming black bear have also been observed by members of the planning team.

1.7 Denali State Park's size, diversity, and proximity to other wild areas make it home to many unique, northern wildlife species.

- a. The South Denali Region, south of the Alaskan Range, receives greater precipitation and thus supports more lush vegetation and wildlife than Denali National Park on the north side of the mountains. Dense cover also makes animals harder to observe.

- b. The river valleys and ridges are migratory routes for many birds and serve as areas of seasonal concentration for bears and other large mammals.
- c. Denali State Park's wildlife is vulnerable to human activities both within and outside the park boundaries. Hunted species in the state park retain a wariness not seen in game species living in the refuge of Denali National Park.
- d. Altitudinal migration is commonly practiced by many animals in this mountainous region. Food is plentiful in alpine meadows in summer but these high, open areas are colder and windier in winter. Therefore moose, porcupine, and a number of predators move to lower, protected elevations.

1.8 The diversity of habitats on Curry Ridge attracts many bird species, most of which are migrants and spend just the summer breeding season in the area.

- a. More than 130 bird species use the park for breeding or during migration.
- b. Most birds are migrants, but a few year-round residents include



Pacific Loons in Lake 1787. June, 2008



Crossing the stream outlet at the south end of Lake 1787. June, 2008



White-crowned sparrows. June, 2008

- the gray jay, raven, willow ptarmigan, rock ptarmigan, spruce grouse, and black-capped and boreal chickadees.
- c. Lakes and streams attract water birds such as Pacific loons, red-throated loons, common loons, horned grebes, trumpeter swans, American widgeon, mallard, shoveler, pintail, green-winged teal, greater and lesser scaup, harlequin duck, surf and white-winged scoters, buffleheads, Barrow's goldeneye, semiplumbed plovers, lesser yellowlegs, least sandpiper, spotted sandpipers, common snipe, red-necked phalarope, long-tailed jaegers, Arctic terns, and mew gulls.
 - d. Smaller migratory bird species fill the trees and shrubs with color and song. These include northern flickers, Say's phoebe, horned larks, violet-green swallows, bank swallows, cliff swallows, orange-crowned warblers, yellow-rumped warblers, Arctic warblers, Wilson's warblers, ruby-crowned kinglets, northern wheatear, northern shrikes, golden-crowned sparrows, tree sparrows, white-crowned sparrows, dark-eyed juncos, Lapland longspurs, snow buntings, gray-crowned rosy finches, and common redpolls.
 - e. Raptors, like bald eagles, golden eagles, northern harriers, and gyrfalcons, ride the updrafts of Curry Ridge and may be seen soaring past the visitor center. Uncommon hawk owls hunt from tree top to tree top, short-eared owls nest in open tundra habitats, and great-horned and boreal owls may be found in forests.
 - f. Many large bird species in Denali are ground or cliff nesters partially due to the abundance of cliffs and the relative lack of large trees.
 - g. Select areas of the Park serve as rich, breeding grounds for many species of birds, like swans and cranes, which depend on the abundance of sunlight, summer food, and the relative lack of predators to rear young in this northern environment. Many of these birds migrate latitudinally thousands of miles to wintering grounds in South America and Africa.
 - h. The sandhill crane is Alaska's largest game bird. Cranes can be seen on Curry Ridge in late summer and early fall as they

begin flocking and feeding on the abundant berries. These belong to the Pacific Flyway Population, which overwinter in the Central Valley of California. The birds come together in great flocks before and during migrations but are wary and scatter widely in their breeding and nesting areas. Cranberries were originally called "cranberries," because their flowers look like cranes and early English settlers to North America saw cranes feeding on the berries.

1.9 Several mammal species provide potential (although infrequent) viewing opportunities.

a. Large mammals include moose, black bears and grizzly bears (attracted to the berries in the high shrub and alpine tundra), and occasional hunting wolf packs. Caribou were historic migrants into the tundra, but are now uncommon. Common smaller mammals include beaver, mink, red fox, pine marten, ermine, least weasel, snowshoe hare, porcupine, and collared pika. Red squirrels and flying squirrels are common in spruce forests. Arctic ground squirrels and hoary marmots are found in open alpine areas. Coyotes, river

otters, wolverines, and lynx are less common in this area.

b. Marmots and ground squirrels, like most small mammals in Denali, hibernate through the winter in underground burrows.

c. Beaver adapt their behavior to changing seasonal conditions rather than migrating or hibernating. Caches of food stored underwater provide nourishment to overwintering beavers.

d. Animal species that remain active throughout the winter may turn white such as the ptarmigan, weasel, and snowshoe hare.

1.10 Wood frogs are one of the few amphibians in Alaska

a. They are commonly seen around the Moose Flats bogs and Lake 1787.

b. They are the only frog that survives north of the Arctic Circle.

c. In winter they have the ability to pump their cells full of glucose anti-freeze and freeze solid then awaken during the spring thaw.



Hoary Marmot. June, 2008



Wood frog. September, 2008



View of Denali from Curry Ridge. September, 2007

Sub-theme 2

Dramatic mountain, glacier, lake, and river landforms visible from Curry Ridge illustrate the major geologic forces that have sculpted the landscape of this region.

Messages for Sub-theme 2:

- 2.1 Curry Ridge offers spectacular views of the Alaska Range, dramatized by the flat Chulitna River valley in the foreground.
 - a. On a clear day, several major peaks can be seen from Curry Ridge: Mount Foraker (17,400 feet), Mount Hunter (14,573 feet), Mount Huntington (12,240 feet), Mount McKinley / Denali (20,320 feet), Mount Dickey (9,545 feet), Moose's Tooth (10,335 feet), and Broken Tooth (9,050 feet).
 - b. The vantage point provides an overview of geologic landforms like glaciers, outwash plains, rivers, cirques, and U-shaped valleys—an ideal staging area to connect viewers to the sweeping stories of geology and the adventures of explorers, pioneers, and climbing expeditions.
 - c. Mount McKinley / Denali is the highest peak in North America at 20,320 feet. However, with an astounding 18,000 foot vertical

elevation above the surrounding landscape, Denali has the most dramatic local relief of any of the world's tallest mountains. It has two major summits: the South Summit is the highest and most climbed, while the North Summit is 19,470 feet. The mountain is regularly climbed today with just over half of the expeditions successful. Extreme temperatures and wind, however, make it a dangerous climb.

- d. The debate over calling the mountain "Denali" or "Mount McKinley" continues today. Denali is derived from the language of Athabaskans who lived north of the mountain and means "The Tall One." In 1896, William Dickey, a gold rush reporter, named the peak after presidential candidate McKinley, who supported the gold standard. After President McKinley was assassinated in 1901, the name of the mountain was officially changed to Mount McKinley. Over the years, Alaska residents have repeatedly lobbied to have the name changed back to the Athabaskan "Denali" without success. Although the Alaska Board of Geographic Names changed the name back to

Denali in 1980, the U.S. Board on Geographic Names still maintains McKinley.

- e. At 17,400 feet, Mount Foraker is the second highest peak in the Alaska Range and the fourth highest peak in the United States. The mountain was named for Joseph Foraker, a U.S. Senator from Ohio, in 1899. The Tanana Indians in the Lake Minchumina area called the mountain "Sultana" or "Menlale," meaning "Denali's Wife."
- f. Mount Hunter at 14,573 feet was known as "Begguya" in the Dena'ina language, which means "Denali's Child." It is the third highest peak in the Alaska Range. The mountain is topped by a large glacial plateau with long steep ridges. In 1903, a reporter of the Frederick Cook expedition named a peak after his aunt Anna Hunter. Although it was a different peak than this one, a government surveyor mistakenly named this third highest peak Hunter in 1906.
- g. Mount Huntington at 12,240 feet has a steep pyramid peak—in nearly every direction, the face drops over 5,000 feet in a mile. The mountain is therefore a much

more technical climb than Denali. The peak was named after Arch Huntington, former president of the American Geographical Society who sponsored an early expedition of the northwest branch of the Ruth Glacier.

- h. Moose's Tooth is a unique rock peak on the east side of the Ruth Gorge. Its summit is a craggy, angled, long ridge that runs east-west for about a mile, giving the appearance of a tooth. The name was translated from an Athabaskan name for the peak. Despite its lower elevation of 10,335 ft., its large rock faces and deep gorges (couloirs) make it a difficult, technical climb. Broken Tooth at 9,050 feet is also part of this rocky complex.
- i. Mount Dickey is a peak on the west side of the Ruth Gorge. At 9,545 feet, it has a relatively low elevation. However, its sheer granite east face is nearly a vertical mile, making it one of the tallest rock walls in the world. It is named after William Dickey, a prospector who named Mount McKinley in 1896.
- j. Nestled between the mouths of the Ruth and Tokositna Glaciers, the tooth-like granite crags of the



Mount Foraker. August, 2008



Mount Hunter. August, 2008



Moose's Tooth. August, 2008



Tokosha Mountains glow pink at sunrise. September, 2007



Picture of Mt. McKinley painted by Sydney Laurence

Tokosha Mountains rise 6,148 feet from the Chulitna River valley in front of the larger mountain peaks. The mountains were named in 1906 from a Dena'ina word meaning "the place where there are no trees."

- k. The Peters Hills, also visible from Curry Ridge, are foothills of the Alaska Range rising to about 3,373 feet. They are important to the gold mining story of the region and are popular for recreational activities such as moose hunting and hiking.
 - l. The Talkeetna Mountains are visible to the east side of Curry Ridge on clear days. The range stretches northeast-southwest about 150 miles north of Anchorage, with the tallest peak, called Sovereign Mountain, at 8,849 feet.
 - m. Fed by numerous glaciers from the Alaska Range, the braided Chulitna River valley stretches before the Alaska Range at the base of Curry Ridge.
- 2.2 The dramatic and rugged scenery of the region has inspired the work of artists, like renowned painter Sydney Laurence.
- a. Sydney Laurence was the first professionally trained artist to make Alaska his home in 1904. His image of Mount McKinley from the Peters Hills above the rapids of the Tokositna River (visible from the visitor center site) became his trademark.
 - b. Laurence applied the "tonalist" techniques that he learned in New York and Europe to the Alaska wilderness. His paintings helped to define Alaska as "The Last Frontier."
 - c. An image of Mt. McKinley had been painted on the wall of the Curry Lookout, which provided a view even when the clouds masked the peak. There is speculation that the painting may have been started by Sydney Laurence. At some point, the wall board was cut away and the painting removed.
- 2.3 The Alaska Range was formed by global tectonic forces that are still occurring today.
- a. The Alaska Range is a relatively narrow band of mountains that extends for about 600 miles. It forms an east-west arc with its most northerly section in

the middle. The range curves southwest towards the Alaska Peninsula and the Aleutian Islands, and southeast into the Pacific Coast Ranges.

b. The Alaska Range is a patchwork of sedimentary, metamorphic, and granitic rock.

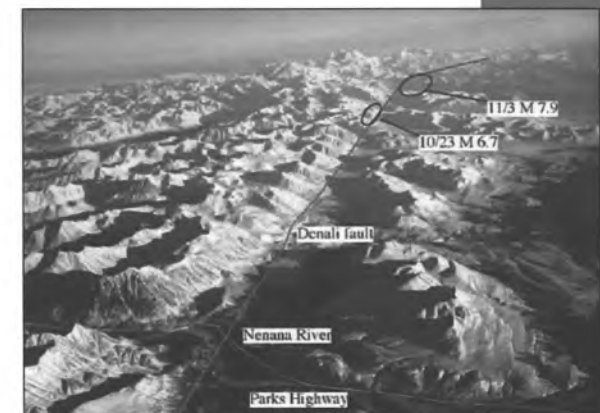
- From about 150 to 80 millions years ago, this region was covered by a sea that deposited layer upon layer of sand, shells, and other debris. These sediments hardened into enormous blocks of sedimentary rock.
- During a period of volcanic activity 56 million years ago, large pools of magma rose toward the surface and cooled, forming massive blocks of granite called plutons—they would eventually be uplifted as Mount McKinley and the Ruth Gorge. Another pluton formed 38 million years ago that became Mount Foraker.
- The highest peaks of the Alaska Range are composed of granite plutons, which erode slower than the neighboring sedimentary mountains.

c. Plate tectonics, a theory that the earth's crust is divided into several massive moving plates, explains the formation of the Alaska Range.

- The Pacific Plate moves north and plunges beneath the North American Plate on the south coast of Alaska.
- The moving plates act like conveyor belts, hauling large chunks of crust from other places on the planet.
- About 50 million years ago, a massive piece of crust called the Yakutat microplate (terrane) hitched a ride north on the moving Pacific Plate from the coast of British Columbia. Between 10 and 20 million years ago, this lump began smashing into southern Alaska, creating the eastern Chugach-St. Elias Mountains.
- As the Pacific Plate continues to plunge beneath the North American Plate, the lump of hitchhiking Yakutat microplate is being forced underneath. This has caused a massive wedge-shaped piece of the North American Plate, called the Wrangell Subplate,



This illustration shows how the Pacific Plate pushes the Yakutat Microplate (YAK) beneath the North American Plate.



Overlay of the Denali fault.



Glacial striations in bedrock near the visitor center site. September, 2007

- to break loose and rotate counterclockwise.
 - The blocks of sedimentary and granitic rock of the Alaska Range are being buckled and forced upward where the broken Wrangell Subplate is pushing against the North American Plate. The Yakutat microplate underneath is somewhat buoyant and light, and is likely driving the rise of the Alaska Range to great heights.
 - The Denali Fault is 600 miles long and is the most significant “strike-slip” fault (where two sides slip horizontally past each other) in Interior Alaska. In the center of the Alaska Range, the mountains straddle the fault. It defines the northeastern margin of the Wrangell Subplate.
 - Mount McKinley was likely thrust up higher than other peaks due to its unique position near a bend in the Denali Fault, where both vertical (thrust) and lateral (strike-slip) movements occur between the plates.
 - The Pacific Plate continues to move northward and plunge under the North American Plate at a rate of about 5.5 cm per year. The Alaska Range is being uplifted along the Denali Fault at about 1 cm per year.
- d. The mountains act as a high barrier to the flow of moist air from the Gulf of Alaska northwards. The heavy snowfall contributes to a number of large glaciers, including the Cantwell, Castner, Black Rapids, Susitna, Yanert, Muldrow, Eldridge, Ruth, Tokositna, and Kahiltna Glaciers.
- 2.4 Curry and K’esugi Ridges were formed by the same processes that shaped the Alaska Range.
- a. Curry and K’esugi Ridges are 35 mile-long north/south alpine plateaus between the Chulitna and Susitna River. They are composed of the same sedimentary (150-80 million years old) and granitic (56 million years old) rock that makes up the Alaska Range.
 - b. The broad, flat rocky areas on top of Curry Ridge are composed of the same 56 million year old granite that forms the peak of

Mount McKinley and the Ruth Gorge. It is a direct connection to the towering formations visible from the visitor center site.

- c. As plates move horizontally past each other in a strike-slip fault (like the Denali Fault), narrow pieces of the earth are broken apart and thrust upwards along cracks parallel to the strike-slip fault (called “thrust faults”). The resulting landscape is like a series of rugged steps—the highest steps are nearest to the main strike-slip fault, and steps decrease in size the further away they get from the main fault. The highest peaks of the Alaska Range straddle the Denali Fault. Curry and K’esugi Ridges were formed similar to the Alaska Range, but were uplifted to a lesser extent due to their greater distance from the Denali Fault.
- d. Faults tend to weather and erode more quickly than unfaulted rock. Glaciers naturally follow the weaker thrust faults and overtime carve out deep valleys. The Chulitna and Susitna River Valleys likely follow thrust faults that may have lifted Curry and K’esugi Ridges.

2.5 Ruth Glacier is an impressive and recognizable feature of Denali National Park and Preserve

- a. The dirty snout of Ruth Glacier flows into the Chulitna valley providing a front and center view. Denali and its companion peaks are accented by spectacular valley glaciers and steep ice-carved gorges and a year-around mantle of snow and ice above 8,000 feet. These glaciers, such as the Ruth, Buskin, and Eldridge, are from 14 to 38 miles long and up to four miles wide. They flow from the high peaks and melt into the broad U-shaped Chulitna Valley, giving the Chulitna River the milky waters and braided channels that are typical of a glacial stream.
- b. In 1903, Dr. Frederick Cook made the first low-altitude circumnavigation of Denali. He named the Ruth Glacier after his step-daughter.
- c. Don Sheldon Amphitheater on the Ruth Glacier was listed by Reader’s Digest as one of the ten most spectacular places on earth. The Ruth Gorge is equally spectacular.



*View of Ruth Glacier from Curry Ridge.
September, 2007*



*Dr. Frederick Cook named the Ruth
Glacier after his step-daughter.
Picture circa 1908*

- d. The head of Ruth Glacier receives all of the snow that falls on the southeast side of the mountain where moisture-laden winds blow in from the coast.
- e. The snow and ice that accumulate in this area flows through the narrow restriction of the one-mile-wide Great Gorge. The glacier, dropping 200 feet every mile, cracks into hundreds of dangerous crevasses here.
- f. The walls of the Great Gorge loom 5,000 feet above the surface of the Ruth Glacier. The ice has been estimated at 3,800 feet thick, so the Gorge is actually 8,800 feet deep; deeper than the Grand Canyon.
- g. Ruth Glacier currently races down the mountain at 3.3 feet per day. Four million pounds of ice push through the canyon daily.

Ruth Glacier. Courtesy of Wikipedia Commons, commons.wikimedia.org/wiki/File:Ruth_Glacier_4.jpg



Sub-theme 3

The broad open crown of Curry Ridge offers unrestricted views of atmospheric patterns and phenomenon.

Messages for Sub-theme 3:

- 3.1 The Aurora Borealis, or Northern Lights, is a uniquely northern phenomenon that contributes to the mythology of Alaskan winters.
- a. Auroras are naturally occurring, atmospheric light displays that are best viewed during darkness in Polar Regions. These lights are named for the Greek goddess of dawn, Aurora. In the northern hemisphere they are called Aurora Borealis, in reference to the Greek name for the north wind, Boreas.
 - b. Auroras are produced by the collision of charged particles in the Earth's magnetosphere with particles swept into it by solar winds. This occurs at altitudes between 50 and 200 miles above the Earth's surface.
 - c. Many northern cultures have developed folklore and mythology about the Aurora Borealis. People have long associated these mysterious

dancing lights with the spiritual world and wonder about their origins. In Norway they were sometimes referred to as "Herring Flash." It was believed that they were the reflections of huge schools of Herring cast onto the sky. Some Algonquin Tribes in North America believed them to be ancestors dancing around a fire. Many gold-struck Klondike prospectors thought the lights reflected the huge mother lode of gold (see Robert Service poems of Alaska during that era). Today in Japan, many consider the viewing of the Aurora Borealis to be a romantic opportunity to conceive a child of outstanding fortune. Native peoples of the circumpolar region believe that one should be very quiet and respectful when observing the northern lights. Mocking them, singing, or whistling could invite bad fortune and danger.

- d. Optimal viewing times are from December to March when nights are long and dark. They can be seen in a full spectrum of colors but red is the rarest. The aurora is most active late at night or early in the morning when the sky is clear and the air is chilly.



Aurora Borealis. United States Air Force photo by Senior Airman Joshua Strang

- e. Auroras tend to be brightest two days after intense solar activity since it takes two days for the "solar wind" to reach Earth.

3.2 As the highest point in North America at 20,320 feet, Mount McKinley/Denali experiences some of the most severe weather in the world.

- a. Denali is considered to be one of the coldest mountains on earth, with air temperatures falling to -40 degrees Fahrenheit even in June. At 19,000 feet temperatures range from -30 to -70 degrees Fahrenheit in winter.
- b. Windstorms on Denali can last over a week with wind speeds in excess of 100 miles per hour.
- c. Halfway to the summit, the climate of Denali is equivalent to the North Pole.
- d. Denali is large enough that it can create its own localized weather. The summit is often shrouded in clouds. The entire mountain is only visible a few days each summer.
- e. The Alaska Range creates a massive rain shadow to the north. Moist air from the ocean travels

northward and is forced up the high peaks of the range. As it cools, moisture condenses to form clouds, rain, and snow. By the time the air descends the north side of the ridge, much of its moisture is gone.

- f. According to some Alaska Native stories, the clouds on top of Denali are the smoke from fires of the "mountain people." When the fires burn, clouds appear around the summit and the temperature begins to warm. When the fires no longer burn, the clouds clear from the peak and the temperature drops.

3.3 Sun halos and sun dogs are a common sight in Alaska, especially in winter.

- a. Sun halos are faint rings of light visible around the sun. They form when sunlight passes through ice crystals in high cirrus clouds (30,000 feet above the earth). The crystals bend the light 22 degrees.
- b. Sun dogs are two colorful bursts of light that appear on either side of the sun. They also form when light shines through cirrus clouds or falling ice crystals called "diamond dust." The crystals fall with their flat surfaces parallel to the earth, and bend the light into colors like a prism. They are also known as "mock suns" and scientifically as "parhelia."
- c. Sun halos and sun dogs are most often seen near sunrise or sunset.



Rainstorm view from Curry Ridge. September, 2007

Sub-theme 4

Denali State Park is a microcosm of the intact Greater Denali Ecosystem, an important indicator for global environmental changes.

Messages for Sub-theme 4:

- 4.1 The Greater Denali Ecosystem is one of the few systems in North America that is almost entirely intact, complete with top level predators within their natural ranges (grizzly bears, black bears, wolves) and a diversity of large mammal species.
- 4.2 Much of the ecosystem is composed of ice field, glaciers, and rocky slopes. In higher elevations, alpine vegetation of dwarf shrub communities dominates. More protected slopes support scrub communities of dwarf birch, willows, and alder. Well-drained sites harbor white spruce, black spruce, paper birch, and quaking aspen.
- 4.3 The higher elevation soils of the ecosystem tend to be poor, shallow over bedrock, and may not retain enough moisture to form permafrost.
- 4.4 Denali State Park (325,240 acres) and Denali National Park and Preserve protect over 6.3 million acres of the Greater Denali Ecosystem.
- 4.5 Much of Alaska's environment exists near the melting point of ice. Small increases in global temperatures can have significant impacts on the ecosystem. The region serves as an important indicator for worldwide climate change.
- 4.6 According to a 2006 study (National Assessment Synthesis Team), Alaska has warmed 4 degrees Fahrenheit in the last 50 years. This compares with the global average of just over 1 degree Fahrenheit.
- 4.7 As the earth's temperature increases, tundra vegetation has given way to shrubs and trees, reducing wildlife populations that depend on the tundra habitat. According to geophysicist Ken Tape of the University of Washington, the growth of shrubs across the tundra has increased by 40% in less than 60 years.
- 4.8 Increased forest insect infestations and fires are caused by longer and dryer growing seasons.
- 4.9 Permafrost temperatures in Denali have increased 0.5-1.5 degrees Celsius since 1980, causing forest damage and the eroding of tundra riverbanks.
- 4.10 Many glaciers in the Greater Denali region are retreating. Studies (Geophysical Institute and the USGS, 2006) have found that 95% of Southeast Alaska's glaciers are thinning. These glaciers are more susceptible to climate change due to their low elevation and flat, broad surfaces. Projections indicate that a sustained warming of 1 degree Celsius will reduce glaciers by 15%.
- 4.11 Sustainable building practices help to reduce greenhouse gases that are warming the planet. Denali State Park and Denali National Park and Preserve can serve as demonstration and educational areas for sustainable practices that minimize human impact on the Earth.
- 4.12 The altitudinal diversity of Curry Ridge, and the panoramic views it offers of the landscape, make it an excellent location to introduce visitors to the interconnectedness of ecosystems and their own effects on the Earth.



Athabaskan exhibit in the Denali National Park Visitor Center. September, 2008

Sub-theme 5

Alaska Natives have depended on the rich resources of the ridges and rivers for survival, maintaining an important network of trade and spiritual connection to the land.

Messages for Sub-theme 5:

- 5.1 "Athabaskan" is a family of culturally and linguistically related Native American groups that traditionally lived in the interior of Alaska, northwest Canada, and the American southwest.
- 5.2 Living in the harsh condition of interior Alaska, traditional Athabaskans were a nomadic people that seasonally followed their food sources. In summer, they traveled to camps on small rivers and lakes where they fished and hunted waterfowl. In winter, they moved to semi-permanent villages to hunt caribou and moose and trap smaller animals.
- 5.3 Extensive trade networks were in place between Athabaskan groups and their neighbors long before white settlers arrived in the region.
- 5.4 The Dena'ina (Tenaina) is a group of Athabaskan Alaska Natives who

originally inhabited the south-central part of the state, including the area around Cook Inlet and K'esugi and Curry Ridges.

- 5.5 With access to the rich waters of Cook Inlet, the Dena'ina people did not need to be as nomadic as other Alaska Native groups.
- 5.6 Shem Pete, a Dena'ina born near Susitna Station in 1896, is renowned as an expert of Dena'ina language and culture. His knowledge was recorded in a book entitled Shem Pete's Alaska, first published in 1983.
- 5.7 K'esugi (for which Kesugi or K'esugi Ridge is named) is a Dena'ina name meaning the "Ancient One." Curry Ridge was known to the Alaska Natives as K'esugi Ken, which means "Base of the Ancient One."
- 5.8 The Ridges were important hunting areas for the Dena'ina people. Shem Pete relates a story of killing 14 bears on Curry Ridge in 1914. He also tells of native people hunting caribou on K'esugi Ridge every summer and floating the meat in skin boats back to Kroto (about 10 miles south of visitor center site on the Susitna River).

5.9 The Chulitna River was known as the "Ts'ilutnu" in Dena'ina, which possibly means "Straight Hand," "Forearm," or "Tongue" River.

5.10 The Chulitna was more navigable in a skin boat than the Susitna. Belmore Browne, a famous mountaineer, traveled the Chulitna River in 1910 by motor boat in an attempt to find a route to Denali. He reported:

[The Indians] drifted past us in boats made of the green skins of moose and caribou. The primitive canoes were loaded to the gunwales with men, women, children, and dogs, and in the bow of each sat an Indian man tapping the river bottom with a slender pole and searching the channel for danger that might wreck his frail craft.

—*The Conquest of Mt. McKinley* by Belmore Browne, 1913

5.11 The Dena'ina called Ruth Glacier "Dghelay Ka'a Li'a," which means "Big Mountain-Glacier." According to Shem Pete, early crossings of the glacier could take an entire day. Leaders would haul packs of grass and use it to mark a safe route over the ice.

5.12 Denali is derived from the language of Athabaskans who lived north of the mountain. "Deenaalee" means "The Tall One" (also referred to as "The Great One" by Ahtna people). The Dena'ina word is Dghelay Ka'a, which means "Big Mountain." These names were often used interchangeably to describe all of the high peaks in the Central Alaska Range. Athabaskan people are quietly reverent toward Denali, rarely speaking of it.

5.13 According to many regional Alaska Native traditions, Denali is the birthplace of mankind. The Creator in the form of a raven lives at the base of the mountain fashioning people. The tallest peak in North America marks the beginning of the world, from which all humans spread throughout the land.



Shem Pete at Eklutna, Alaska, with dog and cabin in background. Summer 1980. Photographer: James Kari. Courtesy of Anchorage Museum of History and Art



"A Standing Ovation" from the Denali National Park photo gallery.

Sub-theme 6

The lofty peaks of Denali/Mt. McKinley and the Alaska Range and the promise of riches have beckoned adventurers and thrill-seekers since the late 19th century.

Messages for Sub-theme 6:

- 6.1 The highest mountain in North America attracts climbers from around the world.
 - a. Mount McKinley has a larger bulk and rise than Mount Everest. Even though the summit of Everest is about 9,000 feet higher as measured from sea level, its base sits on the Tibetan Plateau at about 17,000 feet, giving it a real vertical rise of little more than 12,000 feet. The base of Mount McKinley is roughly a 2,000-foot plateau, giving it an actual rise of 18,000 feet.
 - b. About 1,200 people have attempted to climb the summit of McKinley annually in the last decade; only about half succeed.
 - c. Mount McKinley is a non-technical climb, but still entails considerable risk due to severe weather, avalanches, and altitude sickness. Over 100 climbers have died attempting to summit;

on average 1 out of every 200 climbers die on the mountain.

- d. The safest climbing of Denali is from May 1st to the first week in July.
 - e. 80% of all climbing expeditions today use the West Buttress Route pioneered by Bradford Washburn. Nearly 20,000 climbers have attempted that route.
 - f. Most climbs take about two weeks but bad weather can stretch the time required to over a month. Descending the mountain is more dangerous and time-consuming than going up.
 - g. Climbers are expected to be responsible for their own safety, to know their limitations, and be prepared. The National Park Service conducts search and rescues only when conditions are reasonably safe for rescuers.
 - h. Trash must be carried off the mountain and human excrement must be removed from higher elevations to allow for a snow source that can provide safe drinking water.
- 6.2 Mount McKinley is one of the greatest mountaineering challenges

in North America and has inspired colorful climbing adventures in its short history.

- a. Denali, the tall one, is legendary for its wild and unpredictable moods. Since its “discovery,” people have been enthralled with the goal of reaching its peak. It is a fitting Alaskan icon.
- b. Dr. Frederick Cook, a celebrated explorer, falsely claimed to have summited in 1906. His claim was eventually discredited but the fervor generated by his claim ignited passion in some local Alaskans who subsequently did make a successful ascent to the summit.
- c. The “Sourdough Expedition of 1910” was one of the most unlikely and phenomenal ascents in mountaineering history. Four locals (Tom Lloyd, Peter Anderson, Billy Taylor, and Charles McGonagall), known as the Sourdough Expedition, with little or no climbing experience and homemade equipment hauled a 14 foot spruce pole up 8,000 vertical feet to Mt. McKinley’s north summit. The round trip from about 11,000 feet took them less than 18 hours.

They enjoyed doughnuts and hot chocolate on the summit. Their climb was met with skepticism by the public for the next three years until the Stuck Expedition successfully scaled the south summit and reported seeing the spruce pole erected on the north peak.

- d. The first ascent of the main summit of McKinley came on June 7, 1913 by a party led by Hudson Stuck. The first man to reach the summit was Walter Harper, an Alaska Native. Harry Karstens and Robert Tatum also made the summit. Archdeacon Hudson Stuck was steadfast in his plea that the mountain should be known as Denali, not McKinley; a view shared by many Alaskans today.
- e. After the Stuck Expedition’s undisputed conquest of the south summit, incentive to climb the mountain declined. Nineteen years would pass before another party attempted the climb.
- f. The first double peak expedition to ascend both the North and South Summits was accomplished by the Lindley-Liek Party in 1932.



From the “Ascent of Denali” by Hudson Stuck, 1915



Brad Washburn and his wife Barbara at the summit of Mt. Bertha in 1940.



Bucketline gold dredge in the Cache Creek drainage at the base of the Peter Hills, 1931. Locally abundant coal was used for power.

Postcard property of Dennis Garrett,
http://en.wikipedia.org/wiki/File:Cache_creek_ak_dredge.jpg

- g. The first woman to reach the summit was Barbara Washburn in 1947. Her husband, Bradford, was the first climber to summit twice when he accompanied her.
 - h. The first successful attempt that did not use the traditional Muldrow Glacier route to the summit was led by Bradford Washburn up the West Buttress Route in 1951. Washburn a serious and respected mountaineer devoted his life to researching the mountain. He is widely considered to be the world's leading authority on Mount McKinley.
 - i. The popular West Buttress Route was discovered and successfully used by Bradford Washburn in 1951. It is a 14 mile climb with a vertical gain of 13,000 feet.
 - j. The first truly technical ascent of Denali was made up the Cassin Ridge by Riccardo Cassin and his team of Italian climbers in 1961.
 - k. In 1967, the team of Ray Genet, Art Davidson, and Dave Johnston successfully climbed the mountain in winter. Later that year, Denali recorded Alaska's most deadly mountaineering disaster when seven members of the Wilcox Party died.
 - l. In 1970, Naomi Uemura succeeds in a solo attempt to summit the South Peak. He dies in the descent.
 - m. Dr. Mira Ercolani is the first woman to solo the peak in 1982.
 - n. Vern Tejas is the first solo winter ascent with a safe return in 1988.
- 6.3 After the purchase of Alaska from Russia in 1867 by the United States, miners and prospectors journeyed into the Susitna and Chulitna River valleys.
- a. The name, Mount McKinley was proposed by an early prospector and explorer, W. A. Dickey who navigated the Susitna River upstream to the Indian River in 1896. His name is etched with three others near the mouth of Portage Creek.
 - b. Gold Creek, which was an active mining area with 200-300 residents, was supplied by sternwheeler and tunnel hull barges that traveled up the Susitna River. The area remained remote to most travelers until

the construction of the Alaska Railroad.

- c. Gold was discovered in the Yentna Cache-Creek Mining District of the upper Susitna Valley in 1898, soon followed by claim staking. Placer mining was reported in the Cache Creek drainage of the Dutch Hills by 1906. About 200,000 ounces of gold has been produced from these placer deposits.
- d. The Petersville region ranked among Alaska's major placer gold districts in the early 1900's. The Peters Hills have many named streams as a result.
- e. By 1927, a road from Talkeetna was constructed into the mining area, known today as The Petersville Road. The abandoned mining camp of Petersville, Alaska served as the area Post Office for several years in the late 1920's and early 1930's.
- f. Two areas have been set aside for recreational gold mining, the North and South units of the Petersville State Recreation Mining Areas. Many smaller one-man and family placer mining operations continue today.

6.4 Bush pilots are part of the romantic lore of the Alaska Range and Mount McKinley.

- a. Alaska is famous for bush flying. In this roadless country, remote communities depend on the skill and tenacity of resourceful pilots to bring in life sustaining supplies. These bush pilots frequently must contend with unpredictable weather, rugged landscape, and challenging landing strips on lakes and tundra. The danger and romance of bush piloting is mythical in Alaska.
- b. Don Sheldon was a legendary bush pilot who flew out of Talkeetna in the shadow of Mount McKinley. He spent a lifetime time delivering hunters, fishers, and climbers to wilderness locations. He conducted numerous rescue missions and saved more than a few lives. The Don Sheldon Amphitheater, at the head of Ruth Glacier was named in his honor. He was awarded the Alaska Certificate of Achievement for his many rescue missions.
- c. Don Sheldon's most harrowing rescue might well have been his lifesaving flights into Devils



"Alaskan 'bush' pilot, Don Sheldon, flying plane during rescue of survivors of climbing accident." May, 1960. Photo by Grey Villet of LIFE magazine



Bush planes and pilots continue to be an important part of Alaska's "sense of place." Float plane coming in for a landing. June, 2008



The site of the 1954 C-47 crash on K'esugi Ridge, 2004. Courtesy of Rupert Pratt, touchingancientone.squarespace.com

Canyon to rescue an eight man Army scout team stranded on the rugged cliffs above the rapids. Don spotted the boat debris floating down the Susitna River and then saw seven men clinging to a ledge just above the raging water. He navigated the swirling winds of the canyon and landed his float plane on a straight stretch of river upstream from the men. Sheldon's plane raced backwards downstream at 30 mph. He maintained power to control his speed and to steer the plane. In the first pass one man managed to jump aboard. He repeated the adventure three more times and lifted out two men with each attempt. He then found the eighth man 18 miles downstream.

- d. Talkeetna's Cliff Hudson's bush flying deeds have made the pages of numerous Alaskan adventure stories. He is a pioneer of glacier flying in Denali National Park. Hudson Air Service celebrated its 60th anniversary in 2006.
- e. On February 5, 1954, an Air Force C-47 flying towards Fairbanks broke apart over the Susitna Valley and fell onto K'esugi Ridge. Ten died in the crash but six miraculously escaped, survived bone-chilling cold, and were rescued through the efforts of pilots Cliff Hudson and Don Sheldon. Hudson was in the air within an hour to pinpoint the crash location prior to a storm front that would postpone rescue operations. He later spent the night with the survivors before the storm broke and they could be flown to safety.

Sub-theme 7

The Chulitna and Susitna Rivers are historic travel routes into the rugged interior of Alaska.

Messages for Sub-theme 7:

7.1 Curry and K'esugi Ridges are flanked by two rivers—the Chulitna River on the west (visible from the visitor center site) and the Susitna River on the east.

- a. The Chulitna River is fed by multiple valley glaciers from the Alaska Range. It flows 77 miles past the west side of Curry Ridge before joining the Susitna River.
- b. The milky waters and braided channels of the Chulitna River are typical of a glacial stream. The water of the main channel is clouded with pulverized rock called "glacial flour," limiting opportunities for sport fishing. Salmon do ascend the Chulitna for spawning, however, and the clear side streams that flow into the river are popular fishing areas.
- c. The floodplain of the Chulitna River is just 550 feet in elevation, showcasing the dramatic height of the adjacent Alaska Range mountains.

d. The Chulitna River valley is pitted with landforms left by recent glaciation, including ground moraines, drumlin fields, eskers, kettle lakes, and outwash plains.

e. The Susitna River originates at the Susitna Glacier and flows 313 miles to the Cook Inlet, passing the east side of Curry Ridge. Ranked by volume discharge, the Susitna is the 15th largest river in the United States.

f. "Susitna" is a Dena'ina word that means "Sandy River."

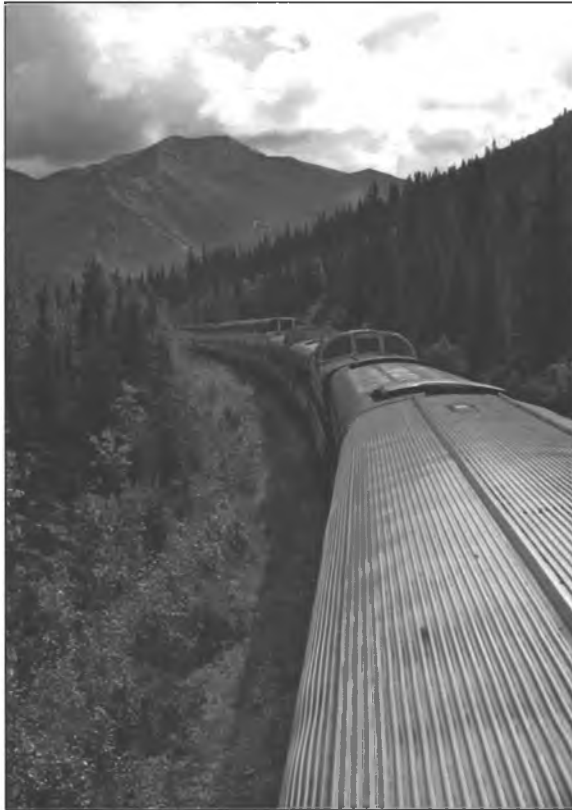
g. The Susitna is one of South Central Alaska's premier sport fishing streams for Chinook salmon, Coho salmon, grayling, burbot, and rainbow trout.

7.2 People traditionally accessed the interior of Alaska by following the rivers.

- a. Dena'ina people traditionally used the Susitna and Chulitna Rivers as a primary means of travel between villages and hunting/fishing areas. In the warmer months, they traveled in birch bark canoes and moose/caribou skin boats. When the rivers froze in winter, they



Susitna River with Curry and K'esugi Ridges on the left. September, 2007



Alaska Railroad heading to Denali National Park.
August, 2007

became ice highways for travel by foot and dog sled.

- b. Although much of the Susitna and Chulitna floodplains are swampy and difficult to travel, early pioneers followed higher ridges that paralleled the rivers to reach the Alaska Interior. Trails created by Native Alaskans and pioneers crisscrossed the landscape.
 - c. In the late 1890s, discovery of gold and copper in Alaska's interior spurred the development of better transportation for the influx of prospectors.
- 7.3 The development of the Alaska Railroad opened the interior of Alaska to settlers, miners, and travelers. Curry, for which Curry Ridge is named, was developed next to the tracks and became a flourishing community in the Alaska wilderness.
- a. The Alaska Central Railroad was the brainchild of Seattle real-estate developer John Ballaine in 1900. The first tracks were laid in 1903 from Seward 50 miles north. In 1905-06, survey crews entered the Susitna River Valley to determine the best

routing of the railroad. In 1907, the railway went bankrupt and was reorganized as the Alaska Northern Railway. About 20 more miles were constructed before it too went bankrupt in 1910.

- b. In 1914, President Woodrow Wilson signed the Alaska Railroad Enabling Act, and Congress agreed to fund the construction and operation of the railroad from Seward to Fairbanks for an estimated \$35 million.
- c. Curry was originally known as Deadhorse Hill, supposedly named in 1916 when a team of horses fell to their death from the top of a steep hill. It became the main supply and equipment staging point north of Talkeetna for constructing the Alaska Railroad.
- d. Supplies for the railroad construction were shipped by large river steamers and sternwheelers to Old Kroto Landing on the Susitna River. From here, smaller tunnel boats (with chambers that protected propellers from the river bottom) hauled supplies in shallow water to camps like Deadhorse Hill.

- e. In 1917, a roadhouse was built at Deadhorse Hill to serve overnight railroad workers. Nellie Neal Lawing, more popularly known as Alaska Nellie, was given the contract to manage the roadhouse.
- f. Alaska Nellie was already well known as an innkeeper, dog musher, and big game hunter.
- g. The name of "Deadhorse Hill" was changed to a more traveler-friendly "Curry" in 1922 to honor Congressman Charles F. Curry of California, a great supporter of the railroad. The tall ridge directly west of the community became known as "Curry Ridge."
- h. In March of 1923, the lavish Curry Hotel was opened on the nearly completed Alaska Railroad. The settlement, near the mid-point of the line running from Seward to Fairbanks, was a logical stopover for travelers.
- i. In July of 1923, President Warren Harding was the first president to visit Alaska. He enjoyed Alaska Nellie's hospitality at the Dead Horse Roadhouse on his tour. On July 15, he celebrated the completion of the Alaska Railroad by driving the golden spike in

Nenana. He died of a stroke or heart attack on his return trip to San Francisco on August 2.

- j. Curry Lookout, also known as Regalvista Camp, is a small hexagon-shaped shelter located on top of Curry Ridge. It offers sweeping views of Denali and the Alaska Range. Built in the 1920s by employees of the Alaska Railroad, visitors to Curry could reach the lookout by crossing a 537-foot suspension bridge over the Susitna River and climbing a steep 5-mile trail to the top of a 2,600 foot ridge. The building was placed on the National Register of Historic Places in 1992.

- k. A 1924 Pathfinder of Alaska article describes the Curry Lookout...

A short jaunt across the Susitna River... affords one an unusually magnificent view of Mount McKinley, as the vantage point at Curry is many miles closer to this majestic mountain than is any other point along the Alaska Railroad. Seekers of the beautiful in Nature will consider this feature alone well worth a stopover in Curry.

- l. Curry continued to grow in the 1930s and 40s with expansions



Alaska Nellie poses in front of the Deadhorse Roadhouse in the 1920s. Courtesy of Trapper Creek Museum-Alaska Nellie Collection.



Cliff Hudson stands in the Curry Lookout, 1950. Courtesy of Trapper Creek Museum Collection.



A cabin hand-built by pioneer Alaska 59ers. Courtesy of the Detroit Free Press, March 13, 1960 as seen in the Trapper Creek Museum

to the Curry Hotel and the development of a ski area in 1947, one of the first in Alaska with a tow-rope and jump.

- m. The beginning of the end for Curry occurred on April 9, 1957 when a major fire burned the Curry Hotel to the ground and took the lives of three people. Faster diesel trains eliminated the need for extra stopovers along the rail line. As more operations moved to Talkeetna and other communities, Curry was abandoned. A mess hall was the last building standing which operated into the 1980s.
 - n. Today, Curry is once again a stop for travelers on the Alaska Railroad, with interpretive signs that tell the history of the community and a growing network of trails.
- 7.4 Alaska is one of the last true American frontiers, challenging pioneers with rugged terrain, extreme weather, and isolation.
- a. The Homestead Act was passed by Congress in 1862, providing 160 acres of land for less than \$20. Homesteaders were required to live on the land, build a residence, and farm part of it within 5 years. Thousands of eager families flocked to the undeveloped American West.
 - b. When Alaska became the 49th state in 1959, the Homestead Act again lured homesteaders by offering land for just a \$10 filing fee. Pioneers to this new land, some of whom traveled thousands of miles, were known as "59ers."
 - c. The Alaska 59ers were considered by many to be "modern day pioneers setting out to tame the Alaska wilderness."
 - d. Homesteaders faced many hardships on their journey. For example, on March 5, 1959, a group of 21 Detroit families embarked on a 4,500 mile route to the Alaska wilderness. Flat tires, vehicle breakdowns, and bad weather turned what should have been an 18-day trip into a 53-day arduous journey. Just 12 families made it to the remote Susitna River valley. Only 4 families stayed long enough to claim a homestead.
 - e. Homesteading was grueling work that brought neighboring families and friends together.

Summer was a time for clearing land, cutting firewood, planting gardens, collecting wild berries, and canning salmon to survive the long, dark winters. Settlers helped each other during the hard times and provided a social outlet. This “frontier spirit” is still alive in the small communities and cabins that dot the Susitna River Valley.

- f. The Homestead Act was finally repealed in 1976, though Alaska was granted an extension until 1986. Nearly 10% of U.S. land was settled in the 114 years of the Act, which included significant portions of Alaska.
- g. The Trapper Creek Museum on Petersville Road is now housed in a log cabin built by the Donaldson family, one of the members of the Michigan 59ers.

7.5 The Parks Highway, visible from the visitor center site, is a marvel of engineering—a 323-mile modern road that took just 12 years to construct through the rugged terrain of the Alaska Interior.

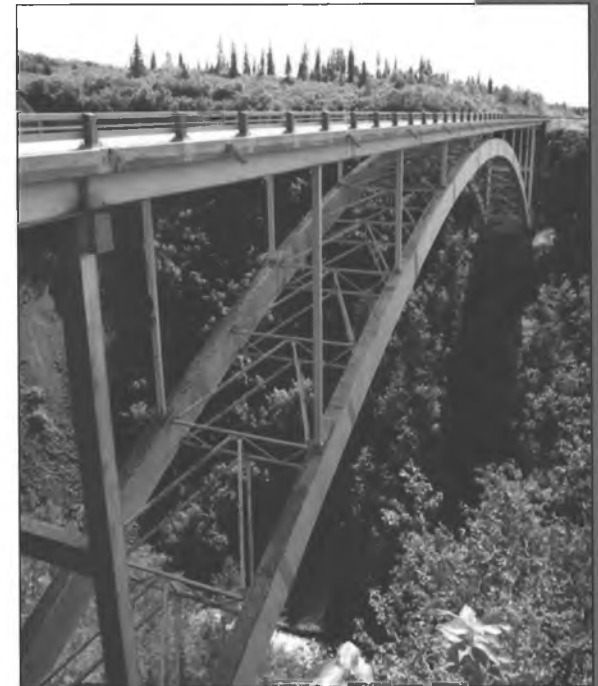
- a. The Talkeetna Trail was an early pioneer route from Cook Inlet to Talkeetna that followed the

flat floodplain of the Susitna River and its tributaries. It was a forerunner of the Parks Highway.

- b. The Alaska Road Commission was formed by Congress in 1899 to oversee construction and maintenance of roads and trails in Alaska. It was transferred to the federal Bureau of Public Roads in 1956, making it eligible to receive funds under the Federal Aid Highway Act. When Alaska became a state in 1959, one of its first projects was the construction of a new Anchorage to Fairbanks highway.
- c. The route for the new Anchorage-Fairbanks highway was chosen to follow the flat Susitna River drainages, the most direct accessible route between the two largest cities.
- d. Construction of the highway started in 1959 and took 12 years to complete at a cost of \$150 million. When completed in 1971, it was originally named the Anchorage-Fairbanks Highway.
- e. The highway was renamed in 1975 for George Alexander Parks, governor of the Territory of Alaska from 1925 to 1933. Its proximity to Denali State



Trapper Creek Museum. June, 2008



Hurricane Gulch at Mile 174.3 of the Parks Highway illustrates the major engineering feat of building the road. June, 2008



Talkeetna welcomes visitors with its rustic signage and charm. August, 2007

and National Parks was also recognized.

- f. The Parks Highway runs 323 miles from the Glenn Highway 35 miles north of Anchorage to Fairbanks in the Alaska Interior. Mileposts along the road start at Mile 35.
- g. The Parks Highway travels through some of the most diverse and spectacular scenery in all of Alaska. A 116-mile segment (milepost 132 to 248) was designated as an Alaska State Scenic Byway and is currently under consideration to be designated as a National Scenic Byway.
- h. The recently completed "George Parks Highway Scenic Byway: Corridor Partnership Plan" describes the significance of the road.

If one byway could epitomize all that is Alaska, that byway would be the Parks Byway. Passing through Denali country, dominated by the lofty, snow-covered peaks of the Alaska Range, active glaciers, rolling tundra, boggy muskegs, and spruce forests laced by rivers, the Parks Byway is, according to some residents, the best drive in Alaska.

- 7.6 Communities near Curry Ridge were formed to provide supplies and serve as social gathering areas for trappers, miners, and homesteaders.
 - a. Talkeetna is located at the confluence of the Susitna, Chulita, and Talkeetna Rivers, an important fishing and trading site for the Dena'ina people. The name comes from the Athabaskan word "K'Dalkitnu" which means "River of Plenty."
 - b. The gold rush in the Susitna River area brought prospectors to the region as early as 1896. Talkeetna became a riverboat steamer station in 1915 to provide supplies to prospectors heading out to mining claims. Talkeetna was chosen as the divisional headquarters for the Alaska Railroad in 1916, and its population peaked near 1,000. The townsite was established in 1919 when the railroad surveyed and auctioned 80 lots. The community continued to supply area minters until 1940.
 - c. In 1964, a 14-mile spur off the Parks Highway opened Talkeetna to vehicle traffic and development. Today, the village of about 770 people celebrates its past with rustic log buildings,



The Trappers Creek Museum tells the story of this area with an array of unique artifacts. June, 2008

wooden signs and a true Alaska small town atmosphere. The community is a staging area for climbing expeditions up Mt. McKinley, scenic flights, and jet boat tours. The historic downtown was placed on the National Register of Historic Places in 1993.

- d. Trapper Creek is located at the intersection of two roads. The first semi-permanent settlers of the Trapper Creek area were two brother trappers, Oliver and Noah Robideux, who built a cabin in 1909. In 1917, an early day miner named Henry Bahrenburg

blazed a trail leading east from the Cache Creek gold mines to Talkeetna. The Alaska Railroad improved the trail into a wagon road, with the present name of Petersville Road.

- e. In 1939, Shorty Bradley settled along Petersville Road a few miles west of "The Landing," a point directly across the Susitna River from Talkeetna. Other settlers joined Bradley to farm the fertile land, including the Michigan 59ers in 1959.
- f. Trapper Creek became an official community when the Parks Highway was constructed in 1968, intersecting with Petersville Road near the same area that Shorty and other homesteaders had settled. Today, the community of about 420 people has a variety of services and tourist attractions.



Talkeetna. August, 2007



Oliver and Francis Robideux. Oliver and his brother Noah were the first semi-permanent settlers of Trapper Creek. Courtesy of Trapper Creek Museum



Camping on Curry Ridge. September, 2007

Sub-theme 8

Denali State Park offers unique opportunities for residents and visitors to intimately experience the diverse landscapes and habitats of the region.

Messages for Sub-theme 8:

- 8.1 The mission of Alaska's Division of Parks and Outdoor Recreation is to provide outdoor recreation opportunities and conserve and interpret resources. Guided by this mission, the South Denali Visitor Center Complex will serve as a hub for diverse outdoor recreational activities in Denali State Park.
- 8.2 Much of Denali State Park's 325,240 acres are in a wilderness state. Wilderness ethics and "Leave No Trace" principles are important for visitors to understand before engaging in recreational opportunities.
- 8.3 Black bears and grizzly bears are common throughout the park, especially near salmon spawning streams in spring and ridge blueberry patches in fall. Safety information about bear behavior and encounters must be provided to visitors.
- 8.4 Camping is an ideal way to experience the park, allowing people to witness the landscape in the changing light of day and encounter wildlife in their dynamic traveling patterns. Roadside camping is available at Byers Lake (79 units), Lower Troublesome Creek Trailhead (20 units), Denali View North (20 units), and Denali View South (20 units). The campgrounds offer toilets, picnic sites, and drinking water. Three log public use cabins are also available for rental on Byers Lake.
- 8.5 For the more adventurous, several rustic trails provide hikers and backpackers access to the park's backcountry region. The backcountry is a totally immersive experience, showcasing world-class vistas, providing unlimited opportunities to observe wildlife and plants, connecting people to the rugged landscape, and offering true exposure to the Alaska wilderness. About 50 miles of trails start at various points along the Parks Highway and climb steeply to the top of K'esugi Ridge. Low impact camping is allowed anywhere in the backcountry.

8.6 Hunting is a popular activity in Denali State Park, a tradition that spans back to the Dena'ina people hunting caribou and bear on Curry and K'esugi Ridges. The entire park is open to hunting, except within a quarter mile of the Parks Highway and a half mile of developed facilities. Common species harvested include black bear, brown bear, moose, and ptarmigan. Fish and wildlife in the park are managed by the Alaska Department of Fish and Game.

8.7 The clear streams of Denali State Park are ideal habitat for many fish species. Black and brown bears flock to the spawning areas during late spring and early summer, which has given rise to names such as "Troublesome Creek." Humans are also attracted to the waterways in pursuit of Pacific salmon, rainbow trout, arctic grayling, and Dolly Varden. Small numbers of lake trout, whitefish, and burbot are found in Byers Lake. The major rivers are clouded with glacial silt, so fishing is limited.

8.8 A plethora of edible wild berries in the park sustain wildlife populations and entice human

gatherers. In the higher elevations, colorful blueberries, crowberries, cloudberry, and low-bush cranberries blanket the tundra habitat. In more protected areas, highbush cranberries, currents, and watermelon berries (twisted stalk family) grow.

8.9 Motorized vehicles can cause lasting damage to vegetation and trails in the park, and are limited to maintained roads and parking areas.

8.10 In winter, snowshoeing, cross-country skiing, and dog mushing are popular activities in the park, especially in lower, protected areas where snow is deeper. Snowmachines are allowed in the park when the snow depth is sufficient (about 18 inches) to protect vegetation.

8.11 In winter, the windswept upper reaches of Curry and K'esugi Ridges often have exposed rock and tundra areas, not ideal for winter recreation. Deeper snow is concentrated in the lower areas around Lake 1787 and between the flat rocky outcroppings.



Fishing at Troublesome Creek.



*Blueberries on Curry Ridge.
September, 2007*

Chapter Five

Interpretive Facility and Site Development

**South Denali Visitor Center Complex:
Interpretive Master Plan**

Visitor Center Site

The South Denali Visitor Center will serve as a gateway and hub to the Alaska outdoors. Visitors who have meaningful experiences at the site will take home not only fond memories, but also a deeper intellectual and emotional understanding of the region. Effective planning of the site and facilities based on interpretation has a positive effect on visitors, garnering future support for the agencies and organizations that manage Alaska's natural resources.

Rationale for Site Location on Curry Ridge

The location of the South Denali Visitor Center must maximize interpretive experiences, while minimizing ecological and visual impacts. The most effective site identified within the study area is a flat, rocky overlook north of Lake 1787 marked with a prominent erratic boulder. The area is just above dense thickets of alder on a north brow of the Ridge.

The following sections describe rationale for this location as an ideal visitor experience.

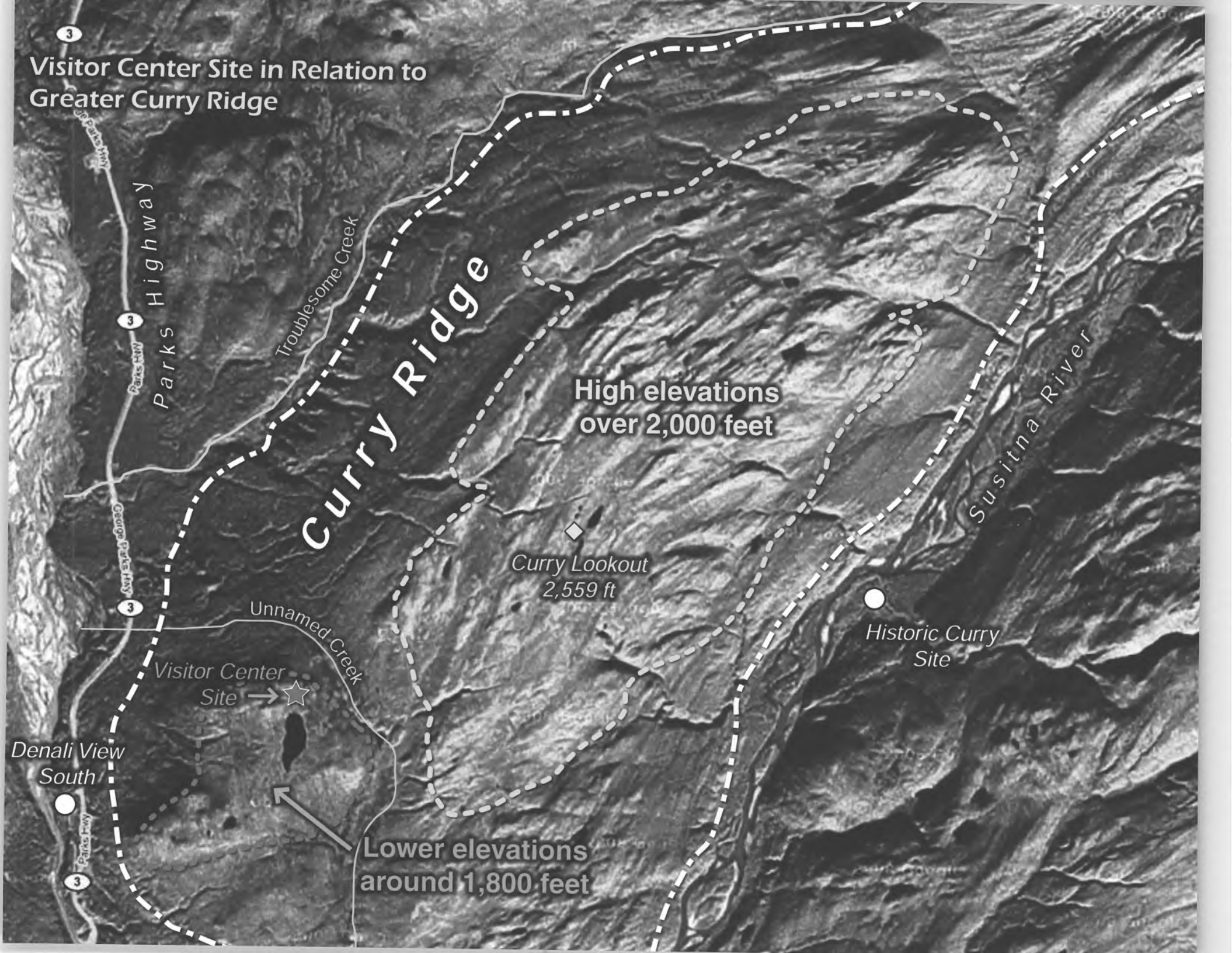
Note: The exact building site location may be subject to change pending geotechnical information, land surveys, and other preliminary studies.

Location on Curry Ridge that reduces impact on the site

The visitor center site is nestled on a small east-west arcing lip of Curry Ridge. It is perched above a valley that divides the Ridge into a small discrete, lower elevation knoll to the southwest (where the visitor center will be constructed) and a long, higher elevation ridge to the northeast.

- **Majority of Curry Ridge remains in natural state:** The location of the building on the discrete southwest portion of Curry Ridge leaves the majority of the ridge available in a natural state for backcountry use. Due to its lower elevation, the visitor center will be hidden from view at the Curry Lookout. Only users who continue down the ridge (southwest) from the Lookout will be able to see the visitor center when they approach the descent into the valley. Currently, the most popular backcountry trail in the area is along K'esugi Ridge, where the visitor center will always be hidden from view.
 - **Resilient habitat around center:** The habitat of this site at about 1,800 feet is a relatively resilient mixture of high brush, alpine tundra, spruce trees, alders, and willows. Dense stands
- of alder and willow and pockets of wetlands channel hikers along corridors and assist trail planners in directing traffic. The site has the best potential to provide easy access to portions of tundra habitat while protecting it from extreme disturbance. In contrast, the vast tundra at the top of Curry Ridge above 2,000 feet (northeast of the site, separated by a valley) is far more sensitive to disturbance; footprints and snowmobile tracks are evident throughout. The distance from the proposed visitor center site (3-4 miles) and the difficult terrain (steep valleys and slopes), however, will limit the number of visitors who can access this more fragile area.
- **Reduced visual impact:** The visitor center's orientation to the north completely hides the building from traffic driving on the Parks Highway south of Denali View South. The rugged, high topography of K'esugi Ridge, Troublesome Creek, and Curry Ridge proper north of the site will also minimize the view of the building for Parks Highway travelers north of Denali View South.

Visitor Center Site in Relation to Greater Curry Ridge



Curry Ridge

High elevations
over 2,000 feet

Curry Lookout
2,559 ft

Susitna River

Historic Curry
Site

Visitor Center
Site → ☆

Lower elevations
around 1,800 feet

Parks Highway

Troublesome Creek

Denali View
South

Unnamed Creek

3

3

4

3

- **Limited access to sensitive Curry Ridge habitats:** The visitor center will serve as a hub to recreational activities in the Curry Ridge backcountry. Its proposed location, however, will effectively limit the number of visitors that can reach the more sensitive alpine tundra habitats. The majority of use will be concentrated around the visitor center area. A few hardy adventurers can choose to follow a rustic trail down the dividing valley slope, over beaver streams, and up a steep incline to access the higher elevations of Curry Ridge and the Curry Lookout.
- **Screened parking areas:** Ample space would be available in close proximity east of this site for shoulder season parking. Topography and spruce trees would help to hide the lot from

the interpretive center, Curry Ridge hiking trails, and the Parks Highway below.

Excellent views of Denali/Mt. McKinley and the Alaska Range

- **Denali:** The site offers spectacular views of Denali, the icon that many seek to “experience.” The view of the mountain here dramatizes Denali’s astounding 18,000 foot vertical elevation above the surrounding landscape. This unique view emphasizes that it has the most dramatic local relief of any of the world’s tallest mountains.
- **Dynamic scenes:** Viewers are engulfed in mountain sunlight, cool air, and panoramic vistas.

Unlike exhibits or audio-visual presentations, this scene is dynamic; storms blow in, eagles soar, or sunlight illuminates the mountain peaks. It can be a rich and serendipitous experience that is more valuable because it cannot be guaranteed.

- **Natural and cultural stories:** The vistas permit people to see the historic routes that expeditions and climbers have taken to Denali. The vantage point provides an overview of geologic landforms like glaciers, outwash plains, rivers, cirques, and U-shaped valleys. This is an excellent staging area to connect viewers to the sweeping stories of geology and the adventures of explorers, pioneers, and climbing expeditions.

A resilient mixture of habitats on the lower elevation knoll (1,800 ft) where the visitor center is planned helps to limit visitor impacts.



The vast tundra areas on the higher elevations of Curry Ridge (2,500 ft) are more fragile; the isolated knoll of the visitor center site limits access.



Visitor Center Site in Relation to Denali View South and Parks Highway

Chulitna River

Unnamed Creek

Curry Ridge

View of Denali

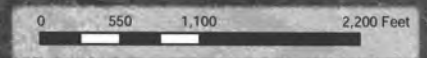


Visitor Center Site

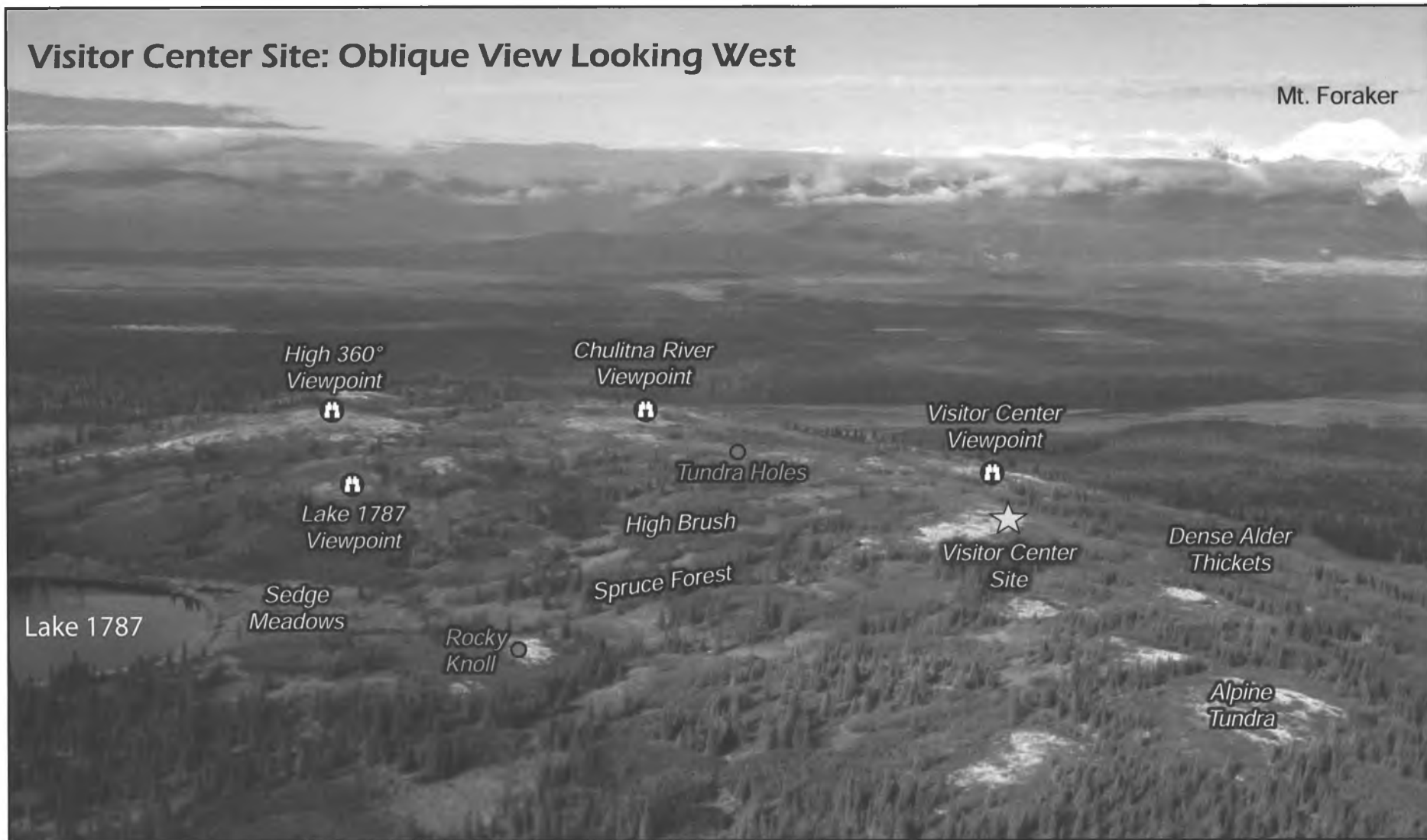
Lake 1787

George Parks Highway

Denali View South
(Mile 135.2)



Visitor Center Site: Oblique View Looking West



- **Natural observation areas:** High vantage points will naturally attract visitors who want a better view. Several overlooks are in close proximity to the site, including a knoll west of the site (providing 360 degree panoramic views), a rocky overlook northwest

of Lake 1787 (with an impressive view of the entire lake), and a 1,980 foot hill southeast of Lake 1787 (spectacular view of the lake with Mt. McKinley rising behind). Well constructed trails can be built connecting these high points with

the interpretive facility to avoid trampling of the tundra habitat. In addition, the Parks Highway is less visible from this vantage point than other similar lookouts.

Visitor Center Site, Viewing Areas, and Natural Features

Universal access to diverse habitats and significant resources

- **Intimate habitats:** On days when Denali is veiled by clouds, a visitor's attention is refocused to the rich colors and textures of the rocky, subalpine vegetation on Curry Ridge. The grand scenery becomes subordinate to the intricate micro-environments of the lush habitat surrounding the visitor center. This site is an ideal area to connect visitors with the local landscape, beyond the grand views or anticipation of large mammals. This is an area where visitors can experience the sounds, colors, and textures of the Alaska / Denali habitat and the complex interplay of plants, animals, geology, and hydrology.
- **Unique natural features:** This site is in close proximity (about a half mile to mile loop trail) to significant natural features, including rocky knolls with 360 degree views, the alpine Lake 1787, spruce forests, diverse sedge meadows and other wetlands, protective thickets of alder and willow, active beaver ponds and streams, miniature worlds of alpine tundra, large erratic boulders, glacial striations, and deep potholes.

- **Potential for observing wildlife:** With easy walking access to different habitats, visitors have ample opportunities to experience the smaller wildlife that may be overlooked on tour buses. Wildlife observed during planning visits to the site included a pair of hawk owls swooping to the tops of spruce trees, a bald eagle and raven battling in flight, numerous migrating northern shrikes, sandhill cranes landing to eat berries, Pacific Loons calling and diving on Lake 1787, Spruce Grouse, Boreal Chickadees, a Gyrfalcon, and a porcupine.

0 150 300 600 900 1,200 Feet

View of Denali

Dense Alder Thickets

Visitor Center

Site

Visitor Center
Viewpoint

Chulitna River
Viewpoint

Glacial
Striations

Alpine
Tundra

Tundra
Holes

High
Brush

Spruce
Forest

Sedge
Meadows

High 360°
Viewpoint

Lake 1787
Viewpoint

Sedge
Meadows

Rocky
Knoll

Sedge
Meadows

Lake 1787

Stream and
wetland

Lake 1787 with Denali
Behind Viewpoint

Panoramic Views from the Visitor Center Site

Looking West

Looking Northwest



Looking East

Looking Southeast



Looking North

Looking Northeast

Curry Ridge
(higher elevations)

K'esugi Ridge

Valley with unnamed stream

Looking South

Looking Southwest

Lake 1787

Lake 1787
viewpoint



This trailhead structure in Knochan Crag National Nature Reserve, Scotland, harmonizes with the stone and heather of this mountain environment.



Homesteads in Alaska are creatively constructed of locally available materials. This cabin showcases rough log construction, a metal roof, and a traditional cache. August, 2007

Visitor Center Design

Alaska is America's Frontier. It is, in the collective minds of Americans, the symbol of wilderness and vast open landscapes. It contains examples of architecture that compliment the scale and the materials seen in the landscape. Many classic Alaskan buildings blend with their settings.

The South Denali Visitor Center should grow from its surroundings and synthesize rustic building practices with today's needs and technology. Native and vernacular materials should be used when feasible but even when other materials are utilized, they should harmonize with the surroundings, be durable, consume less energy, and invite visitation.

The visitor center will serve as a gateway and hub to the real experience out on the site, concentrating intense visitor use within a limited area. This portal will serve as a filter that buffers on-site use of the area. It will provide for visitors' physical comforts and needs, orient them, and prepare people to experience the spirit of this place.

Architectural Precedents in the Curry Ridge Region

When buildings are designed and constructed in response to the inherent virtues and limitations of a particular site, visitors and residents can develop deeper connections to the region's unique sense of place.

There is a strong heritage and local affinity for rustic architecture and design in the Curry Ridge region. Distinct architectural styles include:

- Rough log construction with locally available materials is the rule. Available timber is relatively small diameter and therefore beam construction is usually round, not squared or sawn.
- Vernacular stone design. Geology is varied. Where stone is available it has been used for the first few feet of the first story to avoid snow accumulating on log footings and bases where rot might occur. Stone fireplaces and chimneys are common and firewood stacks were and still are seasonal fixtures in most rural Alaska homes.
- Sod and earthen roofs have been used on some rustic cabins. Metal roofs are quite common. Rooflines tend to be steep to reduce snow loads. Building

placement often takes advantage of windbreaks and available sun.

- Traditional vernacular buildings included outhouses and elevated caches near homes. Often antlers are displayed over doors and in roof peaks. Satellite dishes are a recent addition to home exteriors.
- Railroads shaped the landscape and influenced settlement and commerce. They became a dominant cultural force in modifying the natural environment. Bridges, grades, avalanche sheds, and tunnels are noticeable landscape features in Alaska. The railroads also ferried commercial building materials into once remote areas.
- Quonset huts and other temporary structures became familiar sights here during WWII and in the post war era. Many still persist.
- Federal land agencies like the National Parks, Forests, or Bureau of Land Management have erected numerous wilderness and park structures that emulate the classic, rustic park design of the 1930s. Alaskans and visitors are accustomed to seeing these structures in natural settings.
- Mining is an architectural and landscape influence in the region.

- Tourism, which has been traditionally concentrated in the summer season, has greatly influenced transportation, lodging, and dining facilities. Services are measured out by bus loads. Corporate motels and restaurants have replaced mom and pop businesses along the Parks Highway. Mega lodges with full service tourist packages are expanding in this region.

Ecological Influences on Curry Ridge

The visitor center site is a broad windswept ridge top, at times washed by intense sunlight and at other times muted by cool, gray clouds. Weather conditions, topography, and natural communities are diverse, and can influence the design of the visitor center.

Some ecological considerations include:

- Seasonally strong and abundant sunlight countered with long, dark winters. Clear bright skies or cold, wet and cloudy days.
- Intense freeze-thaw cycles
- Dramatic and dynamic geology (exposed rock, glaciers, outwash plains etc.)

- Vast landscapes that provide little sense of enclosure or shelter. Alpine areas are particularly windy, bright, and, exhibit contrasting extremes of hot or cold.
- Thin mountain soils are unable to retain moisture or to support lush vegetation.
- Some of the most mountainous and wild terrain in North America surrounds the building site.
- Migrations of large flocks of birds and large mammals that may seasonally cross and travel trails and roadways.



In Alaska, people can experience natural forces of weather and geology on a colossal scale. September, 2007

Architectural Guidelines for the Curry Ridge Visitor Complex

Based on the region's cultural and ecological considerations, as well as the visions of the partnering agencies, the desires and concerns of Alaska residents, and the needs of Alaska tourists, the following concepts will guide the development of the South Denali Visitor Center Complex.

- Respect the local climate, topography, and ecosystems, both natural and human.
 - Locate structures below the brow of hills and mountains
 - Place buildings on the edges of clearings and other transitional zones
 - Attempt to duplicate the forms and rhythms of the landscape in built structures
- Size and scale of structures should be appropriate to the wild grandness of the mountain terrain.
 - Maintain a low profile in treeless areas
 - Design the structure to appear rustic and substantial
 - Break up the mass of larger buildings with unified smaller shapes and elements
 - Repeat simple forms to increase a unified appearance
- Place the building below the brow of the ridge to keep it harmonious with the site and inconspicuous from the Parks Highway
- Materials should reflect the natural characteristics of the site and be themed to the culture and natural heritage of the region
 - Use stone as a base for walls to compliment the region's rugged geology, to visually tie the building to the ground, and to protect the wall from snow and moisture
 - Use building materials that are in scale with the site. Large rock is proportional to the mountainous terrain, while the fine vegetation textures of the alpine tundra can be repeated as the roof covering
 - Make windows large enough to invite views of the panoramic scenery and take advantage of the cherished sunlight
 - Place entrances in protected locations, such as the leeward side of the building, and provide a vestibule or porch for inclement weather.
 - Avoid skylights or place them near the roof peak and isolate them from large mammals like bears or moose that may have seasonal access to the roof
- Unify all signage, bridges, viewing platforms, benches, and other landscape elements by using key features of the building's architecture, such as stone blocks and wood
 - Use elements of the natural environment in all walkways, signs, and landscape elements
 - Celebrate wood but use it only where appropriate and use local wood sources whenever possible
- Building and landscape color should be consciously planned with regard to the site's seasonal color palette
 - Muted earth tones are appropriate to blend a facility into a natural site
 - Color values should be kept in the medium range in Alaska as a response to frequent grey skies and overcast weather
 - Use light colors indoors to optimize ambient light reflection
 - Coordinate the colors of the exterior and interior of the building and the site

Sustainable Design

A program of comprehensive sustainable (green) design that is most appropriate to the site and location should be applied to the planning, construction, and operation of the Curry Ridge Visitor Complex.

Sustainable design has many precedents in Alaska. Two rating systems are used to achieve long-term cost savings and environmental benefits: LEED (Leadership in Energy and Environmental Design) and the Interior Alaska Green Building Initiative. Both award points that result in bronze/certified, silver, gold, or platinum ratings for sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Some local architects cite weaknesses in the LEED rating system which they believe tends to focus more on an arbitrary point system rather than real achievement in appropriate design for efficiency in remote areas of Alaska. The Curry Ridge Visitor Center should strive for the highest possible rating, but temper design decisions with a rational approach with respect for balancing the specific demands of the site, visitor needs, and agency budgets. Building a site specific, sustainable facility should be the goal and a good rating will result.

Model sustainable design projects include:

- Eielson Visitor Center in Denali National Park (RIM, Architects) which incorporated an earth-sheltered envelope, green (reclaimed tundra) roof, energy efficient lighting and appliances coupled with solar panel and micro-hydroelectric systems, and recycled materials from the old building. The goal is to achieve a LEED Platinum rating.
 - Homer Public Library (ECI/Hyer Inc., Architects) achieved a LEED silver rating by using almost exclusively local and recycled materials.
 - Cold Climate Housing Research Center at UA Fairbanks used a ceramic heater coupled with hydronic heating coils, a vegetated green roof, a clerestory for lighting, a water recycling system, and many other green design features. The building itself is a testing facility for cold climate design.
- A partial listing of potential sustainable design features:
- Build on a frost protected shallow foundation
 - Apply a green roof using the plants removed from the construction site
 - Use natural day lighting, perhaps with clerestory windows or a wide overhanging roof that minimizes greenhouse heating through glass windows
 - Heat with a natural stone surfaced ceramic heater/fireplace coupled with hydronic heating coils. Use local wood fuels
 - Create natural cross-ventilation throughout
 - Use local wood and stone construction materials
 - Use Alaska manufactured cabinets, insulation materials, and other fixtures
 - Use efficient toilets and faucets; recycle gray water; consider a composting toilet system; have an on-site water source
 - Use efficient lighting and appliances
 - Create the least site disturbance for the building and access roads
 - Consider constructing a net zero energy building, perhaps incorporating a hybrid micro energy system for electricity generation that eliminates the need for running power lines to the site
 - Use the Residential Exterior Membrane Outside-insulation Technique (REMOTE) developed by the Cold Climate Housing Research Center which minimizes energy loss and moisture build-up on interior walls

Visitor Center Conceptual Design

Looking southeast



Roof planted with tundra vegetation removed during construction mimics seasonal landscape colors

Amphitheater extends from the deck to provide views of the Alaska Range and opportunities for outdoor programming

Large deck provides viewing opportunities and relatively inexpensive expanded space for the facility

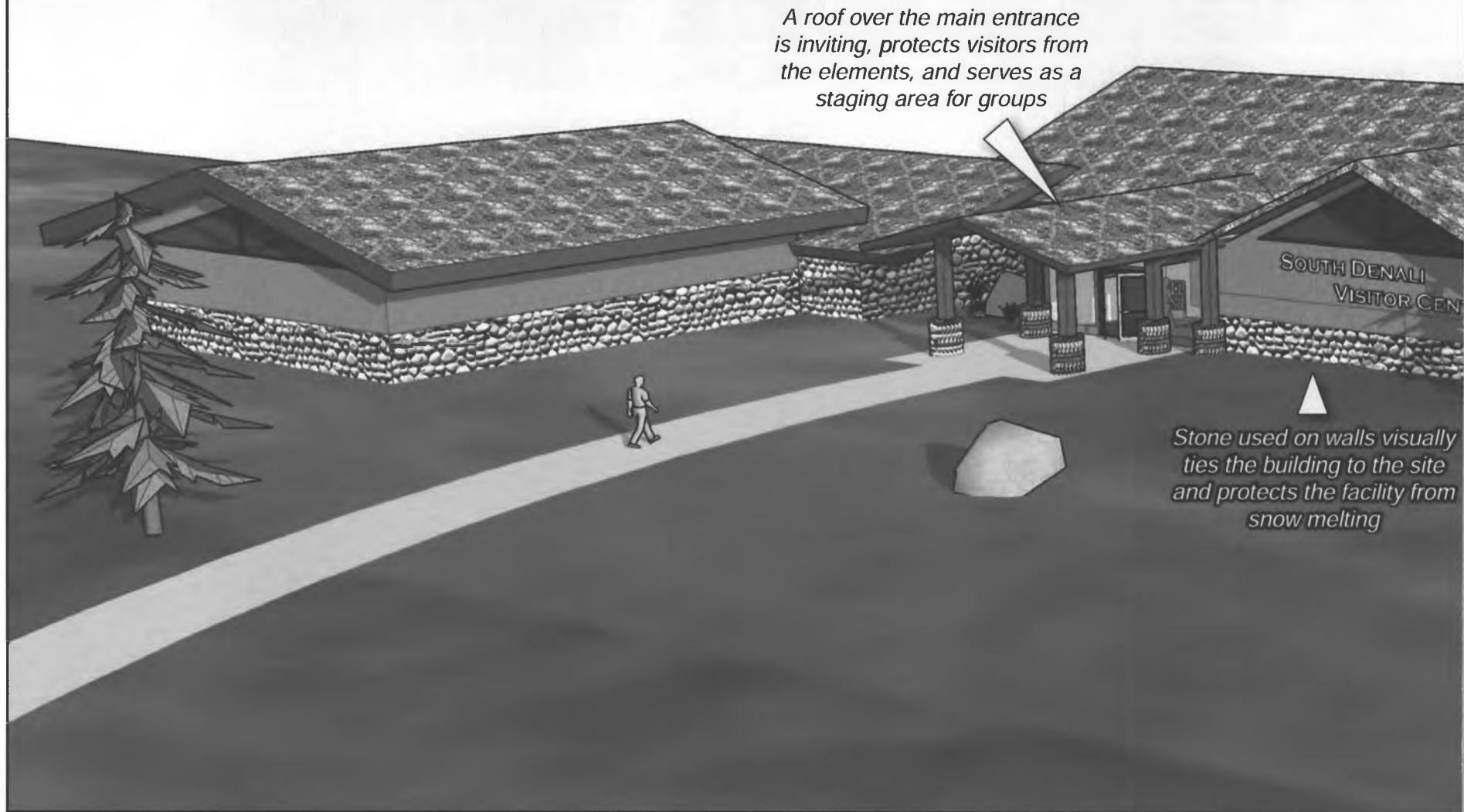
Long, low profile building minimizes visual impact and blends into the ridge line

Varying roof lines visually break up the mass of a single building

Tall windows face northwest and north, maximizing view of Alaska Range

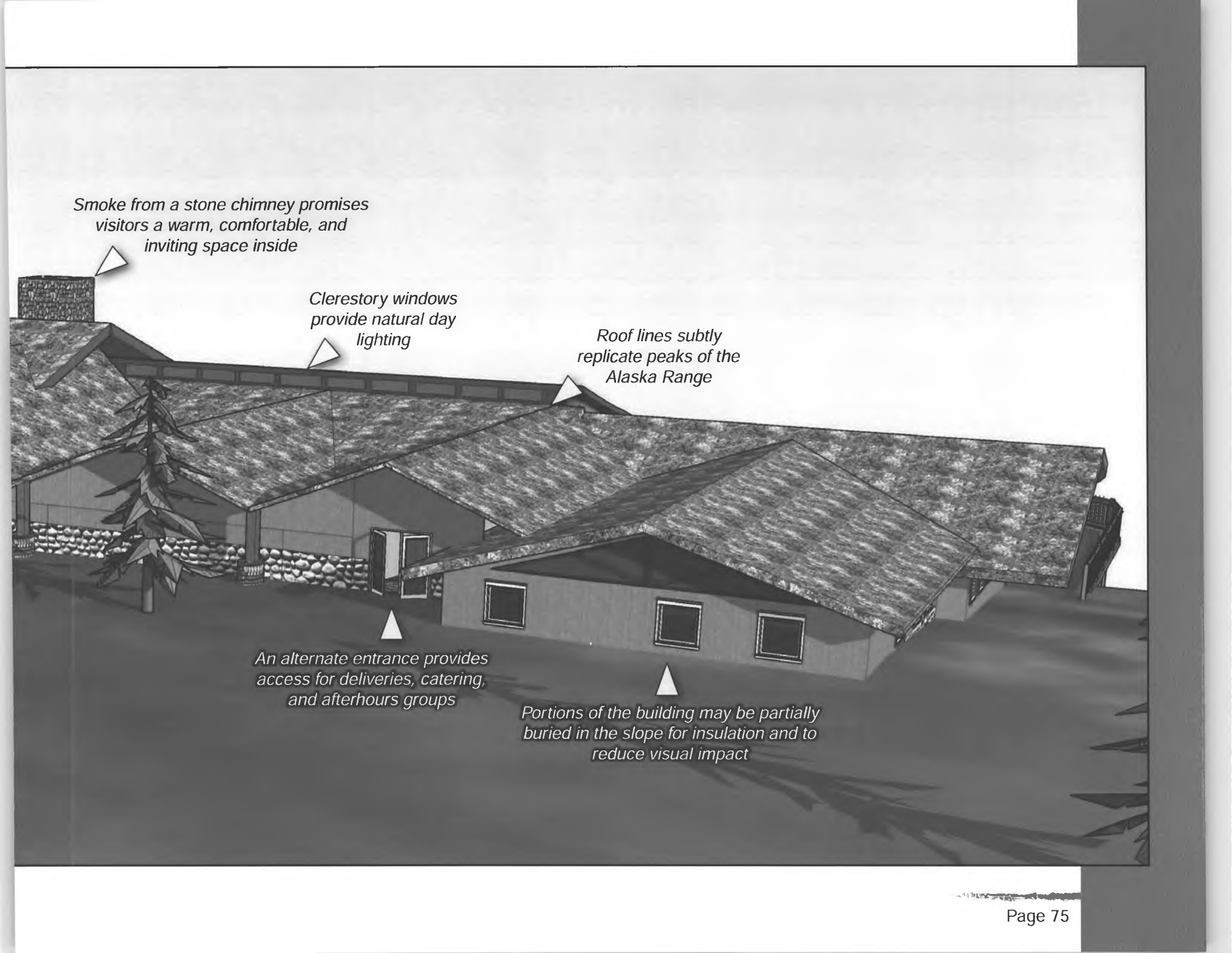
Curved walls and roofs allow for graceful building design and duplicate the undulating ridge line

Visitor Center Conceptual Design *Looking northwest*



A roof over the main entrance is inviting, protects visitors from the elements, and serves as a staging area for groups

Stone used on walls visually ties the building to the site and protects the facility from snow melting



Smoke from a stone chimney promises visitors a warm, comfortable, and inviting space inside

Clerestory windows provide natural day lighting

Roof lines subtly replicate peaks of the Alaska Range

An alternate entrance provides access for deliveries, catering, and afterhours groups

Portions of the building may be partially buried in the slope for insulation and to reduce visual impact

Exterior of the Visitor Center

Vehicle Access and Parking

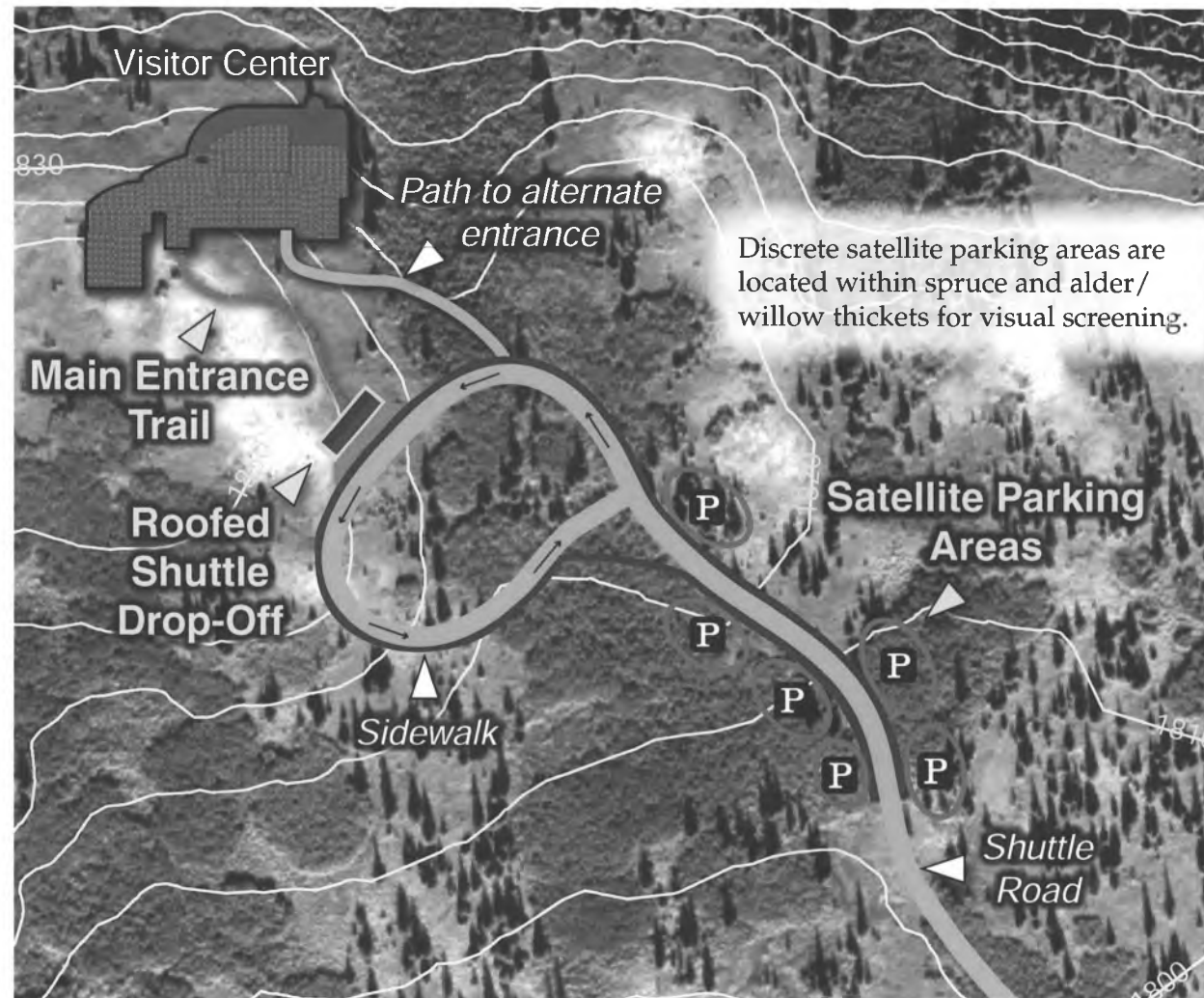
Only shuttle tram traffic will be permitted on the main ridge road during the summer season. Official State Park vehicles should be limited to emergency and maintenance duties. Staff can carpool to the site or take the shuttle when not opening or closing the facility.

The spirit of the Curry Ridge site emanates from its wilderness qualities—its opportunities for solitude, quiet, and observing wildlife. The shuttle system serves as an important transition that prepares visitors for this type of experience. Therefore, it is strongly recommended that tour buses not be permitted to drive up the ridge road. People on the buses would miss a significant portion of the holistic experience (the educational shuttle ride), and increased large vehicle traffic would cause noise pollution detrimental to the qualities of the site.

During the “shoulder seasons,” when out-of-state visitation decreases and Alaska resident visitation increases, private cars will be allowed to drive on the road and access the visitor center site. This provides maximum recreational opportunities for Alaska residents, an important mission of the state parks.

Parking areas will be in the form of small satellite lots that are discreetly clustered in spruce stands staggered along each side of the road east of the visitor center. These lots should be of a porous nature with stone barriers defining them. Trails should connect these lots to the center.

The lots must be carefully planned to utilize the natural vegetative screening of spruce trees and alder/willow thickets. This will minimize visual impacts from viewpoints around the visitor center and from the higher elevations of Curry Ridge.



Entrance from Shuttle Tram

The visitor center building is hidden beneath the brow of the ridge. Travelers on the shuttle tram may catch fleeting glimpses of the viewing windows soaring above them as they climb the final crest of the ridge. Lake 1787 steals the view as it is briefly unveiled behind spruce stands to the south. Then the shuttle stops just below the crest of the bald ridge. There are no cars or parking lots to be seen—only people walking.

A sod roofed kiosk with stone supports welcomes the arriving shuttles and provides a sheltering portal from the elements. A textured concrete walkway gently sweeps through the alpine to the visitor center, which appears to emerge organically from the ridge. As visitors walk to the building, they pass a large glacial boulder that rests provocatively out of place in the mountain meadow. A

rustic timber and iron kiosk announces this as a major trailhead.

Approaching the front entrance to the building, the walkway widens to accommodate gathering groups. A large sod covered canopy extends out over the front door and invites visitors to enter through wide glass doors into a sunlit portico.



Interior Design of the Visitor Center

The interior design of the visitor center must assure that there is a smooth flow of visitor traffic from the entry, throughout the building, and onto the trail system. It must permit a sense of openness that invites and allows people to move freely from one use area to another.

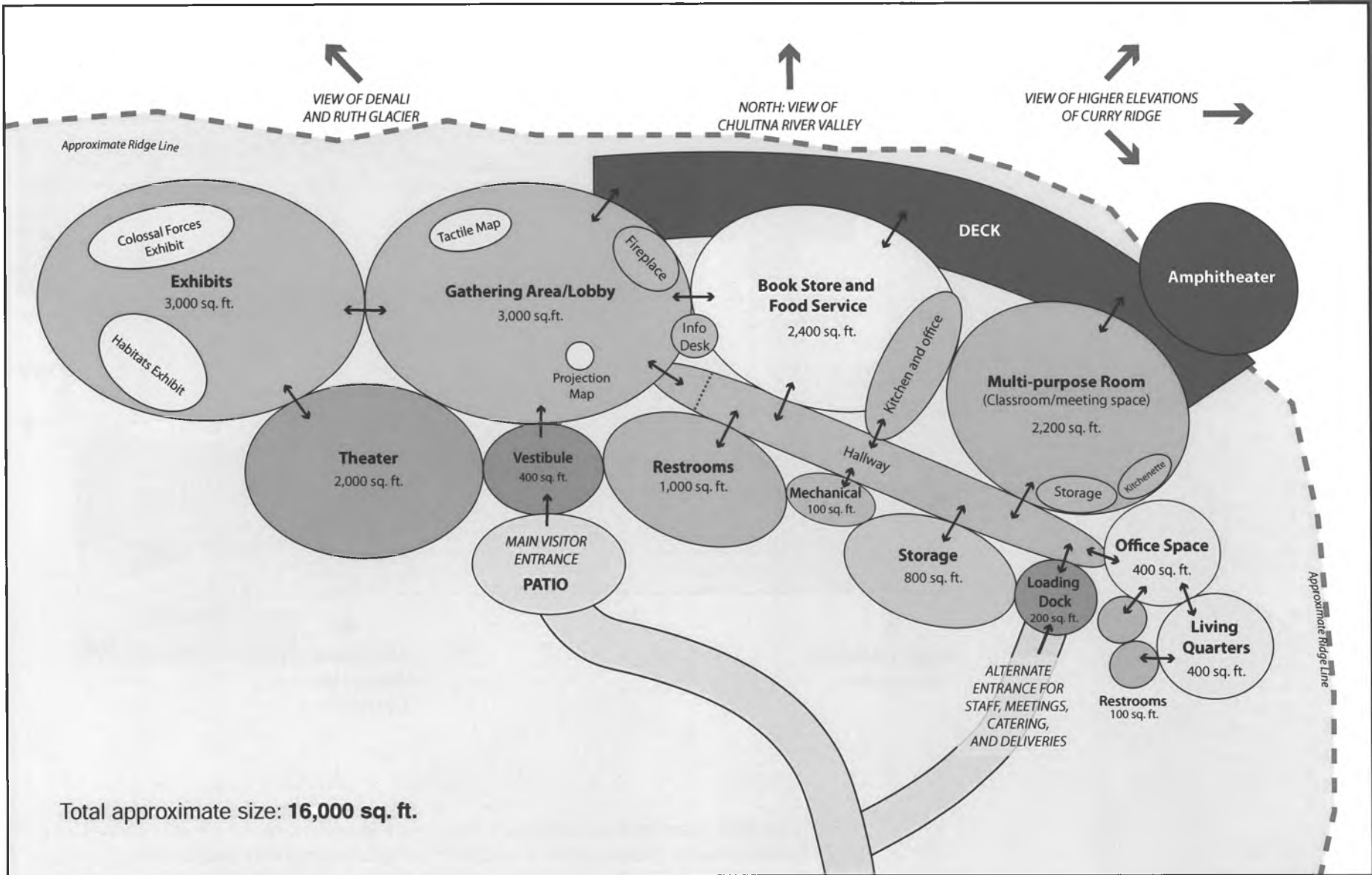
The interior of the building should encourage visitors to explore, to move quickly through some areas and linger in other spaces. Unobstructed views of the Alaska Range and Chulitna Valley should be provided throughout the interior.

Bubble Diagram

Bubble diagrams show the general sizes and relationships between various components of the visitor center, based on the specifications outlined in this chapter. They allow planners to consider the pros and cons of various alternatives of traffic flow and dedicated spaces before committing to more architectural details. Architects use the diagram as a foundation for developing an actual floor plan.

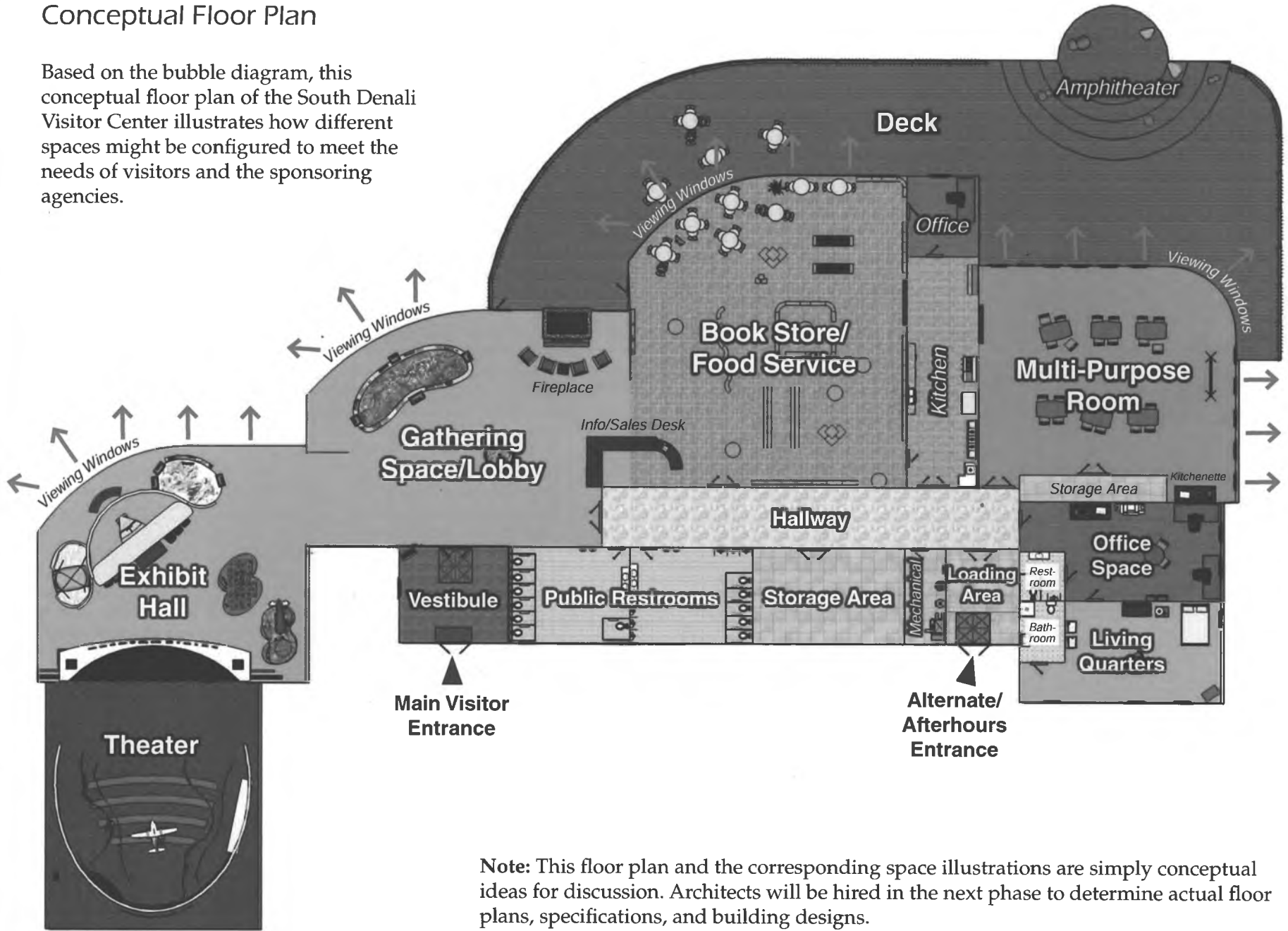
Circles represent the relative size of spaces, while arrows indicate the primary direction of visitor flow.

Bubble Diagram: South Denali Visitor Center



Conceptual Floor Plan

Based on the bubble diagram, this conceptual floor plan of the South Denali Visitor Center illustrates how different spaces might be configured to meet the needs of visitors and the sponsoring agencies.

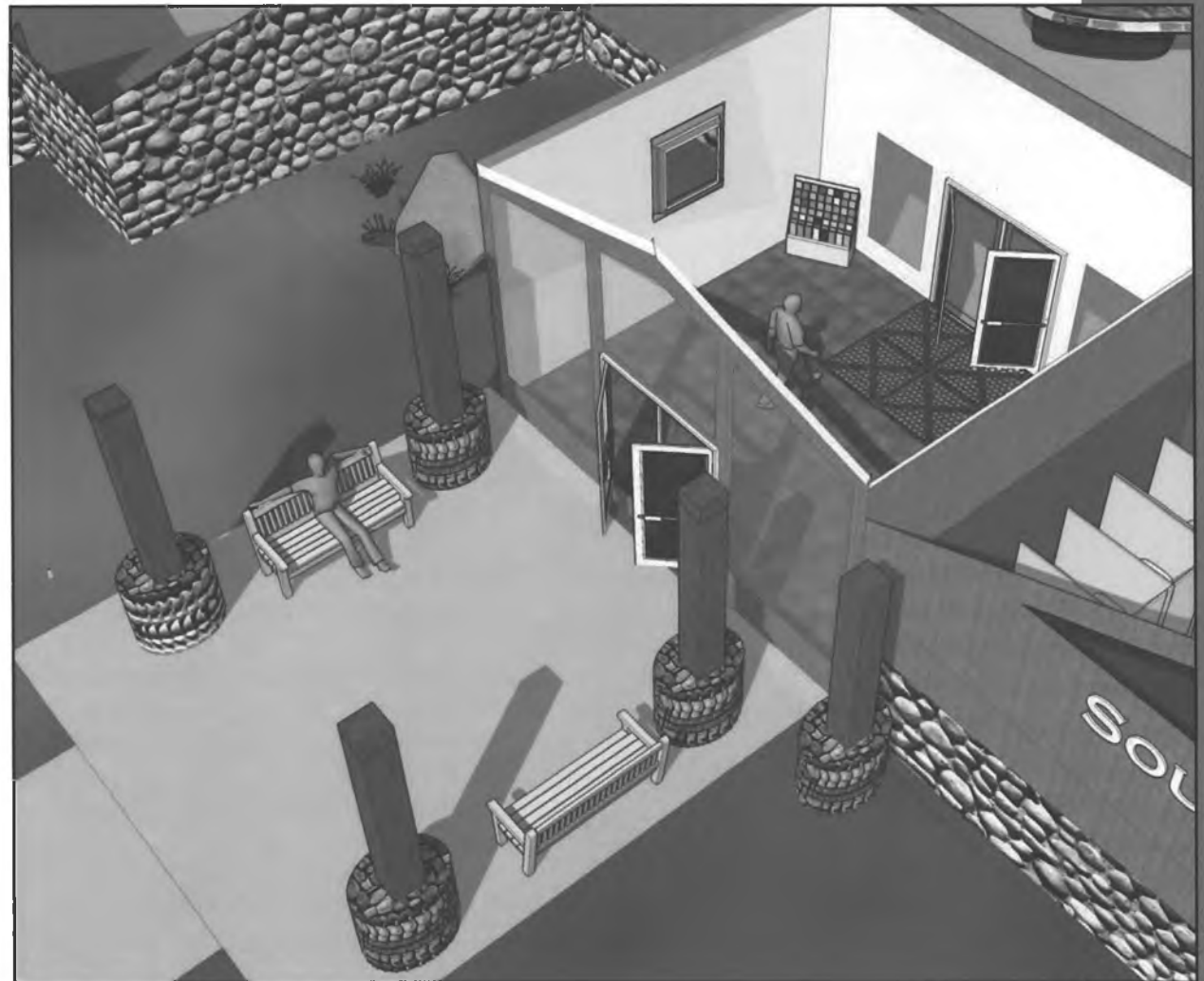
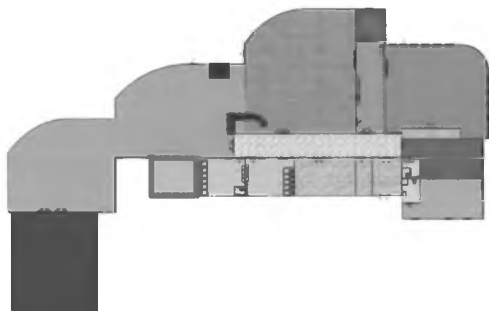


Note: This floor plan and the corresponding space illustrations are simply conceptual ideas for discussion. Architects will be hired in the next phase to determine actual floor plans, specifications, and building designs.

Main Visitor Entrance: Patio and Vestibule

The wide walkway **patio** at the front doors is located so that it will be sheltered from prevailing winds and be warmed by sunlight from the south. It should be recognizable as a public entrance and be wide enough to invite large numbers of visitors to pass in each direction.

Glass side lights and doors will allow views into and out of the **vestibule** (400 square feet) and help to blend the interior with the out of doors. An air lock is needed to buffer the blustery wind and cold on the ridge. This entrance is an appropriate location to install shoe cleaning grates which will minimize mud and snow entering the building from the trails. The vestibule could be locked and after hour's access to restrooms can be provided at the other end of the east-west hallway near the caretaker's quarters. Twenty-four hour emergency telephones will be available here as well as safety information.



Gathering Area/Lobby and Information Desk

The main entrance provides a clear line of sight through the spacious **lobby** (3,000 square feet) to Mount McKinley. The glass wall will soar to its maximum height at this location offering a panoramic view of the Alaska Range looming above the Chulitna River Valley. This dramatic scene will draw visitors across the room so it is imperative that this lobby area be expansive and open to allow viewers to circulate in an unobstructed manner. This grand, central chamber of the building sets visitors expectations and serves as an open hub for unimpeded travel to other destinations in the building. When visitors are near the viewing windows, they will see that adjoining rooms have similar panoramic windows. When the building is crowded, the natural human tendency will be to spread into the other less crowded spaces in the adjacent rooms. The purpose of this room is to welcome and orient visitors to the site in both a personal and cognitive fashion.

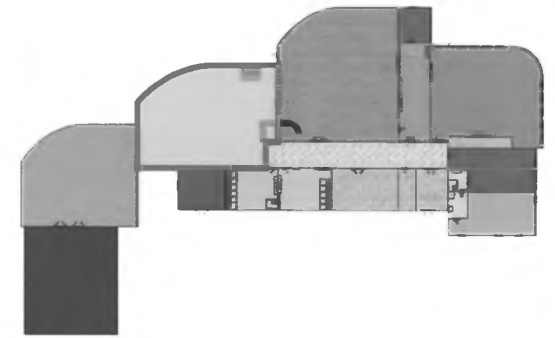
A large scale **relief map** featuring Denali and the Alaska Range is placed near the windows for orientation to the real peaks seen beyond. When clouds veil portions of the Range, viewers can study the relief map and determine if McKinley is visible in relation to peaks they may be seeing

out the window and they can identify them by referencing the corresponding features on the map and by accessing touch screen computers found at each end of this large three dimensional map.

A smaller **map of Denali State Park** is located in the center of the room near the information desk. When accessed via push buttons, it illuminates boundaries, trails, camp sites and interpretive points of interest within the park.

A large stone **fireplace** provides a cozy corner for returning hikers on cool days. This technology works efficiently, burning limited volumes of small diameter wood fuel which is locally available. Comfortable seating and thematic books invite visitors to linger.

For special events in the off season, this spacious room can serve as an elegant hall where groups can gather socially. The large multi-purpose meeting room down the hall can be set for meals or other more formal functions while this magnificent room provides a place for casual mixing while enjoying stunning views of the Chulitna Valley, Ruth Glacier, and Mount McKinley.



The **information/reception desk** will be well illuminated, barrier free, and centrally located. It allows one staff person to observe as much of the public area as possible. During slow visitation periods, it should serve the multiple functions of reception desk and sales area checkout. It must be large enough to accommodate several staff members during crowded periods.

A layered information delivery system supplements the personal interactions of the reception staff. An interactive map of Denali State Park will be located near the desk, along with photographs of trail destinations and significant features. Wayfinding signs (to restrooms, gift shop, exhibits, theater, meeting room) answer visitor's orientation questions when the desk staff is busy with others. Brochures and other handouts should be readily available but should be limited to pertinent site information.



Relief Map of Alaska Range

Access to Viewing Deck

Fireplace Sitting Area

Projection Map of Denali State Park

Universally Accessible Information Desk

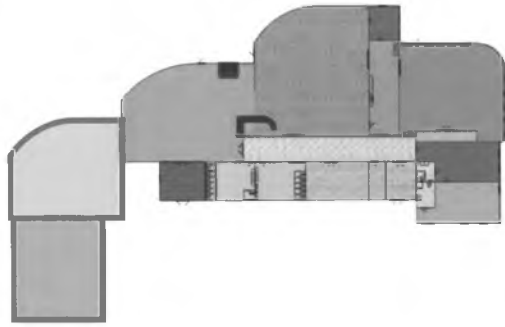


Exhibit Hall and Spirit of Alaska Theater

Exhibit Hall

The viewing windows continue to be a major focus in the exhibit hall (3,000 square feet). This room contains pods and islands of engaging, three-dimensional exhibits that assist people in understanding the special qualities of the place they are visiting. Exhibits will interpret the unique aspects of the South Denali region.

Themes in the hall may include such topics as the dynamics of the area's geologic processes. Media will be designed for optimal visitor involvement. For example, at one exhibit visitors are challenged to physically uplift a mountain range by turning a sluggish crank and watching the resulting simulated fault rise in the exhibit. Other exhibits interpret the adaptations that plants and animals have in order to survive in this beautiful, harsh environment.

The exhibit hall's location next to the theater entry promotes extended visitor interaction while they wait for the next film cycle.

More information about specific media that will be included in the exhibit hall is located in **Chapter 6: Interpretive Media**.

Spirit of Alaska Theater

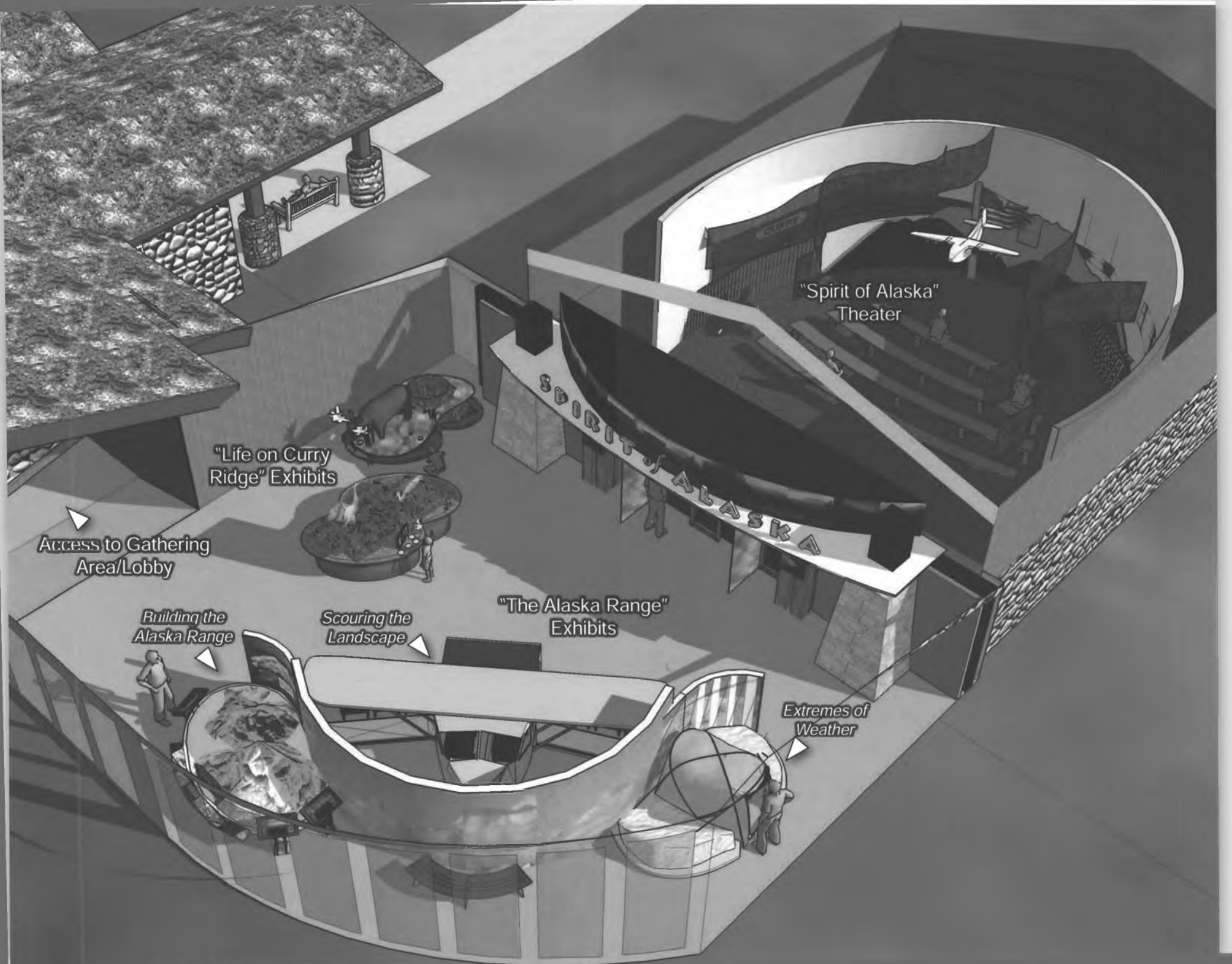
A multi-sensory object theater experience immerses visitors in the dramatic geological, ecological, and cultural stories of the Alaska Range and Curry Ridge. This dramatic sensory presentation brings stories to life and underscores the possibilities awaiting visitors out on the trails.

Object theaters are dynamic presentations that blend moving pictures and audio with real artifacts and objects artistically revealed during the presentation. Special effects, such as surround sound, colored lights, opening curtains, vibrating seats, spray misters, and fans help bring the production to life.

A theater production is the most involving way to tell a complex story, make mythology relevant, and engage the imagination of the viewer.

The theater size of 2,000 square feet should accommodate approximately 60 adults, the size of a full tour bus.

More information about the Spirit of Alaska Theater experience is located in **Chapter 6: Interpretive Media**.



"Spirit of Alaska"
Theater

"Life on Curry
Ridge" Exhibits

Access to Gathering
Area/Lobby

Building the
Alaska Range

Scouring the
Landscape

"The Alaska Range"
Exhibits

Extremes of
Weather

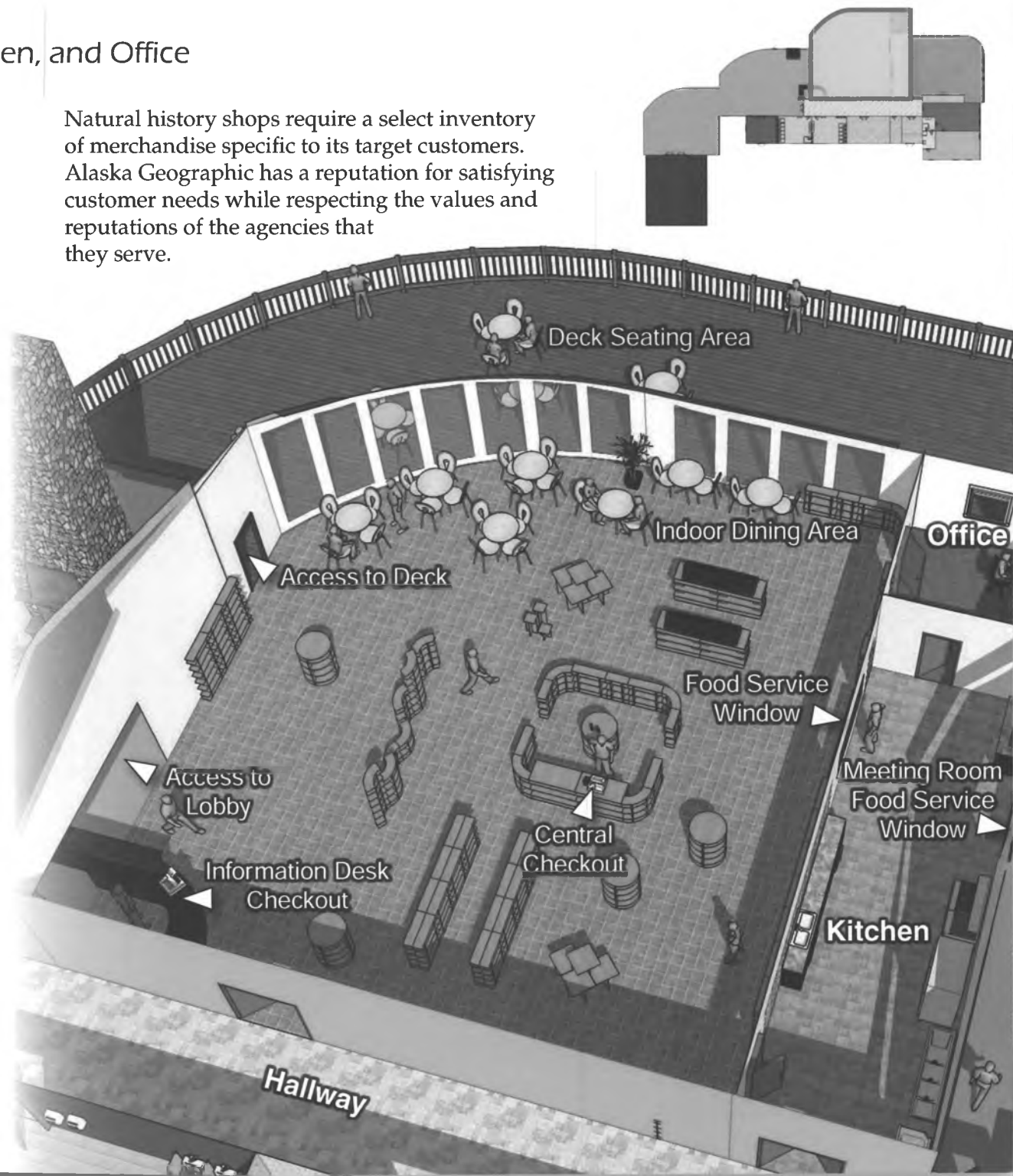
Book Store/Food Service, Kitchen, and Office

The **book store/dining area** (2,400 square feet) also offers sweeping views of the Alaska Range. It is adjacent to and very visible from the lobby and the front desk. During the shoulder seasons one person can greet visitors and watch the sales area from this location. Peak visitation periods will require that the sales counter be staffed at another location away from this high traffic lobby.

The sales area is integral to the visitor experience. It offers the possibility for profits but also serves crucial public relations needs and can be an effective educational tool. This sales space is large to accommodate surges of customers and to encourage leisurely shopping. Locally produced items can help connect visitors to the site and the community's sense of place.

A small **kitchen** facilitates limited food preparation by a concessionaire and serves as a staging area for catering special events and meetings in the multi-purpose room. It is centrally located for efficient transportation of food to the meeting room, deck, and indoor dining space. It is located near an exterior wall for access to deliveries from the hallway. The small **office** adjacent to the kitchen is used by the sales manager for counting cash and other business transactions.

Natural history shops require a select inventory of merchandise specific to its target customers. Alaska Geographic has a reputation for satisfying customer needs while respecting the values and reputations of the agencies that they serve.



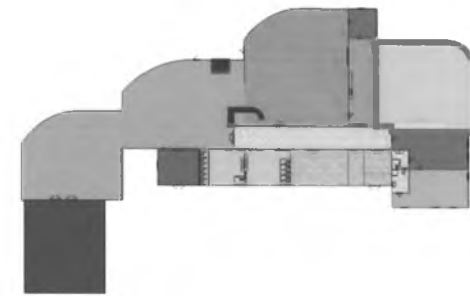
Multi-Purpose Room

The **multi-purpose room** is designed for maximum versatility. It can be divided for use as two classrooms for school visits or used for "breakout sessions" in workshops. It can serve community events, be used for formal meetings, and it functions well for catered events. Special "traveling exhibits" of artwork or select natural history topics can be displayed here. It should have the following features:

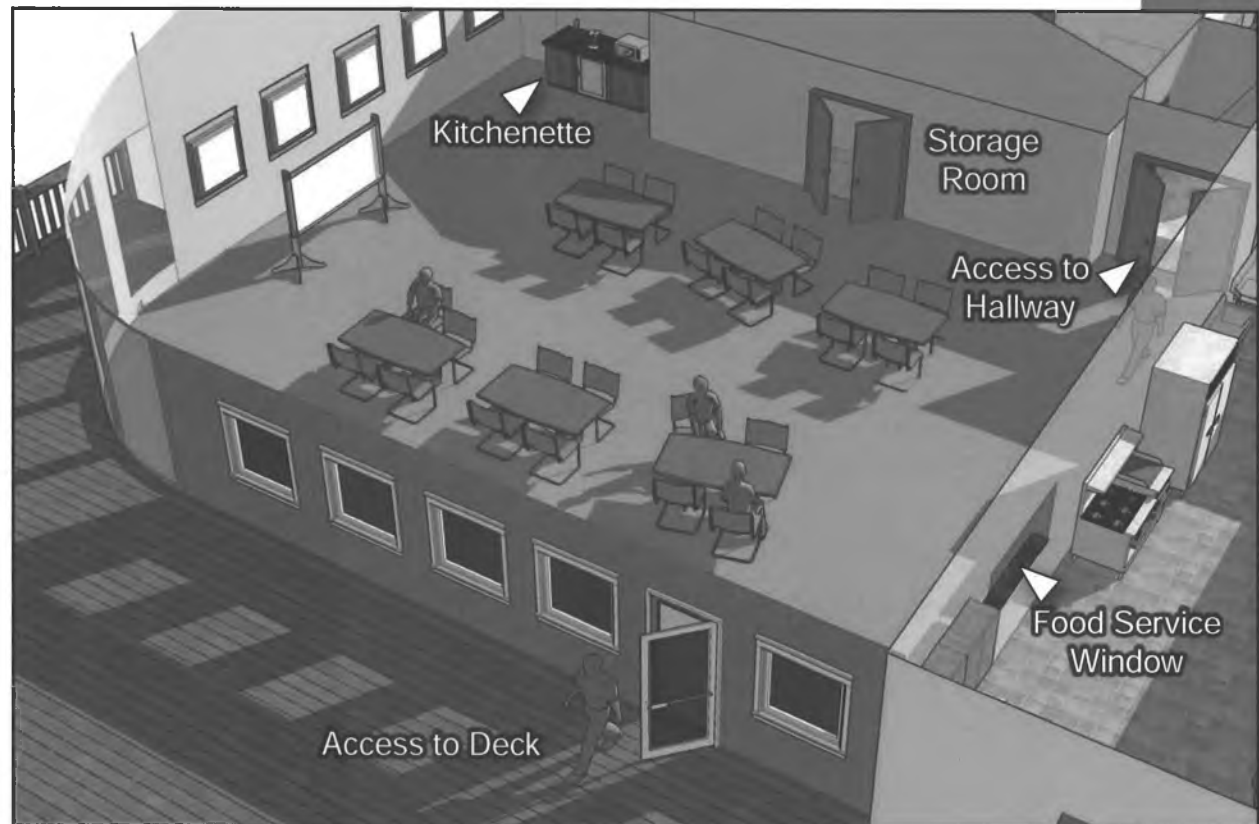
- A high ceiling, proportional to the room size that facilitates projection onto a large screen.
- Windows and doors for scenic views and access to the deck; light blocking shades on all windows
- Sound proof room divider and sound absorbing floor and ceiling surfaces
- **Storage space** for tables and chairs
- **Kitchenette** counters and sink for light food and beverage service. Service window to kitchen to allow for catered meals
- Appropriate number of electrical outlets for audiovisual and computer service and to provide lighting for special events and exhibits
- **Access to the deck** for breaks and outdoor sessions

At a size of 2,200 square feet, the multi-purpose room would be large enough to accommodate about 200 people with just chairs, or 150 people with tables and chairs.

Meetings and workshops held in the multi-purpose room will require food that is prepared off site and catered to the building. These specialized and regulated services are best provided by



private entrepreneurs who will assume responsibility for employee hiring, training, and management of services.

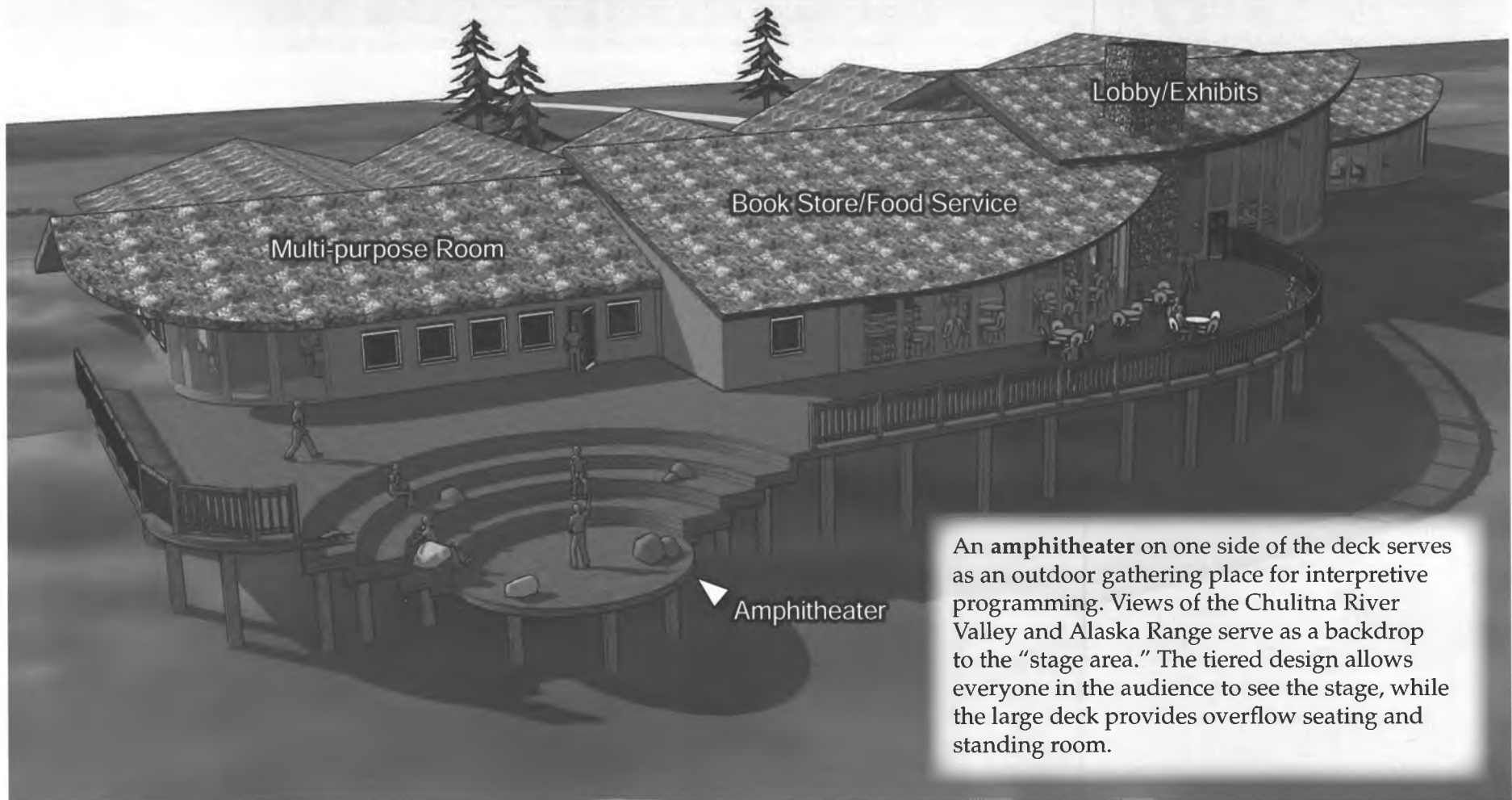


Deck and Amphitheater

A deck sweeps along the north glass wall of the sales area and past the meeting room windows. It is accessible from the lobby, book store, and multi-purpose room. This deck connects the outdoor vistas to the building's interior.

During mild weather and peak visitation, it provides a comfortable space for eating, relaxing, and participating in public programs. It allows large outdoor gatherings without fear of trampling vegetation. Its placement permits views

of Denali without crowds of people blocking the panorama. This deck is a highly desirable area for visitors to gather in good weather so it must be large. It is inexpensive overflow space that will receive optimal use during peak periods of visitation.



An **amphitheater** on one side of the deck serves as an outdoor gathering place for interpretive programming. Views of the Chulitna River Valley and Alaska Range serve as a backdrop to the "stage area." The tiered design allows everyone in the audience to see the stage, while the large deck provides overflow seating and standing room.

Office Space and Living Quarters

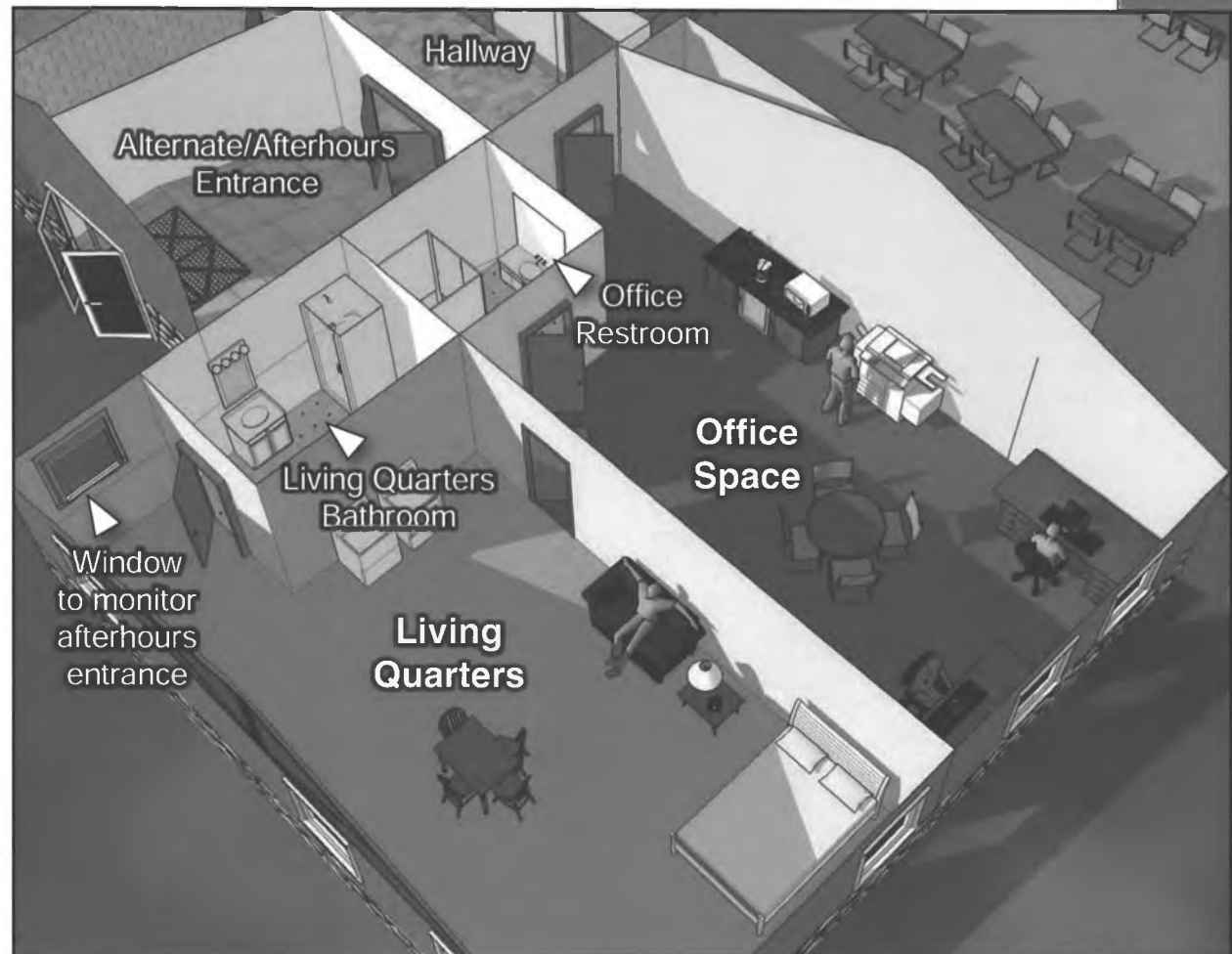
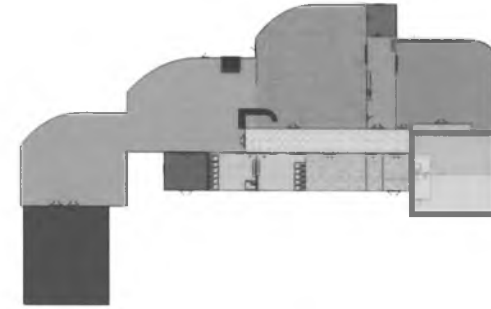
The **office space** (400 square feet) serves the seasonal and permanent program staff for the visitor center. It is adjacent to a small **efficiency apartment** (400 square feet) for an on-site caretaker and functions as an off-season contact station. These facilities are strategically located to provide views of the parking area, shuttle tram loop, and trailheads so that staff can better monitor activity at the site.

The office space and living quarters are discreetly separated since there may be daytime staff working in the office but not living on site. Two small bathrooms serve these areas; additional plumbing is a minimal expense since these restrooms are back to back.

The open concept office space allows for maximum flexibility in arranging and rearranging this room to meet the changing seasonal needs of staff. The location at the far end of the hall from the lobby and exhibit space reduces noise and commotion that might deter staff from their office responsibilities.

In the living quarters, a small window with blinds faces the loading area doorway allowing rangers to access and anticipate the needs of afterhours visitors. In case of emergency, a buzzer and telephone system connects visitors to

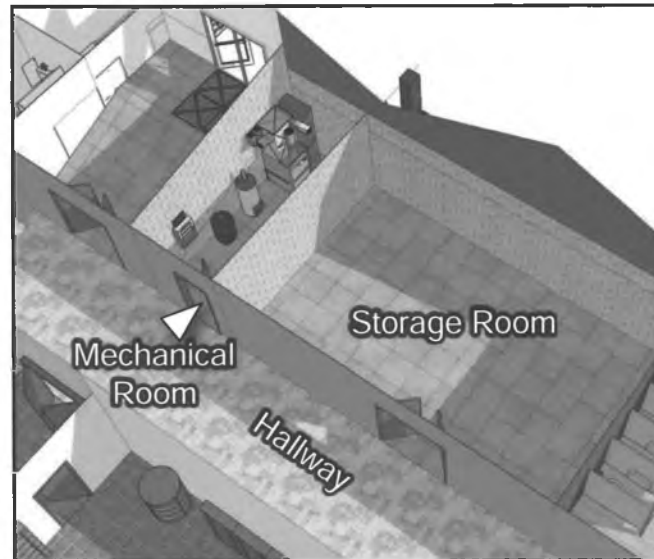
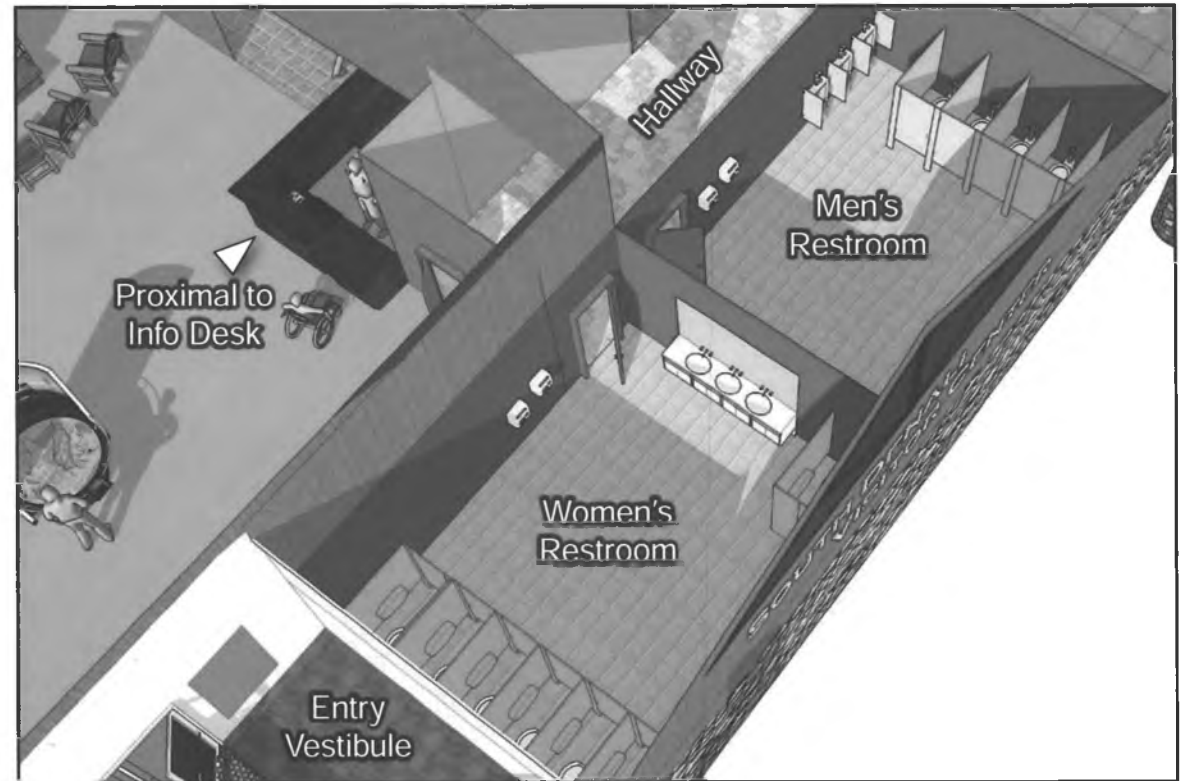
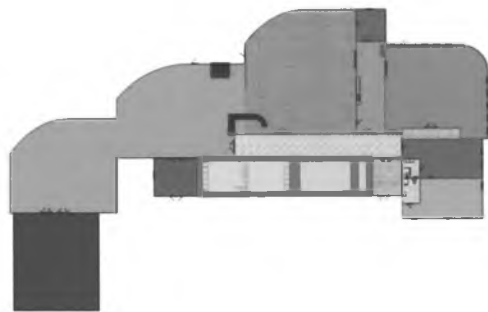
rangers stationed in the visitor center or down below in the Transportation Hub. This is a logical location to keep first aid equipment since trained staff will be here and it is the probable entry where people with emergencies will seek assistance.



Public Restrooms, Storage Room, and Mechanical Room

The pulse of traffic into and out of this facility will be driven by the shuttle schedules. Bathroom use will be concentrated around the arrival and departure of these vehicles.

The restrooms (1,000 square feet) must have enough toilets, urinals, and sinks to accommodate multiple tour groups without long lines. The lower visitor services hub should be designed to alleviate some of the demands on these restrooms. As recommended in the section on sustainable design, a priority should be given to water efficiency/ recycling technologies and waterless and composting toilets. Ambient light should be used during the summer and self dimming lights should be incorporated for winter use. This is an excellent room to provide interpretive signage about sustainable concepts that are concentrated here and that can be seen throughout the building.



Storage is the most under planned area in interpretive facilities according to surveys of site and facility managers. This 800 square foot **storage room** can be divided into discrete areas for housing store merchandise, kitchen inventory, and program materials. It is easily accessed from the central hallway via double doors. Its proximity to the kitchen, sales area, and the multi-purpose room eliminate the need for hauling items great distances through the building. A system of heavy duty shelving and a moveable staircase are desirable for maximizing the vertical space in this room.

Alternate Entrance/Loading Area and Hallway

The **alternate entrance** permits people to access the multi-purpose room, staff office, and kitchen area without using the public entry into the lobby. This eliminates congestion at the public entry and facilitates delivery of sales inventory, food, and provides access to staff areas. A main **hallway** offers access or closure to most rooms. In the off-season or at night, this entrance provides a secure afterhours

doorway to the restrooms and emergency assistance from on-site staff.

The **vestibule** (200 square feet) should be equipped with a buzzer system to alert staff to the presence of people needing assistance. It should have a telephone for communicating with the Transportation Hub when this facility is not staffed. A window in the ranger residence will

allow surveillance of the entry area.

The entry should be universally accessible for wheelchairs and delivery dollies. It should have floor grates to reduce mud and snow from being tracked into the building. Large glass doors and windows will be south facing and should be useful in helping to heat the space.



Curry Ridge Trails

The South Denali Visitor Center is the gateway to Curry Ridge. To really experience the site, visitors must get outdoors and explore the ridge for themselves. A carefully planned trail network provide opportunities for visitors to experience different habitats of Curry Ridge, observe wildlife in their natural surroundings, and climb to scenic viewing areas, while discouraging off-trail trampling.

Three trails are proposed for varying degrees of access into the site.

1. **Denali Vistas Interpretive Trail:** The short main loop connects the visitor center to panoramic viewing points and Lake 1787. The trail provides universal access and wayside exhibits.
2. **Beaver Meadows Trail:** This longer trail encircles Lake 1787 and parallels scenic beaver ponds and streams. It provides opportunities for visitors to experience the Alaska wilderness, while still being in relatively close proximity to the visitor center.
3. **Curry Lookout Trail:** This long wilderness trail climbs the steep slope of Curry Ridge to the northeast and connects to the historic Curry Lookout. It requires preparation and a full-day of hiking.

Trail Design Guidelines

The following recommendations will guide the design and layout of the South Denali trail system.

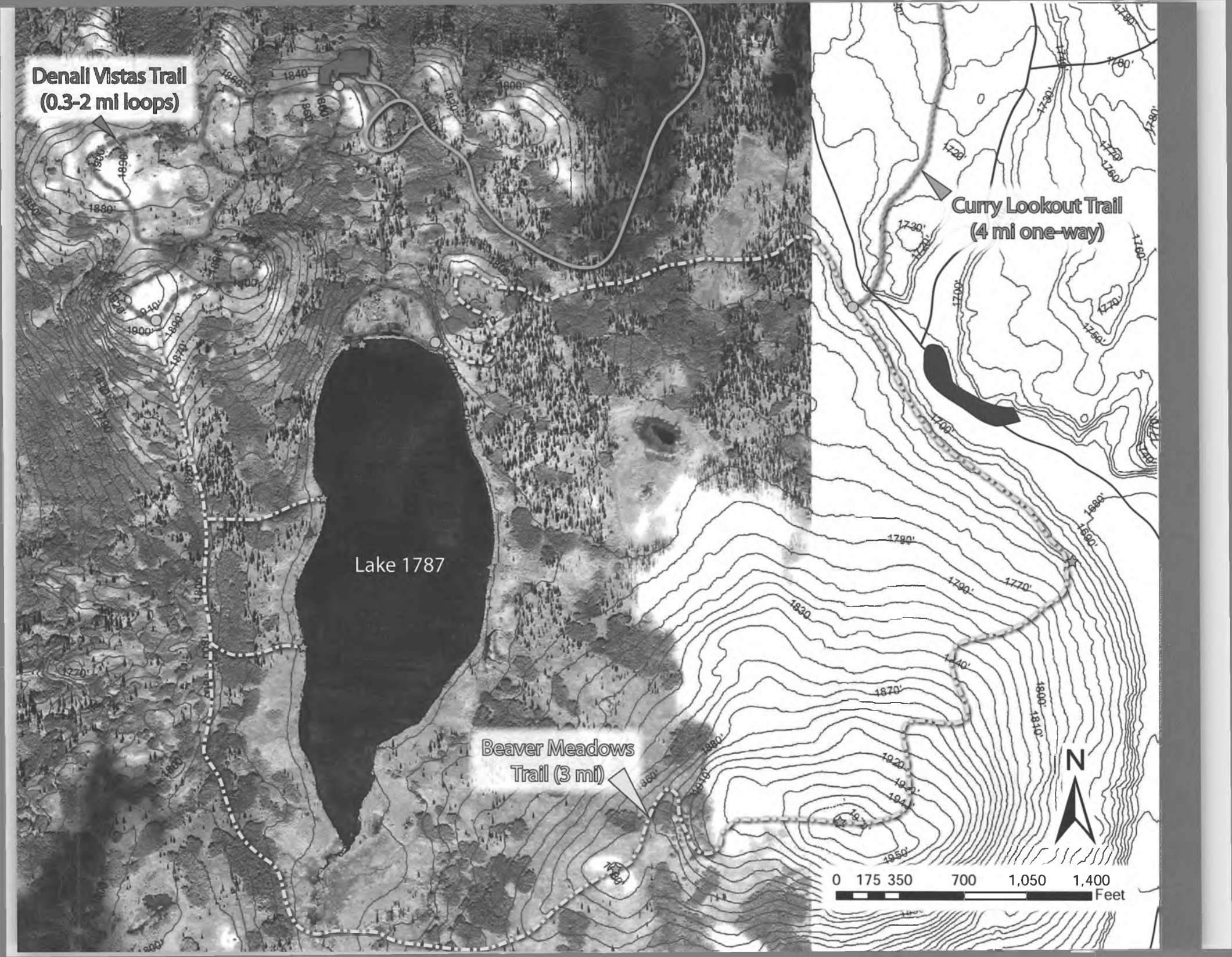
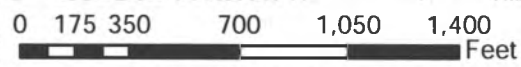
- The visitor center will serve as the heart of a looped, circulatory trail system that is designed to serve concentrations of visitors near the building and provide a continuum of increasingly wild experiences for hikers as they disperse out into the park. Visitors will self-select from a series of experiences that satisfy their schedules, physical abilities, and interests.
- Trail experiences in high use areas near the building will be designed to protect fragile alpine and wetland habitats with boardwalks, bridges, railings, and other barriers that limit human traffic to specific corridors. Trail designers will utilize preexisting natural site barriers as much as possible by routing trails near alder and willow thickets, dense concentrations of ground shrubs, wet swampy areas, and boulders. This site contains a diversity of vegetation and topography that dictates corridors of travel and discourages the creation of shortcuts and off-trail travel.
- Trails will be developed to optimize opportunities to explore the mystery, variety, and beauty of the Ridge. Trails will be routed to showcase the diversity of this site. High lookouts will provide panoramic views and offer safe opportunities to see big game. Sheltered, leeward microenvironments on a trail will permit intimate views of plants and small animals. Trails will be designed to offer glimpses of prominent features and destinations, but that also conceal some mysteries that lie ahead.
- Visitors will be encouraged to better appreciate and protect this environment through outdoor interpretive media designed to help connect their interests to the meanings of this unique place.
- Outdoor media materials need to be resistant to the extremes of weather that the Ridge experiences; powerful high-altitude UV sunlight, high winds carrying abrasive dirt and rocks, frigid sub-zero temperatures, and heavy loads of snow and ice.

**Denali Vistas Trail
(0.3-2 mi loops)**

**Curry Lookout Trail
(4 mi one-way)**

Lake 1787

**Beaver Meadows
Trail (3 mi)**





View of Denali from High Panorama Viewpoint



Lake 1787 Viewpoint



Walking through spruce forests to Lake 1787

Denali Vistas Interpretive Trail

Interpretive Loops, 0.35-2 mile loops

A series of short trail loops that start at the visitor center provide universal access to the natural habitats and observation points of Curry Ridge. Named Denali Vistas Trail, the path promises visitors dramatic views of Mount McKinley, Ruth Glacier, the Alaska Range, and the Chulitna River Valley. A trail spur also takes them down for an intimate view of Lake 1787.

The varied topography around the visitor center offers a highly diverse experience in a relatively short walk. The trail traverses a variety of alpine plant communities from ridge top to muskeg. Visitors are invited to explore high bare rock ridges, alpine tundra, muskeg holes, thickets of alder and willow, spruce forests, swampy lake shores, and beaver meadows.

Most visitors to the South Denali Visitor Center will likely walk at least portions of this trail. Loops of varying lengths (0.35 mile, 0.7 mile, and 1 mile to the viewpoints; 1 mile to the lake and back) provide visitors with choices. All segments of this trail will be designed for universal access.

Boardwalks and hard surfaces are required to protect the tundra and provide universal access for visitors.

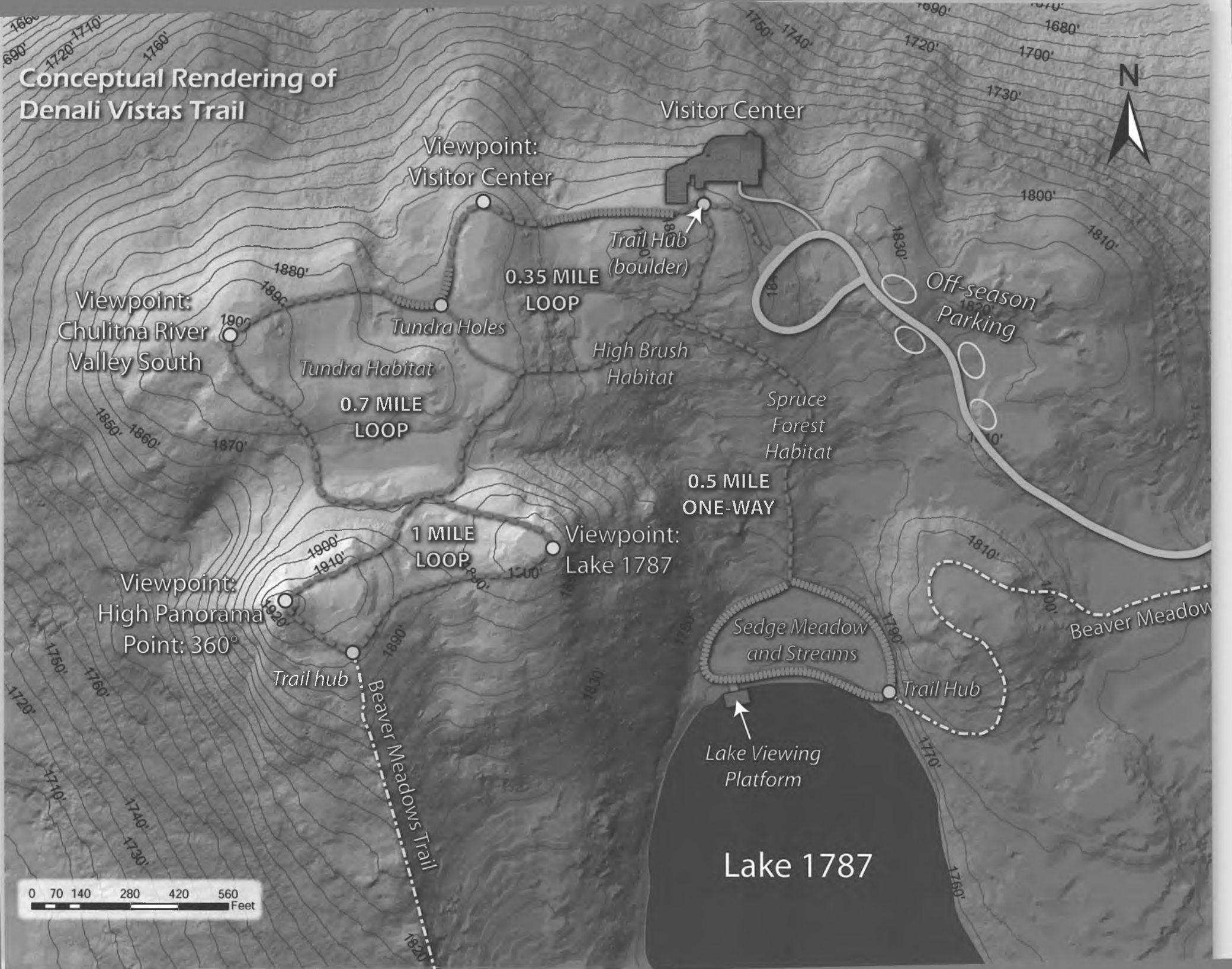
Effective trail layout should use natural site features, like brush thickets, boulders, and wet areas, as barriers to keep visitors within the defined corridor. The best viewing points and most direct routes to access them should be identified early in the process, so trails can be planned to avoid cutting. In wide open areas with low vegetation (like the higher viewpoints), structures such as decks, boardwalks, and viewing platforms should be built to limit trampling.

Wayside exhibits along the trail will interpret the flora and fauna that are adapted to the harsh extremes of the ridge. Three viewpoints are included on the loop which will have rustic benches to encourage visitors to linger and enjoy the vista. A lakeside platform will have built-in seating for observing wildlife on Lake 1787.



Muskeg h

Conceptual Rendering of Denali Vistas Trail





Crossing braided streams of Lake 1787 outlet



View of Denali rising above Lake 1787



Rushing stream through beaver meadows

Beaver Meadows Trail

Nature Hiking Loop, 3 miles

This longer trail rewards hikers with opportunities to exercise, glimpse wildlife, and climb a ridge for an unparalleled view of Denali. It requires a greater investment of time and energy than the Denali Vistas Trail and allows hikers to get away from other visitors to experience the solitude of the site.

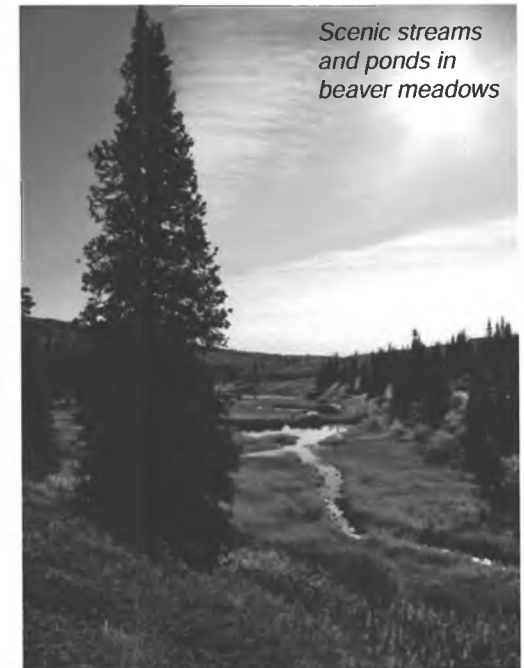
The trail follows a ridgeline to the west of Lake 1787, offering unique views of the lake from a high vantage. Two trail spurs connect to wildlife viewing blinds on the west shore of the lake. Crossing the southern outlet of the lake, hikers experience a diverse complex of streams, muskeg holes, and sedge meadows. Southeast of the lake, a 200-foot promontory offers a dramatic view of Mt. McKinley and the Ruth Glacier rising above Lake 1787. The trail parallels an unnamed stream on the east with views of active beaver lodges, dams, and ponds, before returning to the north edge of the lake through a large sedge meadow.

This trail is expected to have moderate use compared to the Denali Vistas Trail near the visitor center, but it is short enough that many groups will still be able to fit the hike into their schedule. The trail will be widened for comfortable walking in groups and improved with a gravel surface. Boardwalks will be built

over wetland areas. It will not be strictly ADA compliant, but will be available as a more challenging recreational trail for people in wheelchairs.

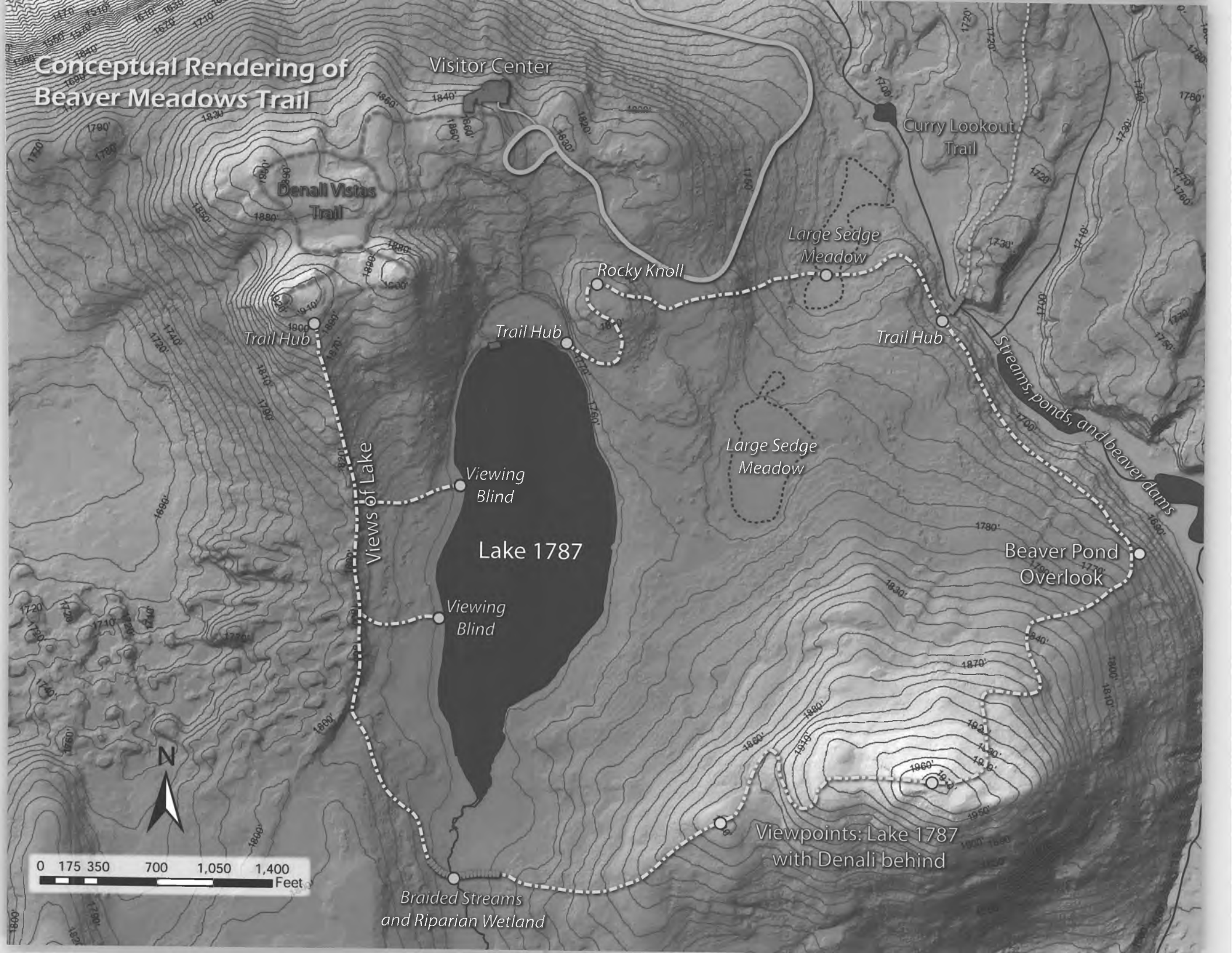
Wayfinding is important on this trail, as some visitors may feel uncomfortable venturing so far from the visitor center. Maps and direction signs will reassure them that they are on the correct path. This trail intersects the Denali Vistas Trail at two locations; trailhead map panels will be provided at these junctures.

Limited wayside exhibits may be placed at natural gathering points (viewing areas, beaver ponds and dams, sedge meadows) to connect visitors with a more holistic story.



Scenic streams and ponds in beaver meadows

Conceptual Rendering of Beaver Meadows Trail



0 175 350 700 1,050 1,400
Feet



Pleasant wooded ridge after crossing stream



Steep, wide valley between Lake 1787 (in the background) and the high elevations of Curry Ridge



Curry Lookout shelter

Curry Lookout Trail

Wilderness Trail, 4 miles one-way

This rustic wilderness trail connects the visitor center to Curry Lookout shelter to the northeast. A spur from the Beaver Meadows Trail climbs steeply about 800 feet to the higher elevation top of Curry Ridge. Once at the top, visitors are rewarded with spectacular views of the Alaska Range and an “other worldly” feel of being in the barren, high elevation tundra punctuated by unique rock formations and blue alpine lakes.

Due to its relatively long length and steep climbs, this trail is expected to have much lower use than the others. It is a day-long adventure that requires a degree of preparation and a commitment to hiking.

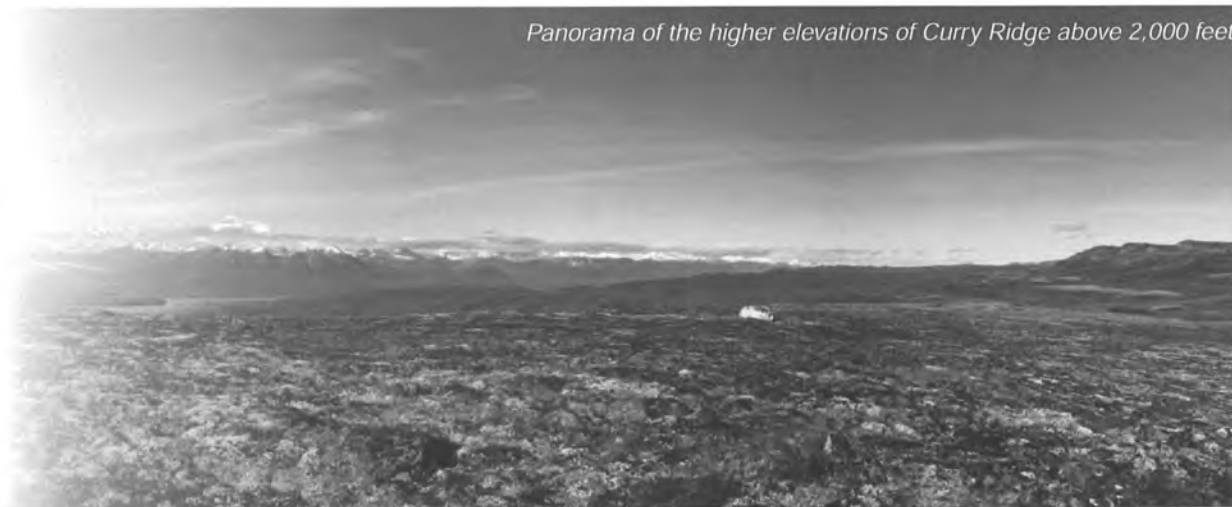
This wilderness trail has few improvements other than minimal wayfinding information such as trail maps and stone cairns across the tundra.

Visitors do need to know how much further the Curry Lookout is as distances can be deceiving.

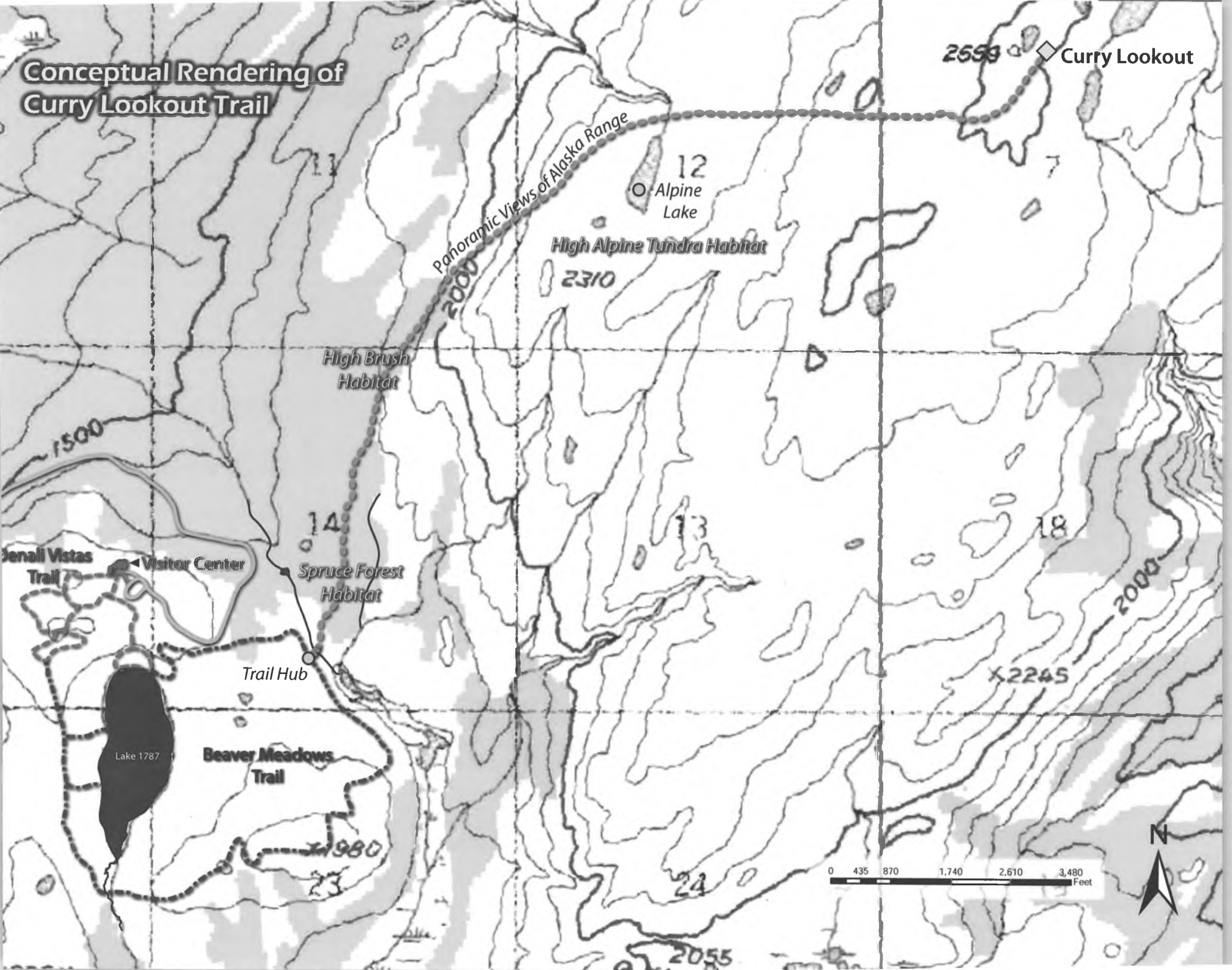
A trailhead map panel will be provided where the trail intersects with the interpretive loop. The Curry Lookout Shelter will discreetly house some interior panels with historic photographs of the town of Curry, the bridge that led to the Lookout Trail, and pictures and interpretation of early hikers from the railroad station and hotel.

Future plans call for trails that will connect Curry Lookout with existing paths along K'esugi Ridge. Discussions have also been conducted with Alaska Railroad representatives to potentially rebuild a trail between Curry Lookout and the historic Curry site on the east side of the Susitna River. At present, there is no crossing over the river.

Panorama of the higher elevations of Curry Ridge above 2,000 feet



Conceptual Rendering of Curry Lookout Trail



2559 Curry Lookout

Panoramic Views of Alaska Range
2000

12
○ Alpine Lake

High Alpine Tundra Habitat

2310

High Brush Habitat

1500

14
○ Spruce Forest Habitat

13

18

Denali Vistas Trail
Visitor Center

Trail Hub

X2245

Lake 1787

Beaver Meadows Trail

1980

24

0 435 870 1,740 2,610 3,480 Feet



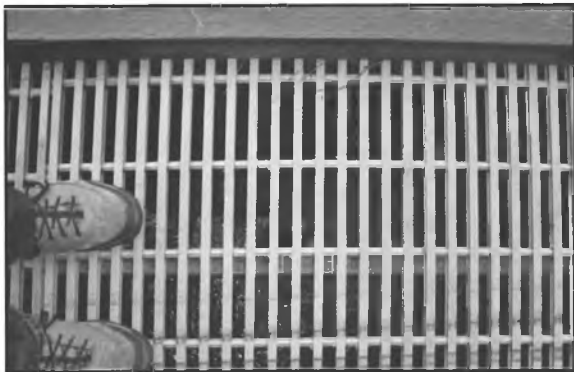
2055



Rustic stone overlook, Knockan Crag NNR, Scotland



Themed wooden bench, Jordan's Custom Sculptures, Indian, Alaska



Boardwalks with grate surfaces allow water and sunlight to pass through. Islands & Ocean Visitor Center, Homer

Trail Structures and Amenities

The core adventure on Curry Ridge is found outside the walls of the visitor center on the trails and in exploring the wild ridge top and saddles. The potential of a peak trail experience is enhanced by the wonderful diversity of the landscape traversed by the trails.

Trail design adds to this heightened sense of discovery. A well designed trail helps hikers explore the mystery, variety, and beauty of a site. The trail surfaces can magnify the sense of changing landscapes; boardwalks can lift a traveler over boggy wetlands, beaver meadows, or present a fresh perspective from above a miniature alpine flower garden.

On the rocky ridge tops, stone should be incorporated into the design of low profile walls that subtly define the edges of scenic overlooks. Boulder benches and stacked stone should be used for seating that is harmonious with the location. In forested areas, rustic carved wood benches that reflect the themes of the trail should be used. For example, at the beaver meadow overlook, a bench with beavers carved in relief and accented with simulated beaver gnawing around the edges would be appropriate.

Trail surfaces and boardwalk treads should blend with the landscape as well. Interlocking concrete pavers formed

and stained to resemble rock can reduce erosion and trampling on the heavily used main loop. Rough cut, treated lumber provides a nonskid boardwalk surface on the stream crossings at the south end of Lake 1787. Boardwalks with grate surfaces allow rain and sunlight to reach the ground; this may be a good solution in alpine tundra areas where vegetation can continue to grow under the tread.

A floating platform that lies low on the water at the north shore of Lake 1787 invites discovery. Underwater viewing scopes installed on the platform provide unique glimpses into the clear alpine waters of the lake. Permanently mounted spotting scopes will invite visitors to study the distant views from the ridges and to focus in on moose in wetlands and loons on the lake.

Other viewing platforms on the west side of the lake serve as wildlife blinds, thematically camouflaged with a layer of sticks and logs from an old beaver lodge.



Chapter Six

Interpretive Media and Programs



South Denali Visitor Center Complex: Interpretive Master Plan



Personal interpretation is the most effective means of connecting visitors to the meanings of the resources. This ranger at Crater Lake National Park uses a tactile topographic model to orient visitors.

Interpretive Programming

Personal interpretation is the most effective technique for connecting the interests of visitors to the meaningful and unique stories found on Curry Ridge. A seasoned interpretive naturalist can help people to see and experience the environment in new and sensory ways that cannot be achieved with more passive techniques.

Since the real intent of this facility is to help people discover wild Alaska experientially on trails and ridge tops, guided trail walks are an excellent way to open visitors' eyes, hearts, and minds.

The National Park Service plans to provide some interpretive staffing that will include interpreters and environmental educators. Seasonal staff will provide some summer needs for programming. A number of interpretive needs demand a higher quality of knowledge and professional expertise than seasonal staff can be expected to deliver. It is difficult for agencies to meet the seasonal demands for both quantity and quality due to the limited training schedules and the turnover of seasonal employees.

There are entrepreneurial interpretive services that are locally available near Curry Ridge. These firms have proven experience and sound cultural and

natural history knowledge of this area. These services should be formally encouraged and integrated into the management plan of the visitor center facility.

This symbiotic relationship will assist the Park in meeting the diverse needs of this large audience while supporting the local economy. Private companies can better meet the needs of this market and be more responsive to its changing demands, numbers, and schedules than government agencies. They can also assume the financial risks and potential profits inherent in providing these services.

Standards and programmatic objectives should be defined by State Parks in order to contract with reputable guide and interpretive entities who will provide a level of visitor service not available through agency programming.

Several provisions have been incorporated into the visitor center design to facilitate interpretive programming. These include an amphitheater off the deck, a large multi-purpose room that can be divided, a large storage area for program supplies, a trail system with different sized loops, and trail gathering areas such as overlooks and a platform on the lake.

Visitor Center Exhibits

Interpretive media are non-personal forms of communication that enhance visitors' experiences by helping them make connections between the tangible resources of South Denali and the intangible meanings that these resources represent. Exhibits, theater productions, and outdoor panels are some of the vehicles that help visitors see how this place is relevant to their own lives.

Specific media components were consciously selected and developed to best interpret the significant attributes of the South Denali site: its ecology, geology, and human history. The varied modes of communication chosen for the media are intended to reach diverse learning styles and span a continuum of ages.

The **visitor center exhibits** are intended to prepare people to understand and value this unique place that they are about to experience. The media can demonstrate complex and colossal geological forces in direct ways that are understandable on a human scale. Some exhibits give visitors unique views of elusive wildlife that they may only glimpse fleetingly as they explore the site. Historic events can burst to life through dramatic theater productions that involve the emotions and intellect of viewers of all ages.

Organization of Media Concepts

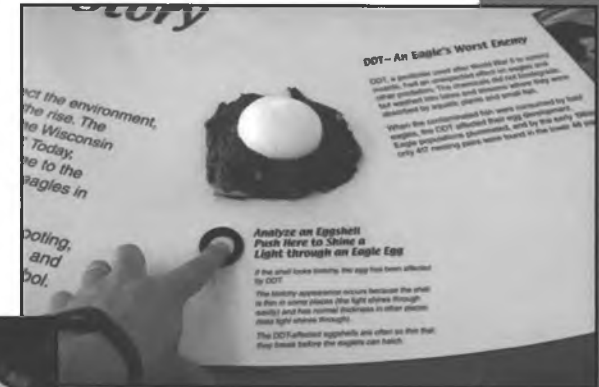
Each media concept is developed as follows:

1. A brief **purpose** is provided. That explains why the exhibit concept is recommended
2. A list of **sub-themes** and **messages** that will guide interpretation for the exhibit is linked to the framework in Chapter 4.
3. **Objectives** are provided that describe what the visitor will learn (educational), what they will do (behavioral), and how they will feel (emotional connections).
4. A **description** along with graphic representations details each media concept.

Begich-Boggs Visitor Center, Alaska



Great River Road Visitor Center, Wisconsin



Everglades National Park Visitor Center, Florida



The most effective exhibits are those that involve the visitor. Tactiles, audio units, smell boxes, flip panels, mechanical devices, videos, and computer interactives are components that increase participation and enhance the success of an exhibit.

Tactile Topographic Map of Alaska Range, Curry Ridge, K'esugi Ridge and Chulitna River Valley

Purpose:

To identify the mountains and other landscape features visible from Curry Ridge and help visitors comprehend their size and relationships even when they are partially covered by clouds.

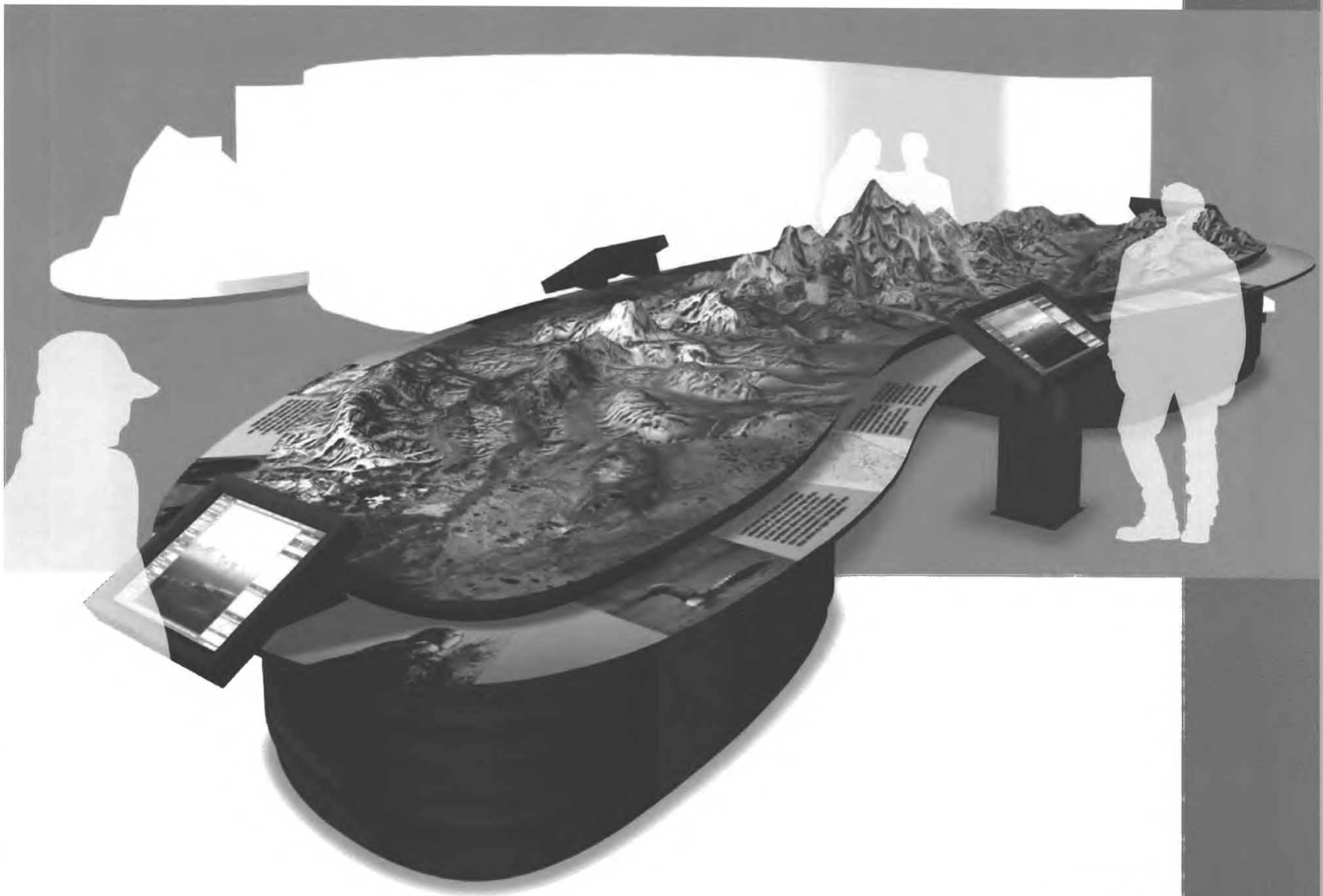
Themes and Messages Interpreted:
Sub-Theme 2, Messages 2.1 a-m

Objectives:

- Visitors will learn the names of the visible mountains, glaciers, rivers and ridges.
- Visitors will be encouraged to touch the physical maps as they view the real landscape scene out the window;
- Visitors will confidently explore Curry Ridge with a newly acquired cognitive map

Description:

This large free-standing topographic map of the South Denali landscape will be constructed without borders or barriers to allow visitors full tactile access to the map. The map will be placed near the viewing window so visitors can make reference to the "real thing" and interpreters can give "map talks" about the features. STM (Solid Terrain Models) is a company that makes maps fitting these criteria.



3-D Topographic Projection Map of Denali State Park

Purpose:

To provide a fun, easily understood, interactive map experience that encourages visitors to plan their visits in a holistic manner. Options will be presented based on visitors' planned length of visit, preferred activities, physical ability, etc.

Themes and Messages Interpreted:

Sub-Theme 8, Messages 8.1-8.11

Objectives:

- Visitors will learn about the range of recreation opportunities and special features of the park as they push buttons that project images such as trails, roads, boundaries, interpretive features, and access points.
- Visitors will plan their visit to the park based on the information provided.

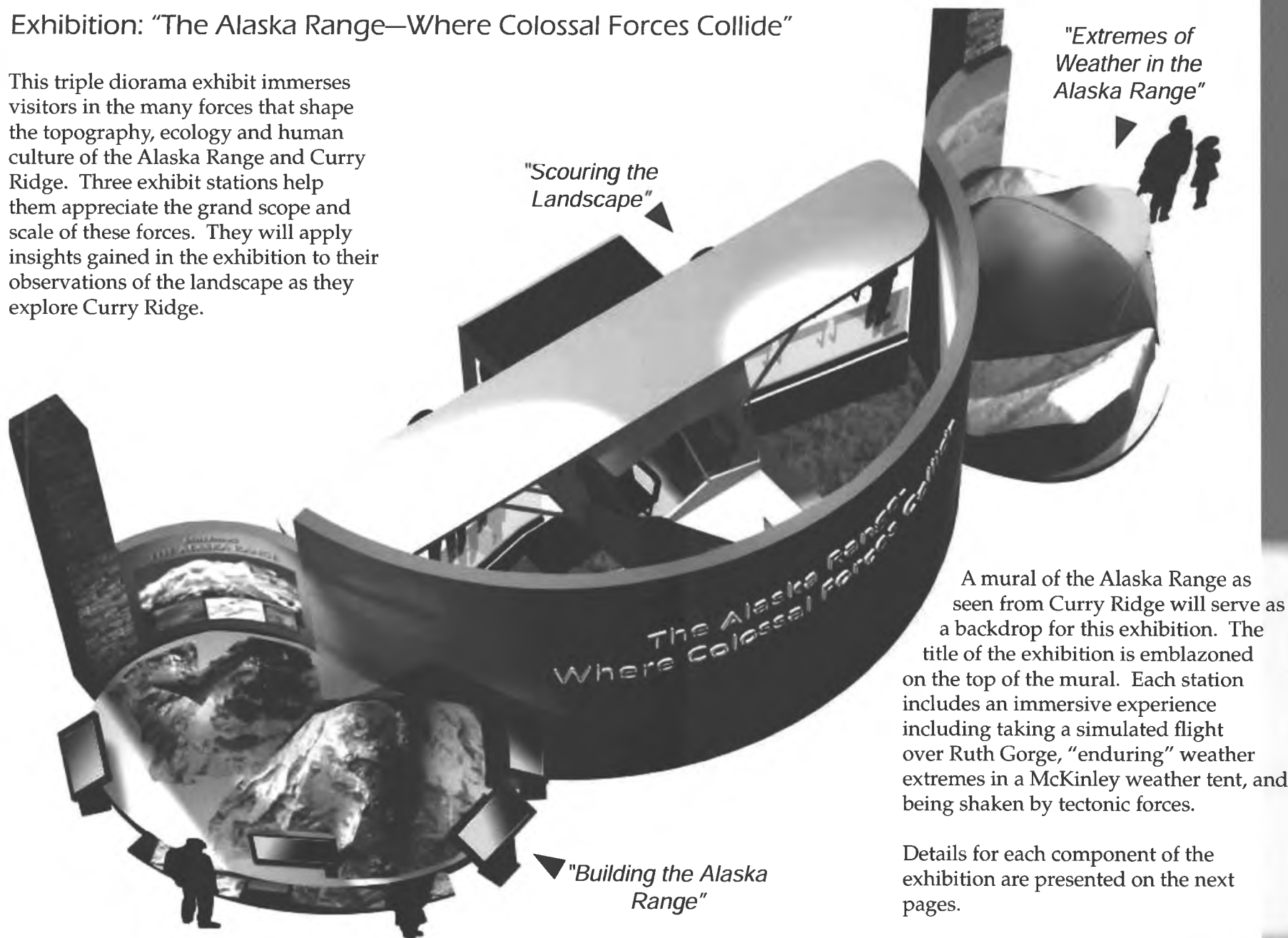
Description:

This map and its projection system will be conveniently placed in an exhibit alcove near the visitor information desk. A menu of projection options will allow visitors to choose various overlays such as fishing and hunting opportunities, camping, trails, etc. It will provide appropriate options based on length of visit and interests.



Exhibition: "The Alaska Range—Where Colossal Forces Collide"

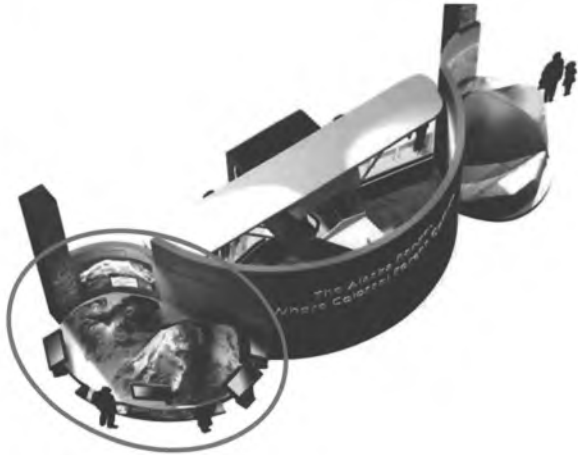
This triple diorama exhibit immerses visitors in the many forces that shape the topography, ecology and human culture of the Alaska Range and Curry Ridge. Three exhibit stations help them appreciate the grand scope and scale of these forces. They will apply insights gained in the exhibition to their observations of the landscape as they explore Curry Ridge.



A mural of the Alaska Range as seen from Curry Ridge will serve as a backdrop for this exhibition. The title of the exhibition is emblazoned on the top of the mural. Each station includes an immersive experience including taking a simulated flight over Ruth Gorge, "enduring" weather extremes in a McKinley weather tent, and being shaken by tectonic forces.

Details for each component of the exhibition are presented on the next pages.

**Exhibition: "The Alaska Range—
Where Colossal Forces Collide"**



Building the Alaska Range

Purpose:

To interpret the tectonic forces uplifting the Alaska Range and Curry Ridge and the rocks and minerals that make up the range.

Themes and Messages Interpreted:

Sub-Theme 2, Messages 2.3 a-c; 2.4 a-d

Objectives:

- Visitors will learn about the tectonic forces that shaped the Alaska Range
- Visitors will be physically engaged in learning the geologic history of the Alaska Range. They will view animations, operate mechanical devices, and feel rock samples.

Description:

Building the Alaska Range interprets the tectonic forces that have uplifted the Alaska Range and Curry Ridge. These concepts are interpreted around the surface of a prominent model of Mount McKinley. A 3-D animation of the forces shaping the Alaska Range is projected on a large flat-panel screen embedded in the mountain. The viewer stands in front of the screen and views the animation through 3-D glasses. A sub-woofer groans and vibrates in synchrony with colliding crustal plates,

slipping faults, and rising mountains. Near the animation, mechanical devices operated by the viewer will allow them to simulate slip-strike and vertical thrust faulting, crustal warping, and the uplift of the Mount McKinley pluton. A reading rail will have illustrations and a timeline of the building of the Alaska Range. Large samples of rocks and minerals are available for visitors to explore. This allows visitors to touch and see what makes up the Alaska Range (e.g.: Plutonic granite making up Mt. McKinley) and learn about their origins from text and graphics placed with the samples.

BUILDING
THE ALASKA RANGE



**Exhibition: "The Alaska Range—
Where Colossal Forces Collide"**



Extremes of Weather in the Alaska Range

Purpose:

To interpret how the Alaska Range intercepts moist air from the Gulf of Alaska and as the air lifts up the slopes extremes of weather are created that are dangerous to mountaineers.

Themes and Messages Interpreted:

Sub-Theme 3, 6

Messages 3.2 a-f, 6.1 a-h

Objectives

- Visitors will be surprised that, although Denali is a non-technical climb, it is one of the most dangerous due to the severe weather, avalanches and altitude sickness.
- Visitors will learn that Denali experiences some of the most severe weather in the world.
- In a game of survival, visitors will choose items that they would need for a two-week climb of Denali (with weather contingencies that could extend it to a month). They will be rewarded if they return safely.

Description:

A large mountain climber's base-camp tent is erected in a simulated glacial ice field. Visitors are lured into the tent by the frantic sounds of a two-way radio and the roar of mountain gale-force wind. The radio voice relates the drama of climbing teams stranded in relentless storms, enduring days of numbing stress from howling winds, crashing avalanches, and flapping tents. "Denali makes its own weather" has real-time readings of current weather conditions on the mountain. A flat panel screen illustrates the changing weather on Mount McKinley and adjacent peaks, especially the flow of clouds from the Gulf of Alaska up the slopes of the mountains, providing high amounts of clouds and precipitation on the windward side and low amounts on the leeward side. A graphic panel shows the relative precipitation at various points and interprets how the mountains affect the climate on the windward and leeward sides of the Alaska Range.



**Exhibition: "The Alaska Range—
Where Colossal Forces Collide"**



Scouring the Landscape

Purpose:

Using the Chulitna River and Ruth Glacier as examples, the exhibit interprets the landscape shaping effects of glaciers and rivers.

Themes and Messages Interpreted:

Sub-Theme 2, Messages 2.5 a-g

Sub-Theme 7, 7.1 a-f

Objectives:

- Visitors will feel the excitement and some of the sensations of a pilot-narrated flight-seeing trip over Curry Ridge, up the Chulitna River to Ruth Glacier, up the glacier to the Don Sheldon Amphitheater.
- Visitors will learn about how glaciers and rivers have shaped the landscape and created features such as Ruth Gorge.
- Visitors will be awestruck by the narrated facts about Ruth Glacier.
- Visitors will see glacial flour in the Chulitna River that limits opportunities for sport fishing.

Description:

An old, "authentic" Ruth Glacier flight-seeing ski plane invites visitors to "climb aboard" for a video tour of the Chulitna River and Ruth Glacier. It is positioned in front of a curved, icy, backdrop. Visitors wear headphones to hear the "pilot" narrate the tour. As the plane "takes off," a breeze blows over the viewer's faces and their seats vibrate to the roar of the engines. The tour begins with a flight over Curry Ridge down to the Chulitna River. The pilot relates that all of this river flow is melt water from the glaciers. He tells about the glacial flour that gives it the characteristic color. He points out that it flows through a valley that was once shaped by surging glaciers. Then it's up Ruth Glacier through Ruth Gorge, ending with a landing in the Don Sheldon Amphitheater. As the landscape floats by, the pilot points out the features and facts of Ruth Glacier. After completing the tour, visitors can walk nearby to touch glacier etched rocks, see rock flour in water and view graphics of Alaska Range glaciers and rivers.



Narration Excerpt: *The glacier's "Great Gorge" is one mile wide and drops almost 2,000 feet over ten miles with crevasses along the surface. Above the surface on both sides are 5,000-foot granite cliffs. From the top of the cliffs to the bottom of the glacier is a height exceeding that of the Grand Canyon.*

Exhibition: Life on Curry Ridge

Three habitat islands feature dramatic scenes such as cranes in tundra leaping in courtship dance, an underwater view of a moose submerged in a beaver pond, and a spruce grouse perched in a spruce tree. Each island is surrounded by a counter-like railing of tactile objects, embedded monitors, and other features that involve

the viewer in actively experiencing and investigating each habitat.

These dioramas engage the visitor's interest and they get involved by touching, listening, smelling and reading. The unusual perspectives in these exhibits give fresh insights into

these plants and animals. When visitors encounter them on the trails, they will have new-found appreciation for them.

Details for each component of the exhibition are presented on the next pages.



Life on Curry Ridge: Mountain Pond

Purpose:

To provide interactive experiences that help visitors learn about selected animals that live in and around Lake 1787.

Themes and Messages Interpreted:

Sub-Theme 1, Messages 1.6 d; 1.8 a, c

Objectives:

- Visitors will learn that Lake 1787, an alpine lake perched on Curry Ridge near the visitor center site, attracts a diversity of wildlife in both the open water and shoreline habitats.
- Visitors will interact with various tactile elements that illustrate fun features of a variety of animals that live in and near Lake 1787. Children will be delighted to crawl into a musky beaver lodge.
- Visitors will be awestruck by the size of a moose and physically engaged with the tangible features of moose embedded on the railing.

Description:

This island replicates a mountain pond environment, featuring a moose foraging near a beaver lodge. Kids can climb into the musky beaver lodge and peer out under the water.

On the rail in front are:

- Touchable relief sculpture of a wood frog, tadpole, and egg mass
- Button activated wood frog call
- Patch of moose pelt and a magnifying lens that allows viewers to touch the hair and see the hollow hairs
- Touchable casting of a moose track and hoof to demonstrate

paddle and weight-supporting abilities in snow and wetlands

- A touchable moose skull with antlers, rodent gnawing marks on it
- Touchable latex moose droppings, which change with a seasonal diet



Life on Curry Ridge: Alpine Tundra

Purpose:

To interpret tundra plants and animals and their adaptations to the harsh alpine environment of Curry Ridge.

Themes and Messages Interpreted:

Sub-Theme 1, Messages 1.1 a-j; 1.8 h

Objectives:

- Visitors will learn that alpine tundra, found in the higher elevations of Curry and K'esugi Ridges, is a miniature world of plants adapted to harsh conditions of sunlight, wind, cold, drought, and a short growing season.
- Visitors will study magnified embedded alpine plants and insect pollinators on a monitor to see and learn about adaptations for alpine survival. Visitors will push buttons to hear and learn about alpine birds including the sandhill crane and its fall visits for blueberries and "craneberries".
- Through the use of various senses to explore the exhibit, visitors will be actively engaged and rewarded with surprising information.

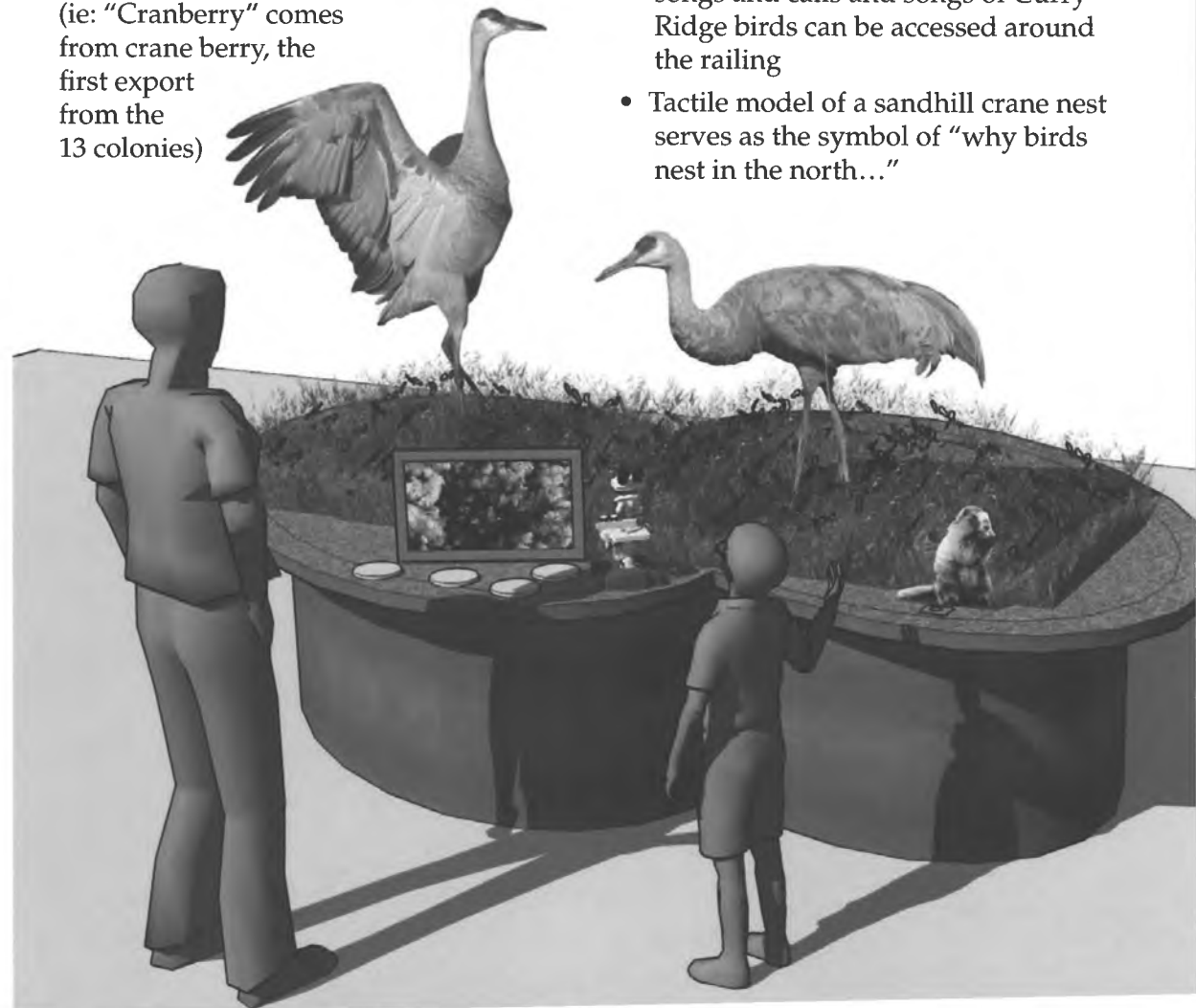
Description:

This island illustrates alpine tundra habitat, and features a pair of dancing sandhill cranes in a courtship display.

On the rail in front are:

- Tiny plants and berries embedded in resin that can be magnified on a monitor so viewers see hairy stems, waxy leaves, spreading roots, and other modifications for alpine survival. When an image shows on the monitor, interpretation relates the plant to the interests of the reader (ie: "Cranberry" comes from crane berry, the first export from the 13 colonies)

- Tundra insect pollinators embedded in resin to be viewed and projected. These include big, hairy bees and butterflies with qualities that make them successful in alpine habitats
- Touchable model of a hoary marmot with alarm call button nearby.
- Bird photographs and push-button songs and calls and songs of Curry Ridge birds can be accessed around the railing
- Tactile model of a sandhill crane nest serves as the symbol of "why birds nest in the north..."



Life on Curry Ridge: Willow, Alder, White Spruce Thickets

Purpose:

To provide interactive experiences that help visitors learn about selected animals that live in the sub-alpine thickets.

Themes and Messages Interpreted:

Sub-Theme 1, Messages 1.2 a-b; 1.3 a-b

Objectives:

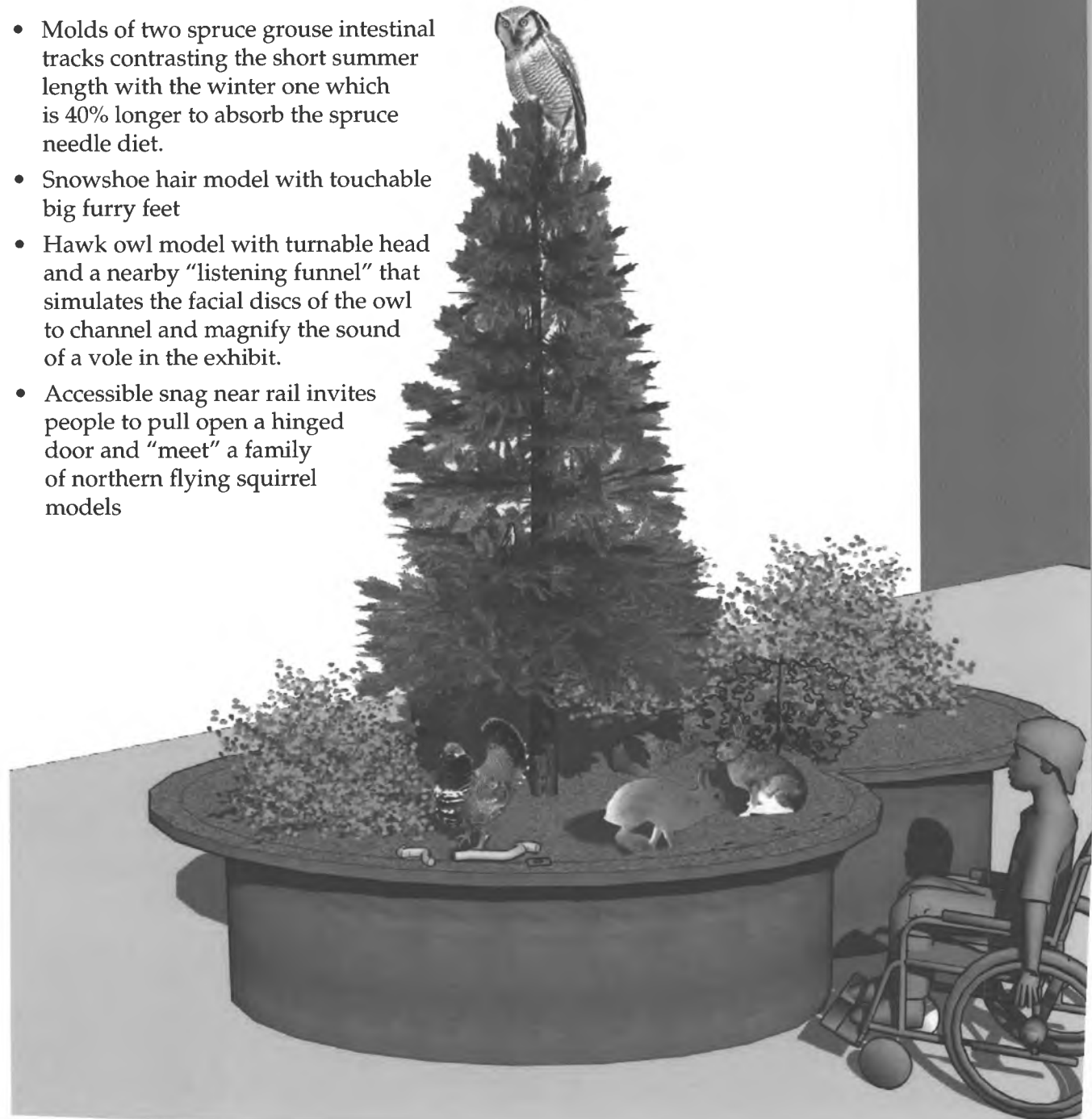
- Visitors will learn that the high brush thickets and spruce forests are a transition zone between lower forests and alpine tundra that provides significant browse and cover for mammals and birds.
- Visitors will interact with tactile models of parts of a spruce grouse, hawk owl and snowshoe hare that illustrate physical adaptations of these animals to survive in this habitat.

Description:

This island features a willow, alder, and white spruce thicket. Several tactile models of wildlife, such as red squirrels, spruce grouse, hawk owls, and snowshoe hares, encourage exploration.

On the rail in front are:

- Spruce grouse model with associated fringed and feathered foot, and pullout snow burrow, push-button sounds of the grouse



- Molds of two spruce grouse intestinal tracks contrasting the short summer length with the winter one which is 40% longer to absorb the spruce needle diet.
- Snowshoe hair model with touchable big furry feet
- Hawk owl model with turnable head and a nearby "listening funnel" that simulates the facial discs of the owl to channel and magnify the sound of a vole in the exhibit.
- Accessible snag near rail invites people to pull open a hinged door and "meet" a family of northern flying squirrel models

Object Theater—"Spirit of Alaska"

Purpose:

To provide an immersive theater experience that gives viewers a sweeping overview of the unforgiving Denali landscape and the people who have met the challenge. This theater is meant to surprise the audience and evoke a sense of adventure as the spirit of the Alaska Frontier unfolds around them. It is more experiential than factual. It is intended to excite people to want to see and do more during their Alaska adventure.

Themes and Messages Interpreted:

Sub-Theme 5, Messages 5.1-5.13;

Sub-Theme 6, Messages 6.1-6.4;

Sub-Theme 7, Messages 7.1-7.6

(Note: In the development of the script, specific messages will be selected that best achieve the purpose and objectives)

Objectives:

- Visitors will learn about the interior Athabaskan people and witness their spiritual connection to the land; that the promise of riches has beckoned adventurers and thrill-seekers since the late 19th century; and that the Chulitna and Susitna Rivers have been corridors for access to the Alaska interior.
- Visitors will be awed by the beauty and diversity of life in the Alaska Range and the Chulitna-Susitna River valleys and ridges.

They will feel amazement at the stories of mountain climbers, bush pilots, homesteaders and other adventurers drawn to this land.

- Visitors will be compelled to taste the spirit of Alaska by hiking the ridge, riding the river rapids, or chartering a flight.

Description:

The "object theater" has an arc of alcoves to the right, left, and above a HDTV format screen (e.g., Da-lite™ Cinema Contour 9' X 14' screen). Each alcove has a vignette of historic events complete with objects and artifacts that will be dramatically revealed through motion, lighting and sound during the course of the presentation. The alcoves are hidden behind scrim that reveal what is behind them when illuminated. The ceiling has undulating special scrim that transform the theater to a show of northern lights. A surround sound system for commercial theaters will provide the dramatic sound effects for the production ranging from roaring bush plane engines or a rushing waterfall to the gnawing sounds of a beaver or a calling family of Boreal Chickadees. The production will be stored and presented in a digital high definition format.

The audience is engulfed in an array of dreamlike experiences that give them insights into Athabaskan mythology about the "Tall One," Denali. Stories about Alaskan legends and real people personalize the history of this land. Theatrical lighting, surround sound, and dynamic video footage actively engage viewers in the presentation. The voices of sourdoughs, bush pilots, and '59ers, echo through the room. The room is filled with movement and surprises.

A veiled "stage" encircles the theater audience. As the story unfolds, lights mysteriously illuminate symbolic artifacts behind a scrim. Sounds, voices, and highlighted objects pull people's attention from one side of the room to the other. The theater is alive with the sound of life—the gurgle of a brook in one direction transitions to the roar of a bush plane in the other and the theater seats vibrate in response. A darkened room bursts into brilliant arcs of undulating color when the Aurora Borealis glows from the dancing drapery of the reflective ceiling. Periodically the large screen jumps to life with dynamic sequences of mountain sunrises or the thunder of an avalanche.



Entrances to the theater are to the right and left of a large door opening. On the corridor walls behind the opening are a series of large simulated theater posters. These interpretive panels are illustrated with dramatic headlines, text, photos

and graphics representing stories that are told in the theater: "Shem Pete's World: The Dena'ina of the Alaska Range"; "Gold Fever: Sourdoughs of Denali rivers;" "Tough as Nails: The Sourdough Expedition"; "Railroad Town: Alaska

Nellie's Curry Roadhouse"; "Bush Pilots of Talkeetna: Tales of Don Sheldon and Cliff Hudson"; "The 59er's: Staking a Claim in the Wilderness"; "The Parks Highway: Corridor to Adventure."

“Spirit of Alaska” Storyline Concept

Opening Scene—The theater lights fade and when the theater is dark and quiet, a raven call breaks the silence. A Dena’ina male voice quietly retells their ancient legend of how the Great Mountain was created. He describes the flight of a young brave who has taken a bride from the Raven Chief’s camp and paddles to escape the wrath of the chief. . . . The audience will see the dream-like silhouettes in their peripheral vision (shadows behind a scrim). As the tale reaches its climax the ceiling bursts into a shimmering Aurora Borealis and the Alaska Range and the towering Denali begins to glow on the screen.

Scene 1—Spectacular views of the summit of Denali are accompanied by the sound and feel of wind in the theater. Fly-over views ensue of the rugged mountain terrain under a low winter sun. The audience is immersed in the vast, wild landscape. A close-up of a calving glacier’s wall is transmitted with thundering sound and vibration in the theater. The camera follows the surging melt water to a stream with the glint of a gold nugget in the gravel bed. The screen fades dark.

Scene 2—The sound of water shifts to the side where a light begins to

illuminate a moving rocker box and sluice trough. The murmur of miners escalates to excited shouts of “Gold!” The voices fade and the sound of rag-time piano draws the audience’s eyes to the screen where historic black and white images of gold-town saloons appear. An argument ensues: Tom Lloyd, Kantishna miner says, “Bill (Bill McPhee, barroom owner, standing behind the bar) you know that Dr. Cook was a liar. He didn’t make the summit and every Alaskan knows it.” (Bill): “Tom, I don’t think anyone can climb that mountain.” (Tom): “I’ll bet me and some of my boys can do it!” (Bill): “I’ve got \$500 for anyone who can make the climb and prove if that fellow Cook made the climb or not.”

Scene 3—a series of old black and white photographs are projected on-screen of historic Denali climbing parties accompanied by verbal quotes from accounts of the Sourdough Expedition (e.g.: “Those guys had to be tough as nails”). Doughnuts and a thermos are illuminated on a side alcove. A flag on a spruce pole waves in a breeze. The Sourdoughs images slowly appear behind a scrim, near the spruce pole.

Scene 4—Theater goes dark, a raven call gives way to the distant whistle of a steam locomotive. An engine headlight



"...and as the Raven Chief's spear soared over the young brave, it struck the huge wave, turning it to a great stone mountain."

breaks the darkness. The sound grows louder. The seats rumble to a passing train as the whistle shrieks from one side of the theater to the other. Light strobes onto a Curry Station sign. Vintage video footage and stills tell the story of building the Alaska Railroad. The nearby town of Curry is featured, first as a construction landing, later as an overnight stop for travelers on the railroad. Photos of President Warren Harding show he was a guest at the Curry Hotel when he drove the golden spike at Nenana. The story of Alaska Nellie and her Deadhorse Roadhouse in Curry is told as a tale of a frontier woman who exemplified the spirit of Alaska. Adventurers climbing to Curry Lookout from the Curry Hotel are testimony to the lure of frontier Alaska. The last photo in the scene is of Cliff Hudson standing in the doorway of Curry Lookout. He is identified as a pioneer bush pilot. The light fades to black.

Scene 5—The sound of an airplane engine firing to life breaks the silence. A reproduction of the 1930's McGee Airways sign "Fly an hour or walk a week—keep sled dogs off runway" is illuminated behind a scrim. The engine roars for takeoff, reverberating through the seats, from Talkeetna and you fly over the Susitna River to Curry Ridge where you circle the Curry Lookout. You

enter a cloud and a raging snowstorm and an airman's voice describes his ordeal when his C123 breaks up over the snow-covered Curry Ridge. Historic film and photos of famous Talkeetna bush pilots, Don Sheldon and Cliff Hudson provides the images (perhaps add some re-enactment footage like some airmen waving frantically from the snow fields below) for the telling of their dramatic rescue of the airmen. Bush pilots are illustrated with historic film as the link to the wilderness and a lifeline for homesteaders, miners, and trappers. Cliff Hudson is seen bringing mail and supplies to a homestead is the transition to the '59ers and earlier homesteaders.

Scene 6—Artifacts from a homesteader's cabin (a cook stove, tools, furniture, etc.) are illuminated behind the scrim. Vintage film depicting the life of homesteaders in the Alaska bush is narrated in their own words. These contemporary pioneers are representative of the true spirit of Alaska.

Scene 7—The George Parks Highway, completed in the 1970's, connected Anchorage with Fairbanks and brought civilization to Susitna and Chulitna River homesteaders. This story is told through the words of Mary Carey, who had a homestead just up the road from

South Denali Viewpoint and petitioned the Governor to build the road. ("We already have two roads in Alaska. Why do we need another one?" responded the Governor). When the road was completed she opened McKinley View Lodge. The scene ends with a photo of Mary at her lodge that dissolves.

Final Scene—A bright, present-day view of the lodge reappears on the screen and you soar away from the lodge, above the valley. A voice invites you to "Catch the spirit of Alaska". A view into the river shows rafters on the Chulitna, and suddenly you are aboard a raft surging through swirling rapids. You are lifted from the rapids and soar above Curry Ridge where join happy hikers on their way to Curry Lookout. From the top of the ridge you look to the south as a train snakes along the Susitna River. You zoom in to see people waving from an observation car. Your attention is turned to a group of birdwatchers on Lake 1787 who focus their spotting scope on Pacific loons calling on the lake. You hear the sounds of insects and your focus is turned to a meadow of mountain flowers that turn to ripened berries and the rusts and golds of fall, and finally the silence of winter snows. The light fades on Denali and the Northern Lights once again dance above you in the theater.



President Harding drove the golden spike that symbolized the completion of the Alaska Railroad, dedicating it "to the men who suffered cold and defied death that they might write their page in history."

Outdoor Interpretive Media

The South Denali Visitor Center serves as a gateway to the real Alaska outdoors. A well developed network of trails is proposed in Chapter 5: Interpretive Facility and Site Development. Signage planned along the trails provide opportunities for interpreting actual resources and events that visitors are currently experiencing on the site. This is a powerful method for connecting visitors to the stories of Curry Ridge.

Standardized trail panels and supports are desirable for visual recognition by visitors. They should blend aesthetically into the environment, while also serving as comfortable visual icons, assuring visitors that this is a well maintained and safe place.

When interpretive signs are unified and designed for a specific site, they create a sense of identity and a familiarity to visitors that makes them more user friendly. The following are some considerations for creating a “family” of related signs at the Curry Ridge site:

Sign Supports

- Flat iron supports that are thematically designed for each individual panel.
- The hard metal is harmonious with the site and resilient to weathering and vandalism
- The low angled profile matches the horizontal lines of the environment
- The sculptural cutouts cast shadows and silhouettes of animals that accentuate the strong seasonal sunlight on site and create a dynamic aspect to each sign

Sign Panels

- Fabrication material will allow for full color printing and high resolution images.
- Preferred material is exterior grade, high-pressure laminate produced through a reputable, experienced fabrication company.
- At least a ten year warranty from fading and delaminating should be included in the specifications.

Sign Face

- The design of the sign face must be a response to bright sunlight, the vibrant colors of flowers and alpine vegetation, and the dramatic seasonal variations in hues and patterns on the ridge.
- Light colored backgrounds of flat color will reflect the intense light and can make reading text difficult. A quiet wash of color and pattern that still provides a contrast between letters and their background is desirable.
- The complexity of textures at this site requires that sign panels and supports exhibit some textural complexity as well if they are to “fit” the environment.
- All messages should be conveyed visually and verbally expressed as concise inscriptions of 60 words or less in the primary paragraph.
- Each panel should be designed to present an obvious message hierarchy. Varying font and graphic sizes should represent the relative importance of each message.

Denali Vistas Trail Panel—Conceptual Design

Stylized title font develops a personality for the family of signs

Bold, unified banner creates contrast and gains attention

A hierarchy of text and graphic sizes improves readability

Wood Frogs are Super Cool!



Have you seen any frogs hopping around Lake 1787?

Then you've seen a wood frog, the *only* amphibian in interior Alaska. They have an incredible ability to freeze solid in winter, and then thaw out and hop away in spring.

How do wood frogs survive an Alaska winter?

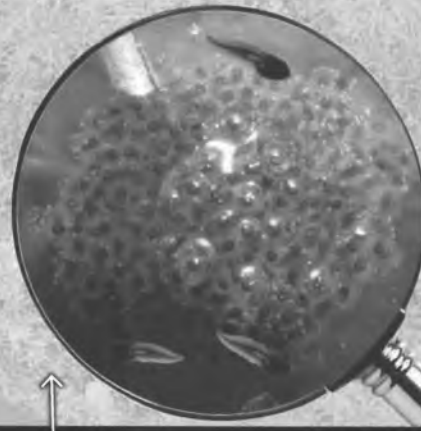
Antifreeze! Wood frogs protect their cells by pumping them full of glucose. They hibernate under leaves or soil insulated by the snow pack.



Frozen wood frog hibernating

Take a closer look...

Wood frogs deposit eggs in floating masses that absorb heat from the sunlight and speed their growth into tadpoles.



Watch for a small frog with a black mask and a white "mustache." In early spring listen for their "quacking" call when they enter the water to mate and lay eggs. The rest of the summer, see them hunting insects near the lake.



Press to hear the call of a Wood Frog



Touch a Wood Frog

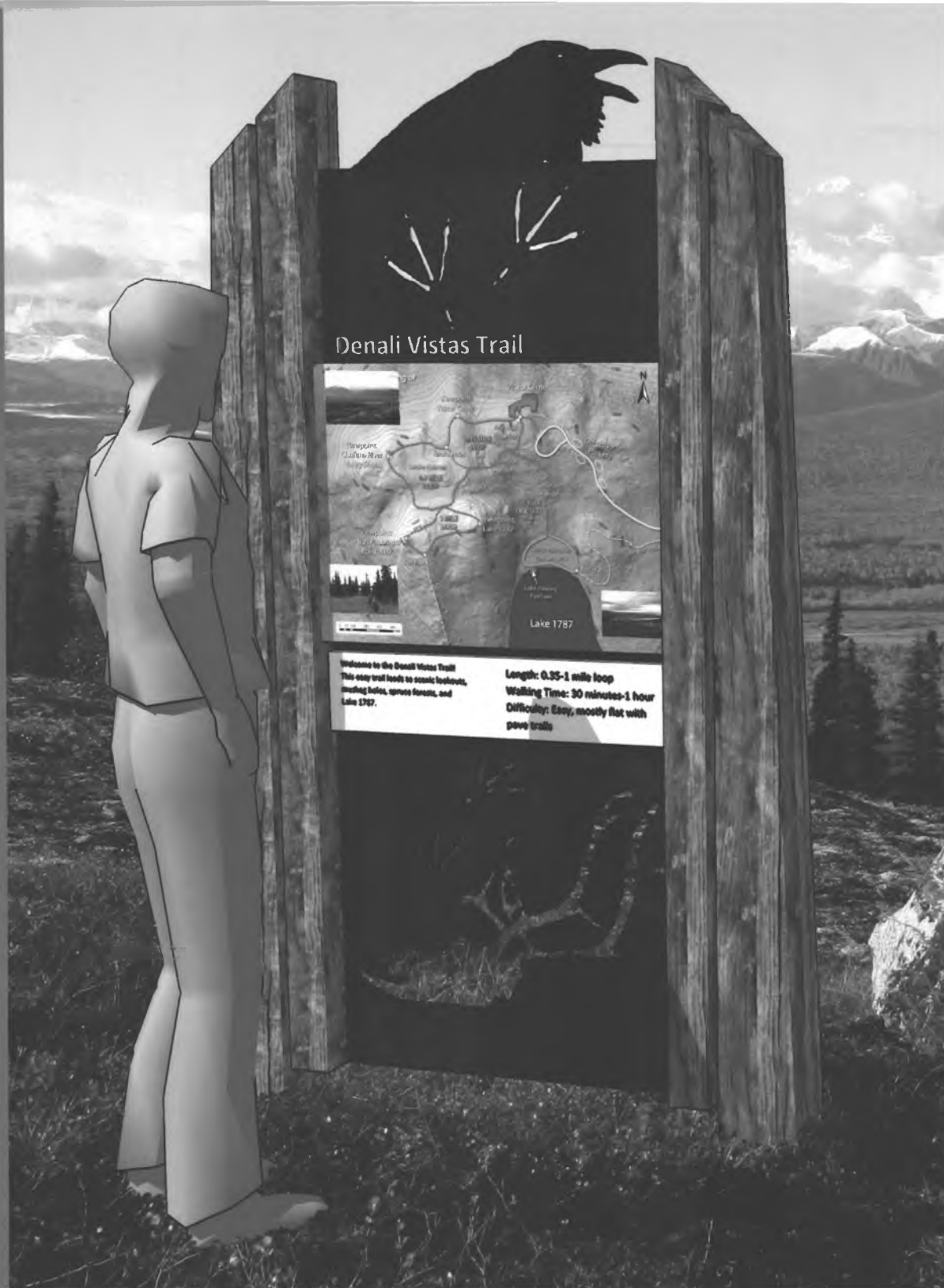
Thematic tint blocks separate sub-stories from the main ideas

Soft, thematic background reduces glare in a bright alpine environment

Audio units and tactile models provide a sensory experience

Colors can be changed for variety and to suit subjects

Ragged edges on photos and tint blocks mirror the vegetation and jagged lines of the alpine



Trailheads

Three trail systems are proposed near the South Denali Visitor Center. Trailhead panels will be installed at the main visitor center hub, as well as locations where different trails intersect. The panels provide basic information about each trail to visitors, while enticing them with promises of unique features and viewpoints they can experience.

Design features for the trailheads include:

- Each trailhead will be designed to express the unique features of each trail loop.
- Trailhead panels will be designed using support plates of iron and wood timbers for ease of maintenance, for a rugged appearance, and to resist weathering and vandalism.
- Positive and negative cutouts in the iron plates will reinforce the themes of each trail.
- The cutout iron images will be repeated in interpretive panels along the trails.

*The **Denali Vistas Trailhead** features a raven cutout with bird tracks and a caribou skull punched into the iron plate.*

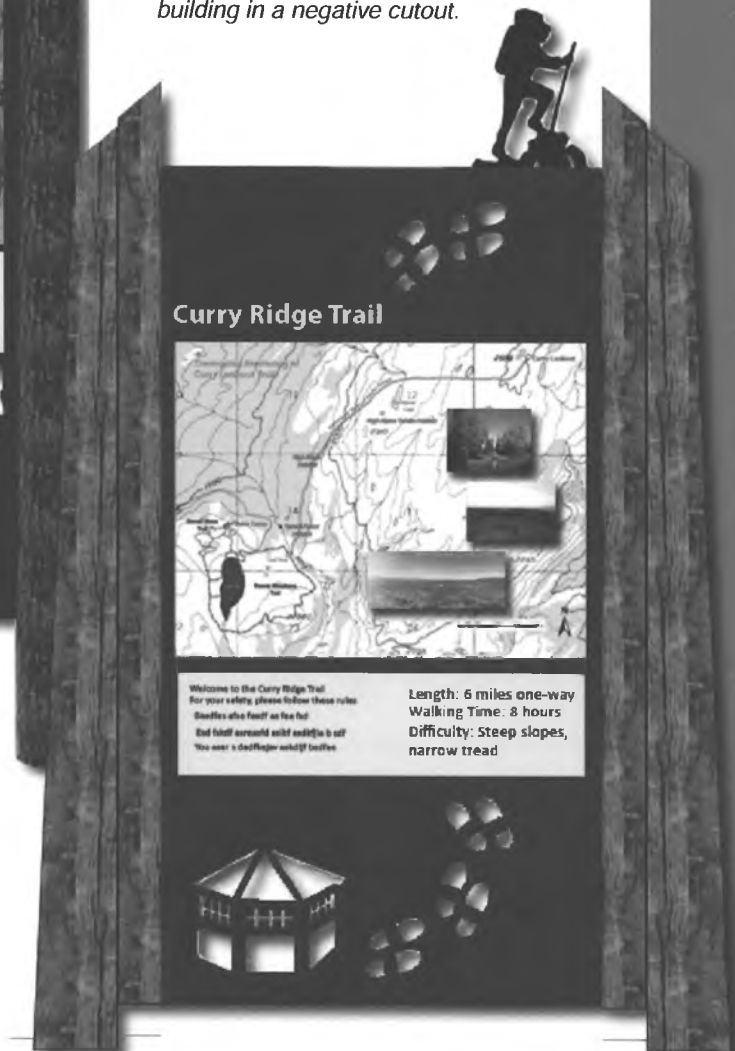
Each trailhead panel will include:

- A full color map that shows a simple trail layout and significant features. The map should be **oriented to the site** (“north” isn’t necessarily “up” on the map; instead, “up” will represent “straight ahead.”) The viewer’s current location will be clearly marked with a “You are here.”
- Basic information pertinent to hiking the trail, including length, estimated walking time, difficulty, wheelchair accessibility, elevation change, and safety precautions (wildlife encounters, changing weather, etc.)
- Photographs of trail features and a concise introduction to the theme of the trail.



The Beaver Meadows Trailhead is highlighted by a beaver cutout, a lodge, and a support with a beaver gnawing.

The Curry Ridge Trailhead shows a cutout of a hiker at the summit of the ridge and the historic Curry Ridge Lookout building in a negative cutout.



Golden Gate Canyon State Park, Colorado



Tijeras Pueblo Archaeological Site, New Mexico



The addition of tactile elements, audio units, and participatory devices on trail panels provides a memorable, multi-sensory experience for visitors.

Denali Vistas Trail Panels

The Denali Vistas Trail is a system of universally accessible trail loops that begin and end at the visitor center. It is expected that the majority of visitors will likely walk at least a portion of this trail. This is an ideal location for wayside exhibits that interpret the resources of Curry Ridge. The purpose of the trail is to connect visitors to the intangible meanings associated with the resources.

A series of 9 interpretive panels are proposed for the trail system. Each is associated with a specific viewpoint, unique feature, or habitat—places where visitors will naturally congregate.

The trail is designed to be an interactive and engaging experience for visitors. The signage should pose questions to readers, encouraging them to explore aspects of the site that may not be readily apparent. Focal point graphics and illustrations should be the primary means of telling the story, with associated concise text only where necessary. Tactile components and audio units should be incorporated into as many panels as possible, providing a sensory experience that goes beyond just sight.

Crowley's Ridge Nature Center, Arkansas



Denali Vistas Trail— Interpretive Panel Locations

1. Tiny But Tough

Tough

Visitor Center

Trail Hub

2. Boggy Soggy Muskeg

3. Arteries into the Heart of Alaska

6. Giants Carved this Land

7. Alpine Thickets

4. Alaska Range Viewpoint

5. Lake 1787 Viewpoint

8. Wood Frogs are Super Cool

Trail hub

9. Beaver Works

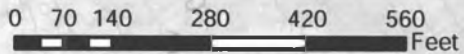
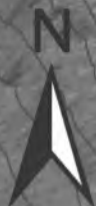
Lake Viewing Platform

Trail Hub

Beaver Meadows Trail

Beaver Meadows Trail

Lake 1787



Stop 1—"Tiny But Tough"

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.1 a-j

Lead Paragraph: Curry Ridge may look barren but look closely and discover a carpet of miniature plants. Welcome to the world of upland tundra.

Sub-message heading: Why are the plants so small?

These hardy little plants are adapted to dry winds, thin soil, and short growing seasons countered by cold winters. To survive these extremes, the little perennials grow slow, live long, and huddle together for shelter. Fuzzy stems, leaves, and buds protect them from freezing while their dark colors absorb warm sunlight.

Sub-message heading: A Kaleidoscope of Color

In spring, tundra plants burst into bloom to attract swarms of insect pollinators. By August, the tundra is lush with seeds and berries. By September, the ridge blazes in leafy rusts, reds and yellows as the plants prepare for winter.

Graphics: Close-up photos that illustrate the described plant adaptations. Include a photo of a krumholtz tree with the caption: Look for flag-shaped trees that have been sculpted by howling winter winds. These trees are called Krumholtz, meaning "twisted wood". Tundra animals could include ptarmigan (Alaska's state bird, affectionately called "Alaska chicken") and bears eating blueberries.

Tactile: Acrylic embedment of a representative tundra plant with labels identifying the adaptations, or bas relief models of common tundra plants.



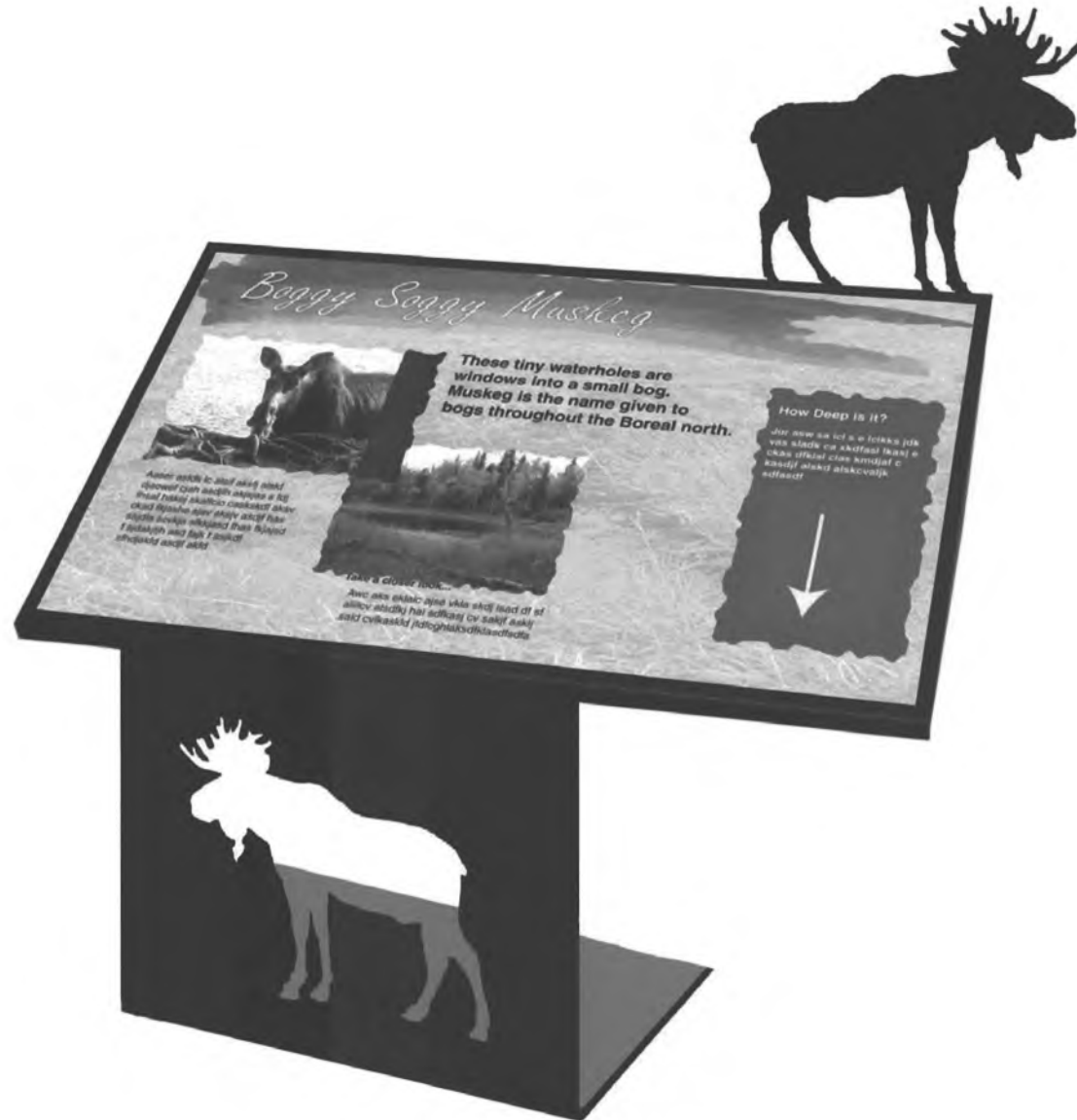
Stop 2—"Boggy Soggy Muskeg"

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.5 b

Lead Paragraph: These tiny waterholes are windows into a small bog. Muskeg is the name given to bogs throughout the Boreal north. Muskeg is found where poor drainage, cool summers and acidic water restrict plant decomposition. Eventually a buildup of dead plants in the water becomes overgrown with sphagnum moss, small shrubs or even stunted trees. Hiking across muskeg is like walking on a giant waterbed with the added danger of suddenly disappearing into the water below!

Graphics: Photo of muskeg bog in the campground/entry area with caption: Visit the muskeg bog on the Moose Flats Trail when you return to the Transportation Center.

Tactile: Acrylic embedment of sphagnum moss with a caption describing how, over time, they form deep peat beds. Model of a full-size moose hoof print.



Stop 3—"Arteries into the Heart of Alaska"

Themes and Messages Interpreted:
 Sub-Theme 1, Messages 1.5 c, 1.7 b
 Sub-Theme 7, Messages 7.1 a-g, 7.2 a-c,
 7.5 a-h ;

Lead Paragraph: You traveled here either on the Parks Highway through the Chulitna River valley or on the Alaska Railroad along the Susitna River. Travelers, be they fish, bird or human, have always used these rivers and valleys to access the Alaska interior.

Graphics: A map of the Alaska Range, Chulitna and Susitna Rivers, and Curry and Kesugi ridges, with the Parks Highway and Alaska Railroad corridors as prominent features.

Sub-Message: The ebb and flow of wildlife and people pulse with the seasons up and down the river valleys and through the mountain passes of the Alaska Range. Birds follow these corridors between nesting and wintering grounds. In spring, returning salmon are met in their birth creeks by indigenous bears. Winter rivers become highways for dog sleds and snow machines which surge back to rafting waters in spring. Travelers on the Alaska Railroad and

George Parks Highway follow the gentle inclines of these waterways.

Graphics: Salmon run photo on Troublesome Creek; bears fishing for salmon; birds commonly seen on Curry Ridge; dog sleds and rafts on the river.

Tactiles: Model of a salmon or a full-size black bear footprint.



Stop 4—"Alaska Range Viewpoint"

Themes and Messages Interpreted:
Sub-Theme 2, Messages 2.1 a, 2.3 a, c

Lead Paragraph: From this vista, on a clear day, you can see a line of mountains with glaciers cascading down their flanks. This narrow band of mountains, the Alaska Range, arches almost 600 miles from Lake Iliamna west of Anchorage to Canada.

Graphic: Physiographic map of Alaska highlighting the Alaska Range and indicating "you are here," Mount McKinley, Anchorage and Fairbanks.

Sub-Paragraph Headline: Bumping and Shoving Builds Mountains

Earth's crust is like a giant jigsaw of puzzle pieces (called plates) floating on molten rock. When one plate bumps into another, the land warps and buckles. The Alaska Range and Curry Ridge rise up as the Pacific Plate crushes against the North American Continental Plate. The Alaska Range is rising at the same rate that your fingernails grow!

Graphic: Illustration showing the plates and movements. Include and label the Denali fault. This could be developed as a tactile by including raised panel overlays that represent the plates.

Inset Headline: What's Up with the Weather?

The Alaska Range blocks the flow of moist air from the Gulf of Alaska and creates some of the harshest weather in the world. Mountain climbers know: It isn't the climb but the weather that kills. Heavy snows on the south slopes cause massive glaciers to swell. Ruth Glacier, visible to the north, is 3,800 feet thick. If it ever melted, the Great Gorge of Ruth Glacier would be deeper than the Grand Canyon!



Stop 5—"Lake 1787 Viewpoint"

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.6 a-f

Lead Paragraph: This alpine lake is a wildlife magnet because it is surrounded by sedge meadows, flowing streams, alder and willow thickets and stands of spruce. Watch for Pacific Loons, Arctic Terns, Long-tailed Jaegers, and Trumpeter Swans attracted here. If you're lucky, you might even see a swimming black bear or wading moose.

Sub-message: An Extreme Environment, alpine lakes are cold, nutrient poor and can support only simple food chains. Scientists use these isolated, sensitive, pristine lakes as early warning systems for global environmental changes.

Inset: What's in a name? In a state as big, wild, and new as Alaska not everything is named. Map makers can't wait for every feature to receive an inspired title. Lake 1787 was christened for its elevation above sea level!

Graphics: Moose swimming in lake. Air photo of Lake 1787 showing Beaver Meadows trail. Photos of birds identified in text.

Audio: Include a sound button that plays the different calls of a Pacific Loon. Perhaps add audio for other common lake birds.



Stop 6—"Giants Carved This Land"

Sub-Theme 2, Messages 2.1 m, 2.3 d, 2.5 a

Lead Paragraph: A glacier etched its signature into this bedrock. Surging rivers of ice gouged out the Chulitna valley and sent tongues of ice licking over Curry Ridge to smooth peaks and carve out bowls like Lake 1787.

Sub-message: Glaciers flow downhill carrying embedded rocks and gravel. The tremendous weight of the ice can cause these rocks to scratch into softer layers of bedrock creating glacial striations that point the direction of the glaciers movement. Graphic: Photo of etched rocks with arrow indicating direction.

Graphic showing Ruth Glacier with labels:

- *Glaciers still shape the Denali landscape. From here, you can see Ruth Glacier flowing down Mount McKinley into the Chulitna River Valley.*
- *Rushing water and rock spew from the melting glacier snout to form a terminal moraine of mixed stones and gravel.*
- *Like a giant conveyor belt, the flowing ice carries streaks of dirt and rock.*

Tactile: Piece of rock with glacial striations.



Stop 7—"Alpine Thickets"

Themes and Messages Interpreted:
 Sub-Theme 1, Messages 1.2 a-b; 1.3 a-b

Lead Paragraph: Thickets of white spruce, alder, willow and berry bushes fill the soggy swales of Curry Ridge. In summer, look for birds singing and feeding their young in these tangled perches. In fall, both Brown and Black Bears roam these thickets in search of berries. Moose browse the willow and alder in spring and fall.

Inset: Spruce grouse inhabit dense spruce forests feeding on berries and spruce needles. They are called "fools hens" because they often can be approached to within a few feet.

Graphics: Photos of common thicket shrubs (white spruce, Siberian alder, willow, etc.) and nesting birds that might be seen here (spruce grouse, juncos, warblers, white-throated sparrows, etc.)

Audio: Include a sound button that plays the normal peeping cluck call of a spruce grouse, and the low whining call of a male during breeding season.



Stop 8—"Wood Frogs are Super Cool"

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.10 a-c

Lead Paragraph: Have you seen any frogs hopping around Lake 1787? Wood frogs are the only amphibian in interior Alaska or north of the Arctic Circle! They have an incredible ability to freeze solid in winter, and then thaw out and hop away in spring.

Inset 1:

Graphic: Include a photo or illustration of a hibernating frog.

Text: How do wood frogs survive an Alaska winter? Antifreeze! Wood frogs protect their cells by pumping them full of glucose. They hibernate under leaves or soil insulated by the snow pack.

Inset 2:

Graphic: Include a photo a photo of a wood frog.

Text: Look for a small frog with a black mask and a white mustache. In early spring listen for their "quacking" call when they enter the icy water to mate and lay eggs. The rest of the summer, see them hunting insects near the lake.

Tactile and Audio: Include a model of a life-size wood frog and a sound button that plays its "quacking" call.



Stop 9—"Beaver Works"

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.9 c

Lead Paragraph: This slope was terraced by beavers. Look closely and you will see evidence of old stair-step dams that keep this ravine wet. Many animals depend on these wetland ponds.

Sub-message: Beaver dams slow the flow of water, filtering it and reducing floods and erosion. The beaver's constant pruning and tree cutting stimulates sprouts and new grow that are eaten by other wildlife.

Graphic: Photo of moose in water.

Sub-message: Diagram of a lodge with an underwater entry. Labels describe the following:

- Beavers build ponds to protect their lodges and create safe access to food. When the pond freezes they are locked in their lodges or under the ice until it thaws.
- They stick caches of aspen and willows in the muddy pond bottoms for winter food.
- The snug mud and stick lodges protect them from wolves, lynx and weather.

- On a cold winter day steam rises from a small vent hole in the roof.

Tactile: Scaly beaver tail with caption—
What use is this fat tail? It stores fat for the winter, warns the family of danger when slapped in the water, and provides a stable prop when chewing down trees.





South Denali Visitor Center Complex: Interpretive Master Plan

Chapter Seven

*Base Transportation Facility, Site,
and Media Development*

Development of the Base Transportation Facility

The Curry Ridge Visitor Center and ridge-top trail experiences are the premier attractions for visitors to South Denali. To preserve the wild and pristine quality of the experience, quiet and efficient shuttle trams will transport visitors 3.5 miles up to the center from a transportation hub. This base facility will include a transportation center, campground, ranger living quarters, nature trail, and other facilities to enhance the visitor experience. It will be built on a spruce/hardwood plateau just off the George Parks Highway across from the popular Denali View South Wayside.

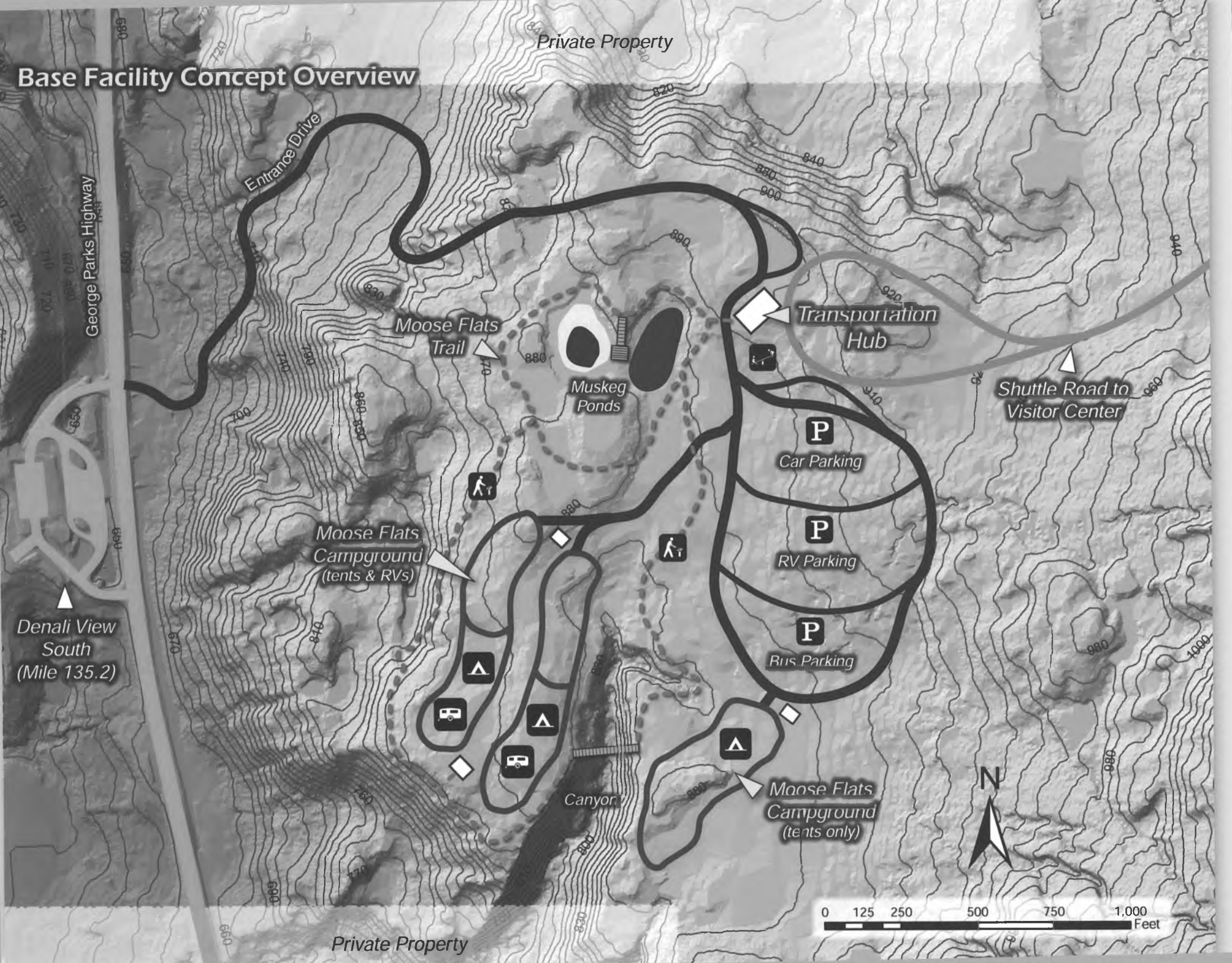
The philosophy applied to the base transportation facility development is that it should function as a transition from viewing the landscape from cars and motor coaches to an immersive outdoor Alaska experience.

The **Transportation Hub** building will orient visitors to the ridge-top opportunities for dramatic views, wilderness trails, and exhibits that interpret the landscape and its people. The hub will also provide information on attractions and opportunities available along the George Parks Highway Scenic Byway allowing visitors to plan other experiences after they leave Curry Ridge.

The “**Moose Flats Campground**” will offer tent and RV camping in a quiet forest setting. Campers will have easy access to wilderness trails where they can spend days exploring Curry Ridge.

The “**Moose Flats Trail**” will begin at a transportation hub kiosk and encircle the campground, then return to the hub. This trail features a diverse landscape that will provide rewarding discoveries and wildlife viewing opportunities.

Base Facility Concept Overview



Entry into the South Denali Visitor Center Complex

Entrance Signage

Alaska visitors on the Parks Highway are traveling fast. They make instantaneous decisions based on symbolic cues, a few words on a sign, and the look and feel of an intersection and a park entrance.

A well designed entrance quickly sets visitor expectations about the quality and purpose of a park visit. Signage must be appropriate to the site; it must be easily seen and understood by someone passing by at highway speeds and should naturally convey the theme and mood of this unique place. The size and scale of this structure should be commensurate with the grand scenery and the visitor experience. The sign and the surrounding landscaping must make a bold sculptural statement about the significance of this park. Highway signage, both north and south of this location should alert and prepare travelers as they are approaching the park entrance.

The sign supports and panel should harmonize with the natural materials found on site. The sign should incorporate other architectural elements used in the buildings and should be unified with a family of signs in the park. Some elemental materials that reflect the

site include stone, timber, and flat iron. It is anticipated that these materials will be used in the buildings, benches, and other trail sign supports. Repetitions of design (size, texture, color, and typeface) provide a reassuring and familiar patterns that subliminally guide first time visitors through this vast landscape. The sign should be unique but should incorporate elements of other state park entry signs; perhaps utilizing the same typeface, color, or supports. The state parks logo and the symbolic identities of other partners should be included, either on the sign panel or in an auxiliary location on the stone supports. It should prominently indicate that this is an information center for the George Parks Highway Scenic Byway.

Letter styles have character; each font has a unique personality. The clean sans-serif typeface used on many Alaska State Park signs conveys a visual message to motorists that is easily read and understood at a glance.

The conceptual drawing of an entry sign is designed to communicate that this is a high quality, nature related site. The powerful outline of Mount McKinley, coupled with a pair of northern hawk owls is intended to convey a dynamic

visual image to the casual viewer. To those with a natural history background, the hawk owl represents a true northern species, seldom seen in the lower 48 but common on Curry Ridge. This symbol promises visitors the possibility of encountering wildlife, but not necessarily the mega fauna of Denali National Park.

The stone wall anchors the sign to the site both visually and thematically and leads the eye from the roadway to the entry drive. The durable sign panel should convey a sense of rustic artistry that is reminiscent of earlier park architecture and yet compatible with other park signage. The owls, produced in relief and attached, provide dimension to the panel and can be readily removed or replaced if damaged.

The large stone pillar has a twofold purpose. It grounds the structure to the landscape, ending the visual movement of a viewer's eye along the rock wall, and in a practical way, it provides an appropriate support for displaying the brands or logos of participating partners without competing with the dominant focal points on the sign panel.

South Denali Main Entrance Sign Conceptual Design



Entry Drive

The drive into the park should prepare people for the ensuing experience and create a sense of anticipation. It should visually promise visitors a safe but exciting adventure. Scenic views and a meandering roadway are intended to gently ease motorists from the fast pace on the Parks Highway into a more relaxed mood.

The road way should seemingly undulate with the landscape and not appear to be cut and imposed into the terrain. The obligatory road cuts through this steep terrain should be softened and healed with stone and native plants. Objectionable views and artificial structures should be screened, and some road curves should be planned to give fleeting glimpses of mountain peaks and the river valley. Planners should consider cutting views into the forest and should design the roadway for opportunities to increase the mystery, variety, and beauty of this site to travelers.

The dramatic cycle of freezing and thawing in this country must be considered when designing this road. North facing slopes can present hazards

of ice retention and buildup. Prevailing winds blowing hard across the river valley can deposit excessive snow drifts in deep swales exposed to the west. Views of the transportation center should be revealed to visitors and they should feel as if they are discovering it. They

should not have to negotiate a crowded parking area on their journey to the building. It should be a culmination of their trip from the entry. Parking then becomes a simple event that does not detract from the excitement of discovering the center.



A curving entry road serves as a transition from the fast-paced Parks Highway to the natural experiences of South Denali.

Parking Areas

Large parking areas that accommodate RVs, tour buses, and cars should be buffered by islands of vegetation that screen the view of pavement and parked vehicles and reduce the perceived size of the paved areas. A series of smaller lots with screened landscaping is preferable to a large lot of continuous hard surface. Views from the Transportation Building should be screened so that cars and buses don't dominate the setting. The vegetation should include plantings of spruce trees to function as visual screens and sound buffers throughout the seasons.

Porous parking surfaces that permit water infiltration and reduce runoff should be considered. Perimeter and interior swales of landscaping should be considered for bio-retention filter areas that cleanse storm water runoff. Vegetation should be selected for their resilience to the effects of road salt, flooding, and sediment deposition. A drop-off loop near the transportation building should permit the unloading of buses, access by mobility impaired individuals, or passengers during inclement weather. It should approach the building without transecting the parking areas to avoid congestion and detracting from the experience of arriving at the center.



To minimize physical and visual impact, parking lots should be buffered with vegetation and incorporate porous parking surfaces, like this one at the River Legacy Living Science Center in Arlington, Texas.

Lighting should be kept to a minimum and directed downward to avoid light pollution. Media should be created that interprets the sustainable design practices used in the landscaping and engineering of the parking area and entrance road.

Transportation Hub Building

This facility will serve as a portal that buffers and regulates the concentrated visitation expected at this site. The purpose of the transportation hub is threefold. First, during the summer tourist season, it must function as a welcoming facility for large numbers of travelers who are waiting to take a shuttle tram to the top of Curry Ridge. They are in need of orientation, information, and inspiration to prepare them for their upcoming adventure. Secondly, this building must function as an off-season lodge, visitor center, and meeting facility. It should also contain living quarters for an on-site ranger. Finally, the building must serve “drop in travelers” on the George Parks Highway National Scenic Byway.

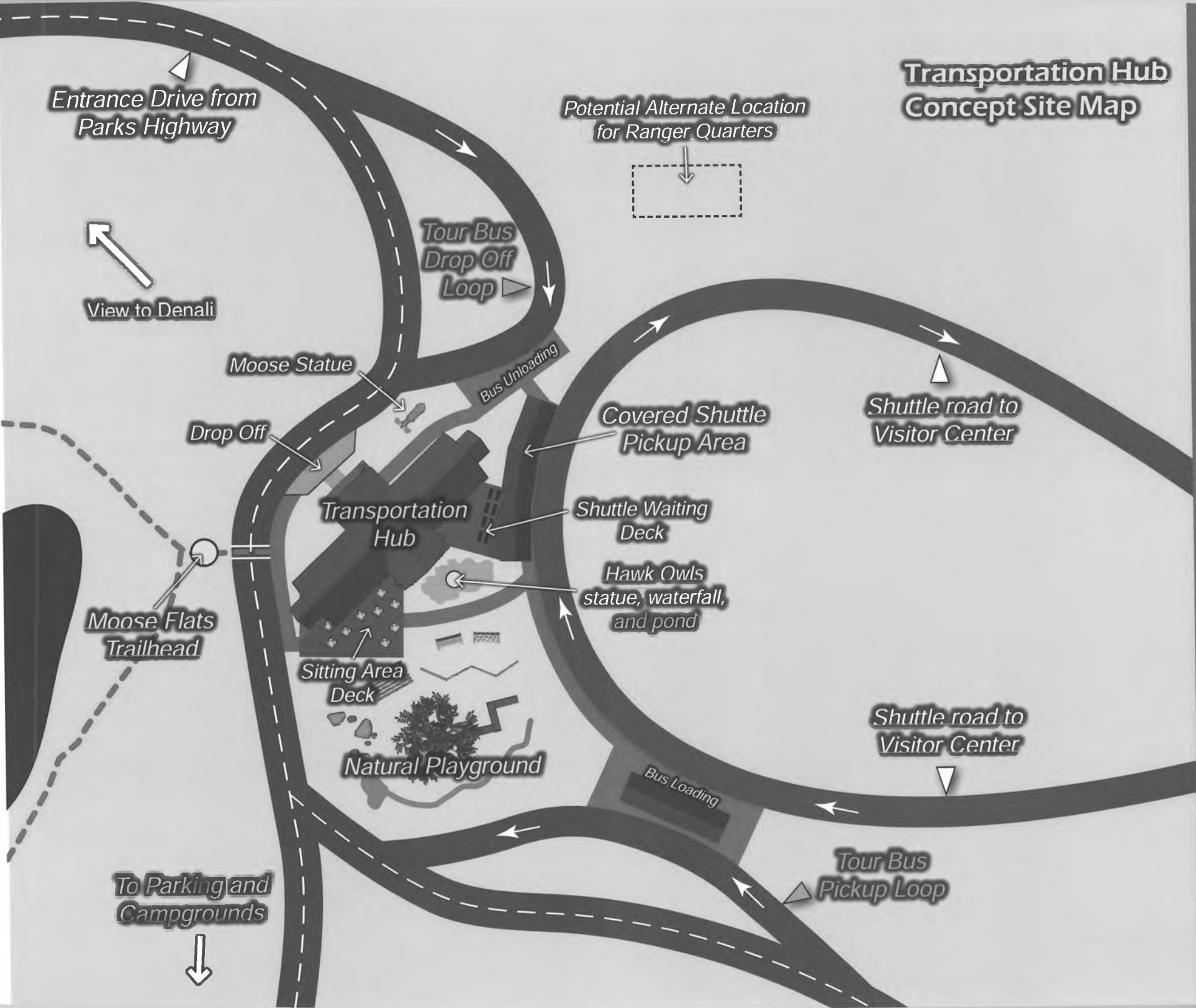
The transportation center is a gateway to South Denali. It sets the tone and forges visitors’ expectations for their entire experience. For many, a visit to Curry Ridge may be the only contact they have with Alaska State Parks and the National Park Service. This initial welcome must inspire and motivate visitors to take the shuttle up Curry Ridge to the visitor center. Facilities should suggest that this is a world class experience that is well worth their valuable time and expense. The exhibits in this area should accomplish four things: create an atmosphere that engenders a sense of

place; interpret the George Parks Scenic Byway; entice people to want to take the shuttle tram to the top of Curry Ridge for more immersive experiences; and inform people about the recreational opportunities in the park.

The image and design of this structure should draw from the rustic heritage of Alaska’s buildings while using today’s environmentally sensitive knowledge and technology. This building should harmonize with its surroundings, not dominate them. It should be designed in the same style as the visitor center on the top of Curry Ridge. There should be a repetition of design elements and materials that unite the two buildings and the trail structures and media at each site. It should promise visitors a quality experience, while enticing them to invest time and money in taking the shuttle to the top. Visitors should be so favorably impressed that they want to see more.

The nature of the diverse activities and audiences at this site require that this structure be versatile and able to change. It must be able to accommodate peak summer visitation of “drop in” highway travelers and scheduled tour coaches. It must also be a safe and warm winter lodge that is inviting to skiers and people accessing nearby trails with snow machines.

Transportation Hub Concept Site Map



Entrance Drive from
Parks Highway

Potential Alternate Location
for Ranger Quarters

View to Denali

Tour Bus
Drop Off
Loop

Moose Statue

Drop Off

Transportation
Hub

Covered Shuttle
Pickup Area

Shuttle road to
Visitor Center

Shuttle Waiting
Deck

Hawk Owls
statue, waterfall,
and pond

Moose Flats
Trailhead

Sitting Area
Deck

Natural Playground

Shuttle road to
Visitor Center

Bus Loading

To Parking and
Campgrounds

Tour Bus
Pickup Loop



The Denali National Park Visitor Center respects the "spirit of Alaska" in its architecture.

The hub building and media design are based on the following criteria:

- The building will pay homage to traditional Alaska design and a "spirit of Alaska" that will be further developed in the Curry Ridge visitor center. There should be an investment in quality landscape and architectural elements. The expediency that is often seen in seasonal tourism infrastructures should not be in evidence on this year-round site.
- The building will welcome and accommodate large numbers of visitors arriving in tour buses and private vehicles, which then pass through to the ridge-top shuttle trams. Organized tour groups should be segregated and channeled to a separate part of the loading ramp to better serve their needs.
- Shuttle loading and drop off platforms should be separated for optimal traffic flow. Bus and passenger delivery and pickup loops should be designed to facilitate safe and efficient group arrival and departure. Pedestrian crossings of the entry road should be minimized or nonexistent.
- The building will serve as a transition to the ridge-top experiences and have facilities limited to information media and services, bathrooms to accommodate peak visitation, and snack/beverage service. It will provide for visitor comfort and safety and will serve as an invitation to explore the park in greater depth.
- The building will provide staff housing and office space.
- A small kitchen will serve the public as well as luncheon preparation and staging area for the visitor center meeting room on Curry Ridge.
- The rustic interior and outdoor design will be accented with hand carved furnishings (chairs and tables), chainsaw animal sculptures, and authentic Alaska homestead cabin artifacts (e.g.: gold pans, traps and furs, snowshoes, caribou and moose antlers, etc.).
- Space will be dedicated to information services for the George Park Highway Scenic Byway Corridor with supplemental information available from staff at the reception desk.
- This building will be versatile to meet summer and winter uses and changing visitor needs.
- This building site must be designed to accommodate change and expansion (perhaps a campus of buildings) for future visitation.

Interior Design of the Transportation Hub

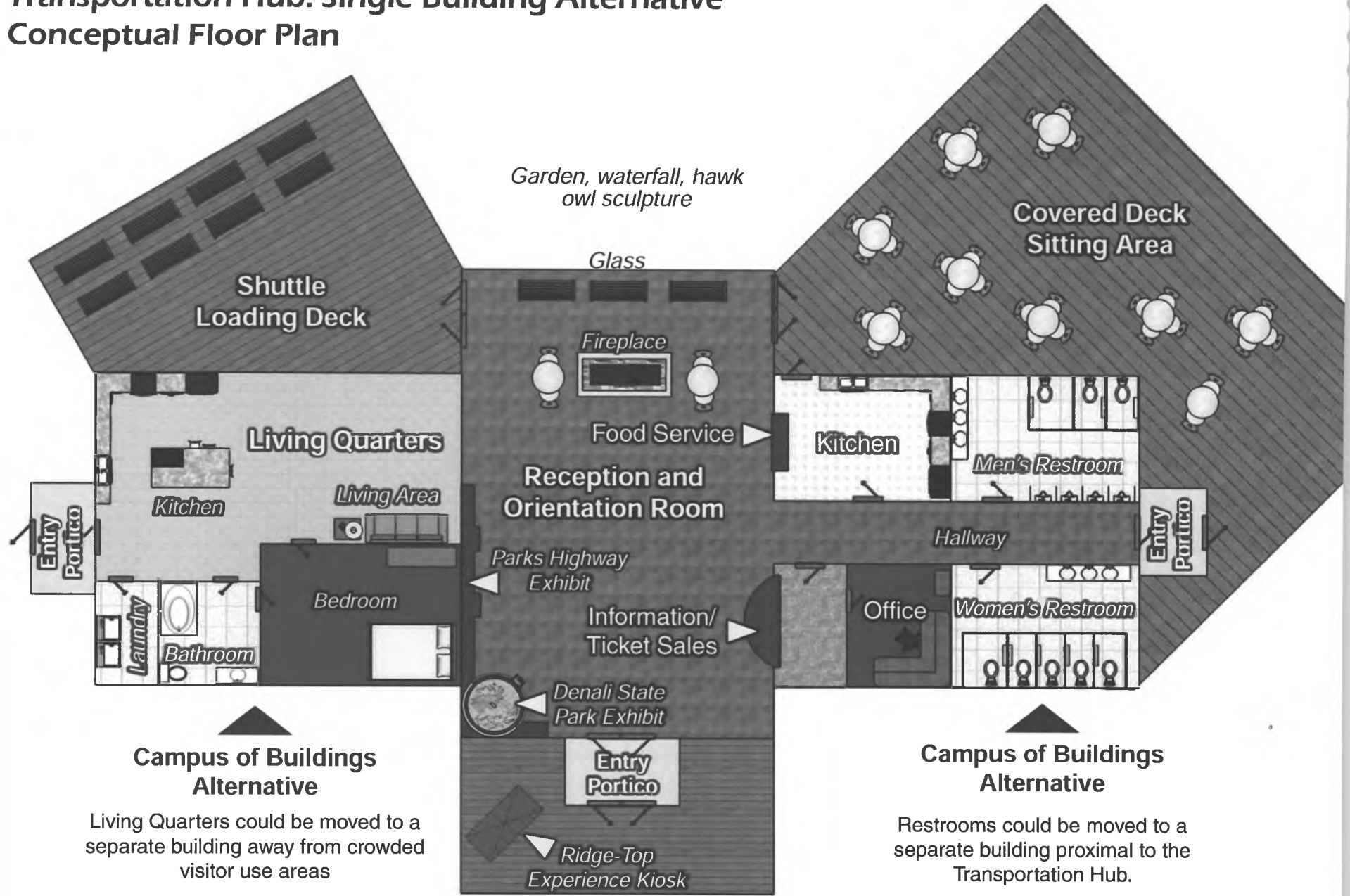
This building must be designed to accommodate peak numbers of visitors arriving in tour buses and private vehicles and be versatile enough to serve as a winter lodge and meeting room during the non-tourist seasons. It must contain very large, open, and multi-purpose space. Visitors must feel welcomed by both the warm architecture and the sense that they know where to go. Wayfinding is paramount to this building functioning successfully. A fluid circulation of visitor traffic is essential throughout this facility if people are to have a satisfying experience here. No matter how crowded the lobby, there should be corridors (interior and decks outside the main lobby) available to permit unrestricted flow to the shuttle tram waiting areas and to restrooms. Roofed decks, porches, and shuttle tram stations should invite visitors to relax in relative comfort while absorbing the overflow of peak visitation crowds.

Restrooms must be easily seen, accessible from multiple entries and exits, and capable of serving coach-sized groups of visitors. People returning from the shuttle tram, waiting outdoors, or coming off trails should have access to restrooms without reentering the main lobby area.



Large, spacious areas, like this lobby at the Everglades National Park Visitor Center, are essential for serving crowds of people at peak visitation times.

Transportation Hub: Single Building Alternative Conceptual Floor Plan



Total approximate size: 3,300 sq. ft.

Entry Portico

This initial entry to the building must be spacious and be visually inviting to arriving visitors. It should offer a direct line of sight into the grand lobby. This sunny vestibule will serve as an airlock and buffer in cold winter conditions. It should be universally accessible with wheelchair accessible ramps, doors, and a hard surface that provides safe traction even during icy conditions. A floor grid is essential for collecting mud and snow before people traverse the lobby. If possible, direct solar heat should be incorporated to help heat this room. The floor and walls should be designed as an absorbing heat mass.

A covered walkway leading to this portico will permit rapid entry and provide a space for people to shake off umbrellas and other wet raingear. It also assures a dry safe walkway during the lingering seasons of sleet and wet snows. Trail lights, directed down over the walkway, should be designed for winter use.

Restrooms

A restroom visit is a priority for travelers. The most frequently asked question at a visitor center desk is, "where are your restrooms?" Ideally this question should be answered by direct visual wayfinding. A new arrival should see the door immediately and not have to ask an attendant for directions.

Restrooms are excellent demonstration and education sites. Every opportunity for sustainable design should be incorporated here. Waterless urinals, low flow flush toilets, and even a satellite toilet building with composting capabilities should be considered for use at this location. Light meters that dim when there is sufficient daylight should be used. Efficient blower hand dryers should be used for energy efficiency.

There must be multiple entrances and exits to these restrooms to serve the surges of users that are dropped off in groups from travel coaches and shuttles. Restroom capacity must be based on visitation peaks and not averages.



The restroom entrances at Wrangell-St. Elias National Park include a bulletin board, roofed seating, and drinking fountains.



A high ceiling and open floor plan, like the Wrangell-St. Elias National Park Visitor Center, convey a sense of spaciousness even during crowded periods. Rustic architecture reflect the themes of South Denali.

Reception and Orientation Room

This room must be spacious. A high ceiling will help to create a sense of openness even when people crowd the floor surface. Stone pillars, walls, and wood timbers or log beams should accent the interior and be reminiscent of rustic architecture of the 1920s and 30s era of grand park design. A sense of place should be created with photos and objects (described in detail in media section).

If possible, large windows should feature a framed view of Denali. In the least, a large painted mural of the mountain as seen from this perspective should be a focal point in this grand room. Directional signage and wayfinding cues should be designed for maximum crowd conditions and placed high above the heads of people standing in the room. Primary circulatory routes through this room should be anticipated and kept free from exhibits, furniture, and other points of interest that can cause congestion. Doors for restrooms and shuttle tram loading platforms must be clearly identified and easily accessed. The food service counter should be signed in the same manner as the restrooms, shuttle deck and information desk.

A reception desk, with a wheelchair accessible area, should be far enough away from the door to avoid creating a

traffic barrier but easily seen by anyone entering the room. It must be well lit and be able to permit multiple staff members to interact with visitors when needed. Signage hanging above it should assure that it is identifiable even when the room is filled with visitors. An office should be proximal to this desk to facilitate daily cash counting and other business that is best done behind a locked door.

Chainsaw art benches and rustic tables should be considered for the lobby and waiting areas. This will add to the "Alaskan sense of place" and the rustic early park style of architecture and the ambiance that is introduced by the entry sign, the winding drive in that hugs the topography, and the organic nature of the building itself. There is timelessness to the wood that is carved for each unique piece of furniture.



If possible, viewing windows in the reception area should frame a view of Denali. Princess McKinley Lodge.

Service Counter and Kitchen

A snack bar and coffee service will be operated by a private concession. The kitchen will be equipped with minimal food preparation equipment beyond a refrigerator, microwave oven, and coffee makers. Bakery and other food products will be prepared off-site and simply warmed or kept refrigerated here.

A serving window to the interior lobby should also be close to exits to permit easy access to the extensive decks and shuttle waiting areas outside. Tables, both inside near the fireplace and on the decks should encourage a relaxed environment for casual food consumption.

The operation of snack bars/coffee service and food catering is a specialized service that is most efficiently managed by private contractors. There are successful local bakeries and restaurants that are capable of expanding their services to meet the needs of this concentrated market of potential customers gathering at the Transportation Hub and Visitor Center. It is expected that many people waiting for the shuttle trams will welcome the opportunity to purchase coffee, tea, and rolls.

Ranger Living Quarters

The two basic theories of building design are to either maintain a campus of buildings including free standing restroom buildings and a separate structure for a ranger residence, or to maintain a smaller but more concentrated footprint with only one heated building, a large structure with select rooms to be unheated unless occupied. The latter is the most efficient in terms of energy use and construction materials and costs. Having the ranger quarters proximal to other plumbing that require heat reduces the off season need for heating large spaces.

In either circumstance, the living quarters should be buffered from the public areas of the facility. It must be accessible to after hour's visitors and should be positioned to permit the resident to visually monitor the site.



Wrangell-St. Elias National Park used a campus concept for their visitor center development, with separate buildings for the information center, exhibits, meeting room, and restrooms. This is an alternative that could be considered for the transportation hub.



An outdoor eating area, like this one at Denali National Park, should be provided adjacent to the base facility snack bar.

Media for Transportation Hub

The transportation hub is a gateway to South Denali; it should serve as a transitional experience that prepares people for a personal and sensory experience in the environment. It must be a portal that excites people about the possible adventures that can be found here, that orients them to the site, and prepares them to be environmentally responsible guests.

This hub is not intended to compete with the more immersive adventure

that awaits them at the visitor center on top of Curry Ridge. The landscape and architecture should include visual organizers and subliminal cues that infer that this is a premier Alaska experience. Posters, videos, and other media should “advertise” the Curry Ridge adventure.

The South Denali Visitor Center on Curry Ridge will house major exhibitions, an object theater, and trails that will be a premier attraction for regional visitors.

Interpretive media for the transportation hub will be limited to four purposes:

- To provide information on the George Parks Highway Scenic Byway
- To engender a sense of place for South Denali
- To orient visitors to the ridge-top experiences
- To provide information on Denali State Park



George Parks Highway Scenic Byway Exhibit

Purpose:

As stated in the Corridor Partnership Plan, "An information system linked to interpretation would accomplish several objectives for the byway: To orient travelers, to provide travelers with information on byway opportunities, and to encourage visitors to frequent local businesses and attractions" (page 54).

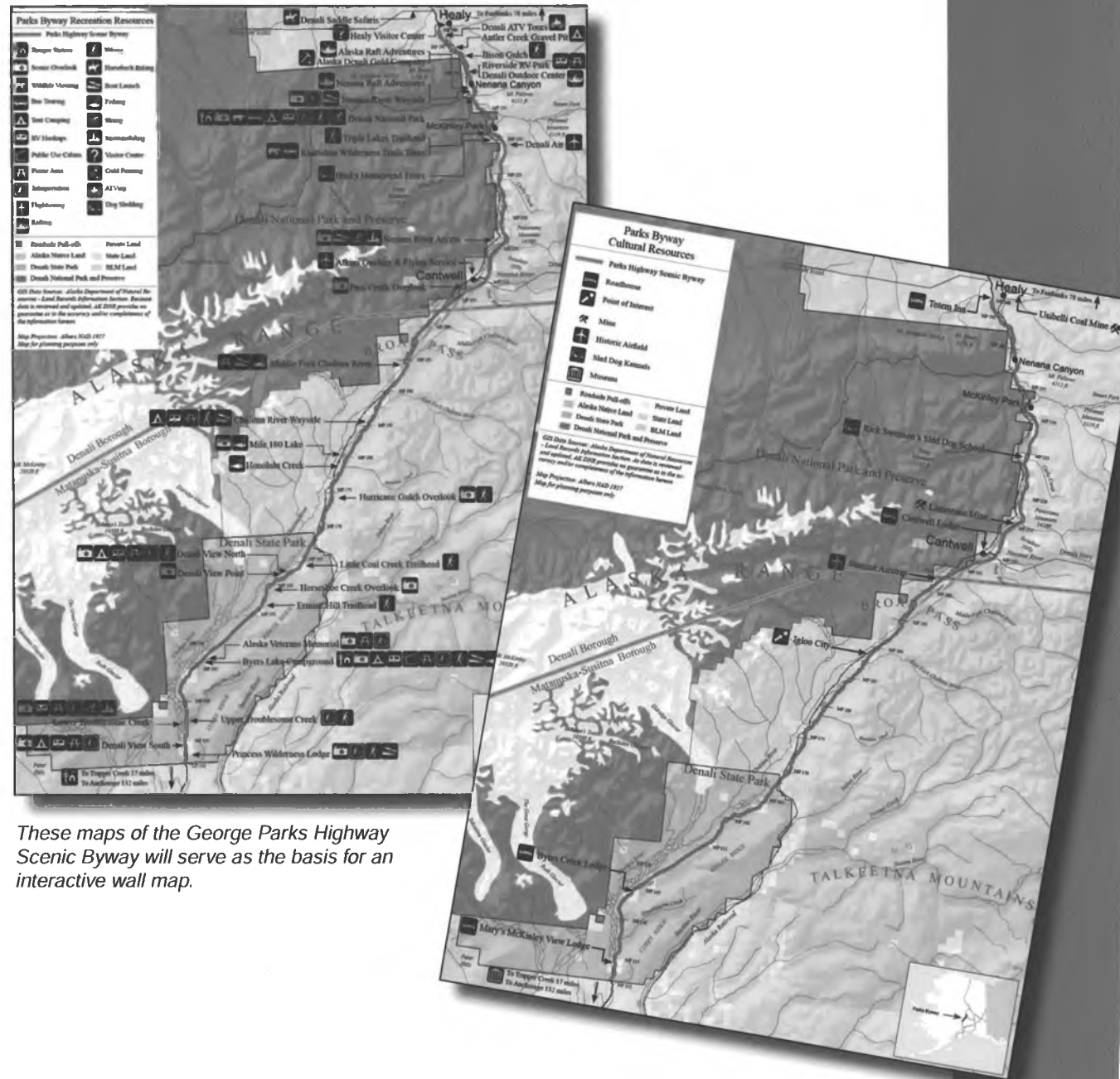
Themes and Messages Interpreted: Sub-Theme 7, Messages 7.5 a-h

Objectives:

- Visitors will use the interactive map, brochures and touch screen computer to learn about the recreational opportunities along the byway.
- Visitors will be introduced to the cultural and physical geography of the byway.

Description:

A large interactive wall map will engage visitors in exploring the opportunities on the scenic byway. This media will include an interactive push-button map of the byway, a rack filled with brochures of attractions along the byway, a photo montage, and a touch-screen information system. This will be supplemented by information services at the front desk.



These maps of the George Parks Highway Scenic Byway will serve as the basis for an interactive wall map.



Artifacts in the Trapper Creek Museum engender a "sense of place" in this region.

A Sense of Place in South Denali

Purpose:

These objects and photos will engender a "sense of place" associated with South Denali and the George Parks Highway Scenic Byway.

Themes and Messages Interpreted:

Sub-Theme 7, Messages 7.4, 7.6

Objectives:

- Visitors will perceive those characteristics that make South Denali special or unique.
- Visitors will feel like they are visiting the "real Alaska" that drew them here as tourists.

Description:

Large wildlife photos and mounted specimens along with artifacts such as snowshoes, moose and caribou antlers, a beaver pelt on a willow frame stretcher, hand tools, gold pans, traps and furs, and photos of homestead cabins will festoon the wall opposite the restrooms, information desk, and snack concession. A large photo mural or painting of Mt. McKinley as seen from Curry Ridge with Lake 1787 will be mounted on the fireplace as a focal point and as an incentive to see that view for one's self.

The "theater posters" recommended for the entrance to the "Spirit of Alaska" theater could be replicated here. These interpretive panels are illustrated with dramatic headlines, concise text, photos and graphics that encapsulate the human stories of the South Denali Region: "Shem Pete's World: The Dena'ina of the Alaska Range"; "Gold Fever: Sourdoughs of Denali rivers;" "Tough as Nails: The Sourdough Expedition"; "Railroad Town: Alaska Nellie's Curry Roadhouse"; "Bush Pilots of Talkeetna: Tales of Don Sheldon and Cliff Hudson"; "The 59er's: Staking a Claim in the Wilderness"; "The Parks Highway: Corridor to Adventure."



Touchable objects at the Denali State Park Information Desk in the Mt. McKinley Princess Lodge provide participatory activities for visitors.

Preparation for Ridge-Top Experience

Purpose:

These media components will provide advance organizers for the visitor experience on Curry Ridge. They introduce the site, list planning considerations, and provide justification for the investment of time and money.

Themes and Messages Interpreted:

Primary Theme Statement

Objectives:

- Visitors will be oriented to the recreational opportunities on Curry Ridge.
- Visitors will feel a trip to the top is a worthwhile investment of time and money.

Description:

A kiosk on the front deck will greet visitors as they enter the building. This kiosk will provide photos and information that show the opportunities and experiences on Curry Ridge. The structure will be a standard upright panel with a small roof.

Two large flat screen monitors on the right and left of the fireplace will provide captioned (no sound) views of the ridge-top experience. As visitors enjoy a beverage and snack, they will see dramatic scenes of the shuttle ride up,

trails, scenery, wildlife, and the services and media in the visitor center. The video monitors will show a continuously looping program limited to 8 minutes or less.

A series of panels should be developed for the shuttle tram waiting area that prepare people for their ridge-top experience. One panel should focus on the trails with photos of scenic views, encounters with wildlife, and beautiful flora. It should inform people what they will need to bring with them for a trail adventure (this is their last chance to grab something from their vehicle).

Another panel should inform people about the “can’t miss” experiences in the visitor center, such as the exciting object theater, building the mountains of the Alaska Range, and flying over the Chulitna River.

A final panel should positively focus on safety, alerting visitors to potentially dangerous encounters with wildlife (black bears, grizzly bears, moose) and how to avoid them, as well as preparing for weather conditions that can change quickly.

Waiting areas, such as the train platform at Denali National Park, are excellent places for interpretive media.





3-D Topographic Projection Map of Denali State Park

Purpose:

To provide a fun, easily understood, interactive map experience that encourages visitors to plan their visits in a holistic manner. Options will be presented based on visitors' planned length of visit, preferred activities, physical ability, etc.

Themes and Messages Interpreted:

Sub-Theme 8, Messages 8.1-8.11

Objectives:

- Visitors will learn about the range of recreation opportunities and special features of the park as they push buttons that project images such as trails, roads, boundaries, interpretive features, and access points.
- Visitors will plan their visit to the park based on the information provided.

Description:

This map and its projection system will be conveniently placed in an exhibit alcove near the visitor information desk. A menu of projection options will allow visitors to choose various overlays such as fishing and hunting opportunities, camping, trails, etc. It will provide appropriate options based on length of visit and interests.

Amenities Near Transportation Hub

Wildlife Sculptures

Visitors to this site are seeking ways to document their visit through photographs. A picture of themselves with Mount McKinley as a background is probably the most sought after souvenir. Photos of charismatic mega fauna like bears, wolves, and moose are highly valuable but difficult to obtain. The simulated bronze wildlife sculptures at the Mt. McKinley Princess Lodge (Mile 130, Parks Highway) are extremely popular photographic subjects for visitors to pose with.

Large bronze sculptures express a sense of elegant importance attributed to the chosen subject. Moose are resident wildlife common to Denali State Park and symbolic of wild Alaska. A graceful sculpture of a moose in front of this transportation center could provide an iconic focal point to welcome arriving visitors. It would also be a photo documentation station for visitors waiting for the shuttle.

The view from the Transportation Hub out to the shuttle loading area is softened by a tranquil natural garden of native shrubs and wildflowers, bird feeders, a small pool of recycling water, and a graceful bronze statue of a pair

of hawk owls. An interpretive panel gives suggestions for attracting wildlife to backyard plantings and feeders and addresses the unique species, like hawk owls, that are found on Curry Ridge. Visitors waiting for the shuttle tram while enjoying a cup of coffee can learn about the special creatures adapted to living on the Ridge. Species like hawk owls are an uncommon northern species

that will excite birdwatchers. They are also an animal that can be rendered gracefully in the tops of sculptural trees. Sandhill cranes are yet another Curry Ridge bird suitable as a sculptural subject. These sculptures are an appropriate blend of artistry and science that makes a statement about the quality of this site and experience.



A traveler to Cody, Wyoming poses for a picture with a bronze moose sculpture. Wildlife sculptures reinforce the themes of South Denali, while providing photo opportunities for visitors.



Examples of natural playground elements

Natural Playgrounds

There is a growing trend to incorporate nature, rather than manufactured equipment, into children's playgrounds. This park setting offers an excellent opportunity to create a nature based playground that reinforces the ecological theme of this special place and that will instill in children fond memories of playing in a beautiful natural setting in the shadow of the Alaska Range while they wait for a shuttle or camp on site.

A body of research that shows a direct link between exposure to nature and the physical, mental, and emotional well being of children. Some recent surveys show that kids prefer to play in open ended natural environments rather than in structured playgrounds with equipment. When given a choice between playing on a playground jungle gym or climbing around a boulder amphitheater on a woodland hillside, kids invariably choose the stone circle. The amphitheater has more possible uses for varied play and it contains countless little things that can be touched, climbed, slid down, or hidden in. And it changes all the time!

Something as basic as a large, unrestricted pile of sand offers children unlimited creative possibilities. When given the freedom to play in a big pile of sand, not a tiny contained table, kids can build a mountain range, a road

system into Denali, run water and watch a river develop, or create a canyon. They can learn about slumping, about the solar heating of sand and the coolness of digging down into it. They will see the uniqueness of tiny granules, their colors, textures, and shapes. Sand can be a physically involving sensual experience where kids learn to control their bodies when they're kneeling, crawling, or sitting in the sand.

Play areas can contain other imaginative building materials like logs and sticks to build houses and forts, they can include "caves," or have walkways that span slopes to tree houses.

Nature playgrounds are safe, sustainable, and cost less than traditional equipment laden play areas. These natural play areas have a smaller carbon footprint than traditional ones because the total carbon dioxide and other greenhouse gases emitted during manufacture, transportation and eventually the disposal of equipment is many times less with a natural play area. There are a number of compelling reasons to consider the creation of a nature playground here.

Moose Flats Trail

The "Moose Flats Trail" will begin at a transportation hub kiosk and encircle the campground, then return to the hub. The figure eight layout of the trail system permits both long (a 1 mile loop) and shortened (a 0.4 mile loop) walks depending on the weather, available time, and physical ability and stamina of the users. It will offer a forest trail alternative to the timberline Curry Ridge trails above. This trail is intended to be a serendipitous exploration with surprising views of Mount McKinley and the Alaska Range. It should be designed to maximize visitor opportunities to experience the mystery, variety, and beauty found on this mountain slope by wandering through clearings, out onto the brink of the slope, over a deep ravine, and on boardwalk trails that traverse muskeg and sedge meadows.

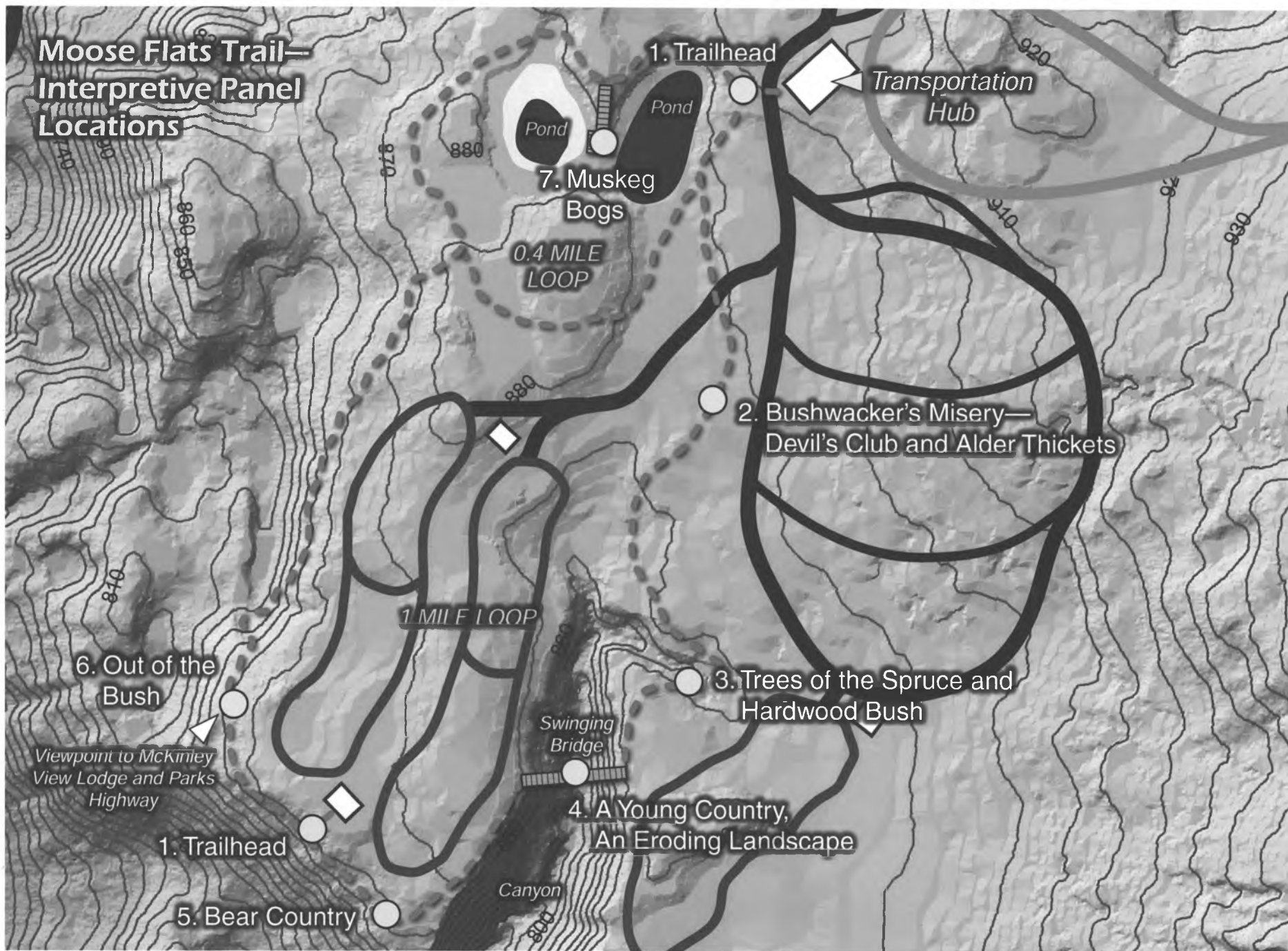
Campers and visitors waiting for their shuttle tram to the top of Curry Ridge will be the primary users in summer. Travelers on the George Parks Scenic Byway will be dropping in seeking information about the Byway and may take the opportunity to stretch their legs and experience this rich environment in greater detail.

In the winter it will be a snowshoe trail for Alaska residents. This universally accessible interpretive trail will focus on the "Alaska Bush," a term that represents wild Alaska outside the urban

areas. The trail traverses on boardwalks through alder thickets, wetland meadows and muskeg bogs, over a forested ravine on a swinging bridge, and through upland spruce-hardwood forest.



The Moose Flats Trail traverses beautiful forested landscapes that offer a contrast to the habitats surrounding the visitor center site.



1. Moose Flats Trailhead Panel

Location: Transportation Hub and Moose Flats Main Campground

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.4 a-b; 1.9 a

Description:

The trailhead panel will use the same vertical design as the Curry Ridge trailhead panels. It will have a trail map and an introduction that states "You are embarking on a walk through the Alaska bush..." Moose Signs—Be Alert! is a sub-message that describes moose signs to be seen here, the dangers of moose encounters, and what to do to minimize them.



2. Bushwacker's Misery—Devil's Club and Alder Thickets

Location: Alder thicket

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.2 a;
Sub-Theme 4, 4.2

Description:

A boardwalk will take visitors from the trailhead through alder thickets and across a wetland area. This panel will interpret the infamous, almost impenetrable alder thickets that grow horizontally and vertically with spiny devil's club interspersed. Devil's club has been described as "festering leaves of horror" reflected in its scientific name *Oplopanax horridus*. These thickets are the bane of hunters and hikers in the Alaska bush. On the other hand, they have redeeming qualities that need to be pointed out.



3. Trees of the Spruce and Hardwood Bush

Location: Upland near "canyon"

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.4 a-c

Description:

Spruce and hardwood forest is one of three major habitat zones in Alaska. Much of the interior of Alaska has this habitat type comprised of white spruce and hardwood trees such as birch, aspen and poplar. Mature spruce and birch line the rim of this canyon and very large aspen and poplar can be seen in the canyon.

4. A Young Country, An Eroding Landscape

Location: Suspension bridge over "canyon"

Themes and Messages Interpreted:
Sub-Theme 2, 2.4

Description:

This canyon is evidence of water erosion in a landscape recently freed from glacial ice. This geologic story is the subject of this panel.



5. Bear Country

Location: Back of campground area

Themes and Messages Interpreted:
Sub-Theme 8, 8.3

Description:

This panel will inform visitors about the presence of bears, their habits and how to avoid conflicts with them. Black and grizzly bears inhabit all of Denali State Park above and below timberline. Wildlife, particularly bears, can be dangerous. Never approach wild animals closely, especially those with young. To avoid surprises, warn animals of your presence by making noise, singing, or carrying bells when in the bush.



6. Out of the Bush—Mary Carey's McKinley View Lodge and the Parks Highway

Location: Overlook platform with trees cut to open the view

Themes and Messages Interpreted:
Sub-Theme 7, 7.4, 7.5

Description:

This panel will tell the story of the development of the highway connecting Anchorage and Fairbanks. It will tell of the 59'ers and Mary's McKinley View Lodge and how she and others fought for the completion of the road to bring them "out of the bush."

7. Muskeg Bogs

Location: Boardwalk between two bog ponds

Themes and Messages Interpreted:
Sub-Theme 1, Messages 1.5 b

Description:

This panel should relate to the message from "Boggy Soggy Muskeg" on the Denali Vistas Trail: "Muskeg is the name given to bogs throughout the Boreal north. Muskeg is found where poor drainage, cool summers and acidic water restrict plant decomposition. Eventually a buildup of dead plants in the water becomes overgrown with sphagnum moss, small shrubs or even stunted trees. Hiking across muskeg is like walking on a giant waterbed with the added danger of suddenly disappearing into the water below!"



Moose Flats Campgrounds

Two campgrounds are planned for the South Denali base facility. The main campground west of the ravine will serve both RV and tent campers. A smaller campground east of the ravine will be for tent campers only.

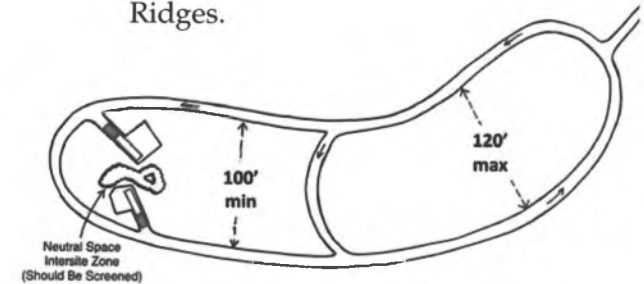
The following criteria should be applied to the development of these campgrounds:

- They should be sited on dry uplands adjacent to the “canyon” ravine.
- They should be served by a series of loop roads.
- For the best use of limited space, campground loops should be narrow and shaped to fit the topography. Separate entrances to each loop provides options for closing an area during the shoulder seasons.
- The campgrounds should be served by bath/toilet/refuse storage facilities near the entrance to the loop roads. A campground host station should be provided near this facility.
- Avoid placing amenities (restrooms, shower building, shelter building) inside of campground loops—this leads to unwanted trails and site cutting.

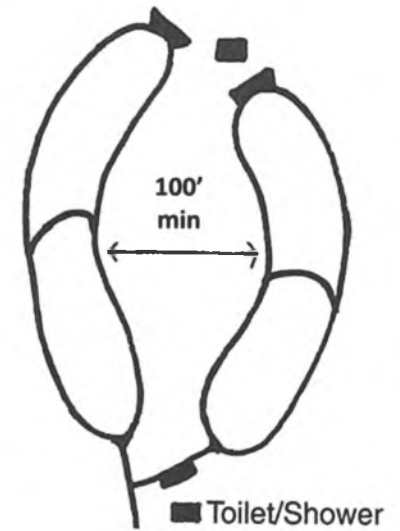
Amenities should be located at each end of a loop, naturally directing pedestrians along the road.

- Privacy should be maintained by separating sites and shielding them with natural cover.
- A vegetative buffer should separate campsites and the interpretive trail. A trailhead hub at the south end of the campground loops provides access for campers.
- The minimum space for each RV campsite should be 20 feet in width and 40 feet in length. The drive-through spaces should be 15 feet in width and 60 feet in length.
- Where possible, campsites should be designed for universal access with low slopes, no barriers between parking spur and living space, hardened surfaces, and extended picnic tables. These sites are beneficial for all campers—not just people in wheelchairs.
- The majority of campsites should be designed as “back in” sites, which surveys indicate most visitors prefer. However, at least 1/3 of the main campground sites should be “pull-through,” which are easier for campers with large RV rigs to navigate.

- Moose Flats Campground should be maintained as a rustic campground with no hook-ups. Generators will be permitted only during specified hours.
- The “tents only” campground should include some secluded walk-in campsites for backpackers who may be starting or ending their journey on Curry and K’esugi Ridges.



Recommended measurements for campground loops to maximize space, while still providing sufficient buffer between sites.



Source: Planning Parks for People by Richard Hultsman, 1998

**Moose Flats Campground—
Concept Site Plan**

Showers/restrooms
building

Moose Flats
Trail

Main Campground
RV and Tent Camping

**Secondary
Campground**
Tents Only

Restrooms

Swinging
Bridge

Restrooms

Moose Flats
Trailhead



Connecting the Base Facility to the Visitor Center



Shuttle tram photo courtesy of Northwest Trek.

The Shuttle Tram

An efficient transportation system is needed to keep tour coaches on schedule and prevent long waiting times at the transportation hub or visitor center. During the peak visitation months of June, July and August, an estimated 2,000 daily visitors will need to be accommodated (data in Chapter 3). A separate loading zone will be required for cruise package and independent tourists (about 1,000 per day for each target group). This allows speedy processing of pre-ticketed groups and keeps them on their tour schedules. It also limits congestion at the loading area.

Northwest Trek, a wildlife park in Washington, uses an 85 passenger three-car propane shuttle tram. Each has a “naturalist driver” who interprets the experience. This is a potential model for Denali State Park. Interpretive training for drivers could be provided by the park staff. The shuttle will traverse through various life zones with chance wildlife encounters that could be interpreted by the driver.

This facility will project a philosophy of sustainability and respect for the

environment. Therefore, every effort must be made to communicate that message to visitors. An energy-efficient shuttle tram system is a silent reminder to users of our commitment to “living lightly” on the landscape. It also minimizes the impact of noise and fumes on the site and visitors. A quiet and efficient shuttle will greatly enhance the aesthetic quality of the visitor experience.

Trams International™ of Bell Gardens, California is a major manufacturer of shuttle trams including those used at the Princess lodges in Alaska. They offer propane, electric and diesel drive train options. Engineers for the firm were consulted regarding the best option for Curry Ridge at an average 6% slope. After deliberation, they concluded that neither propane nor electric would have enough power for this application, but recommend the diesel engine they use as a quiet and emission free option. Bio-diesel fuel should be considered as an environmentally friendly action that also makes a statement.

Waiting for the Shuttle Tram

Visitors have a variety of choices available to them as they wait for their shuttle tram to the top of Curry Ridge. For some a cup of coffee and a roll while sitting on the deck may serve their needs. These spacious decks, some with partial roofs, invite casual dining, social interaction, and begin to prepare people for a leisurely pace as they explore Curry Ridge. The decks are surrounded by shrubs and native flowers, a pool with a small, whispering waterfall, and bird feeders. Car traffic and parking areas are screened and buffered with native vegetation.

The nature playground is adjacent to one deck, allowing parents to watch children as they explore the caves, boulders, and tree house. Interpretive panels and posters alert visitors to a menu of Curry Ridge.

For those that seek some exercise, the Moose Flats interpretive trail promises some memorable experiences with overlooks of the Chulitna River Valley, a suspension bridge, and a boardwalk between muskeg ponds and sedge meadows.

When rain or cold drives the crowds inside, there is an interactive map to help you plan your trip in Denali State Park. There is a series of exhibits on points

of interest on the George Parks Scenic Byway, and streaming video footage of what you'll experience on the Ridge.

The Shuttle Tram Experience

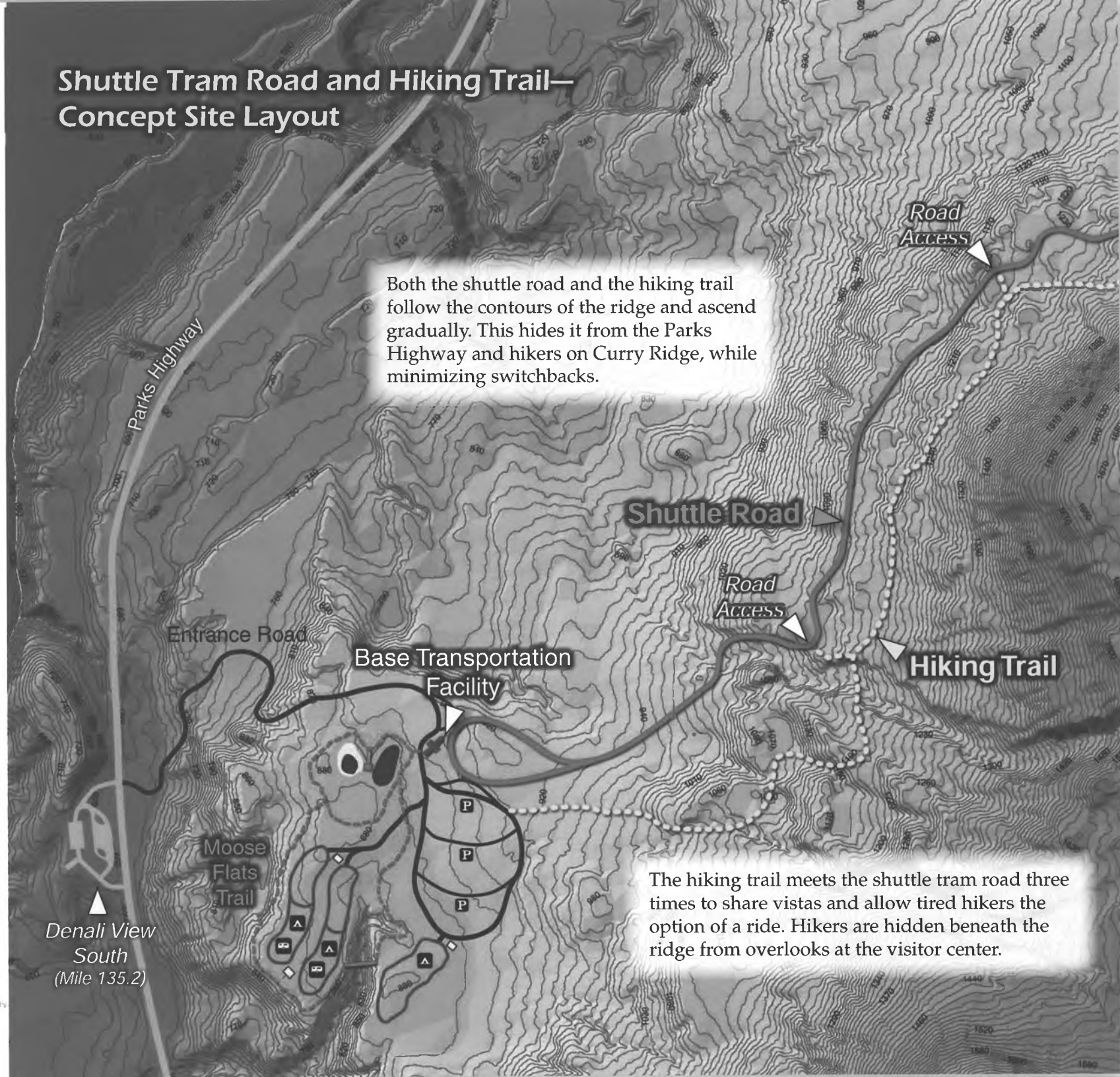
The shuttle ride to the crest of Curry Ridge is not just another "bus ride." It is an exhilarating outdoor excursion to a mountaintop. Along the way a passenger may be treated to the fragrance of the alpine forest, the fleeting sight of a moose or bear, and unsurpassed views of the sunlit snowy peaks of the Alaska Range.

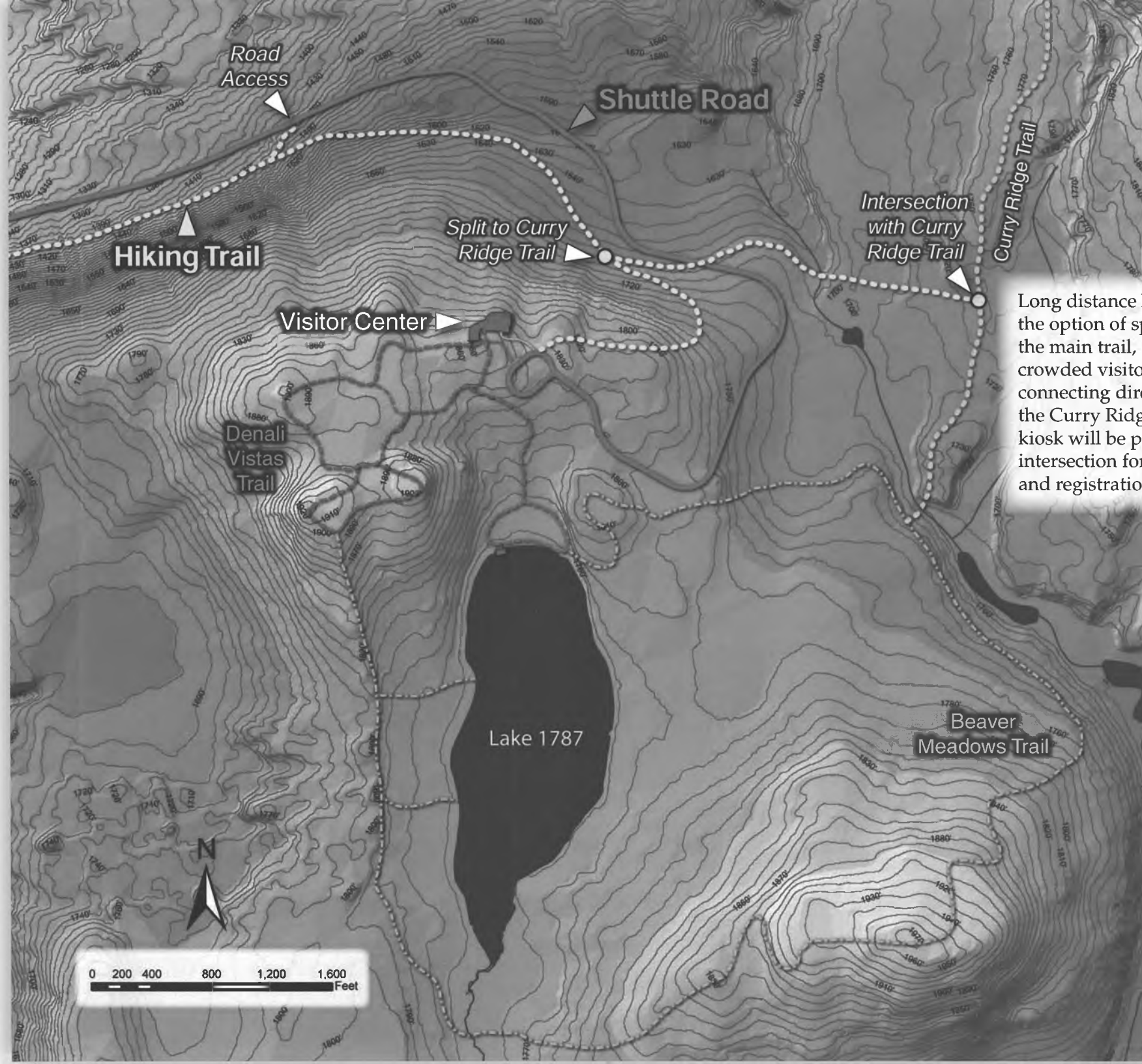
The 20 minute, open air ride gives travelers a chance to decompress from the fast pace of the Parks Highway and an opportunity to prepare for a quiet, natural experience. The shuttle tram road hugs the contours of the bluff as it meanders through shaded forests and into sunny meadows with distant vistas out over the valleys to the north. There are a few select pullouts where the shuttle stops on clear days for opportunities to photograph Mount McKinley. The quiet ride accentuates the silence of the vast surrounding wilderness and creates a sense of humility in many. Because the hillside hides the destination, there is a sense of mystery and anticipation.



The shuttle tram experience would include scenic pullouts with views of Mt. McKinley on clear days. Shuttle tram photo courtesy of Northwest Trek.

Shuttle Tram Road and Hiking Trail— Concept Site Layout





Long distance hikers have the option of splitting from the main trail, avoiding the crowded visitor center, and connecting directly with the Curry Ridge Trail. A kiosk will be placed at the intersection for information and registration.

Pedestrian and Biking Trails to Visitor Center

The shuttle tram will be the primary means of getting to the visitor center for most people but alternative modes of traveling up or back will also be available to hikers and bicyclists. For those who are seeking a more personal and physical adventure in getting to the site, a trail will be available.

Visitors have an option to hike up and/or down Curry Ridge when accessing the visitor center and trails on the ridge. The trailhead, located near the shuttle drop off, is visible from the base transportation facility. It is a rustic kiosk which is thematically designed to resemble other structures in the compound.

It will contain large scale colored maps which correspond to folding publications with safety and orientation information that can be carried by hikers. This location permits easy access to the parking areas, water, and bathrooms. It can be seen from the waiting areas.

The trail is wide enough to permit two hikers to walk side by side or for groups to pass by as they meet each other. It parallels the shuttle tram roadway but only crosses it when topography demands it. There are numerous opportunities to look out over the Chulitna River Valley and to view the Alaska Range. The trail should alternate

alluringly through mountain meadows and through the forest to maximize diversity of habitats. Trail structures like bridges and benches are thematically rustic log and stone structures. Only hikers are permitted to use this trail so it meanders to a walkers speed, with inviting surprise views down into ravines and out across the no name creek watershed. At several strategic places, it intercepts scenic vistas where the shuttle tram stops. These places permit reluctant hikers the assurance that they have an option of riding the shuttle or of seeking assistance if needed.

Biking Alternative

The 3.5 mile climb averages a challenging 6% incline. Maximum road grades for the shuttle will be 9% or less. While this is a moderately challenging climb for hikers, it is a challenging workout for bikers. It is a fair assumption that most people will prefer to coast down the grade on bicycles rather than laboriously peddling up the long, steep slope. Provisions and policies should be made that address transporting bicycles to the top of the ridge on the shuttles and that facilitate their safe storage in racks on site at the visitor center. There are precedents for similar cycling adventures at other park locations such as in Hawaii Volcanoes National Park. There, commercial

companies transport visitors to the top of the roadway where they mount their rented bicycles and coast down the long mountain highway. There is potential for creating a similar, if shorter, biking experience on Curry Ridge if it is deemed an appropriate recreational experience.

Conflicts between bicyclists and hikers are a major controversy on multiple use trails. The more natural and narrow the trail, the greater the potential conflict and the frustration of the users. While most encounters between hikers and bicyclists do not result in injuries, the steep topography, dense understory, and narrow trails on Curry Ridge are problematic. Wherever possible, these uses should be separated. The safest and most economical bike route up and down the ridge is the shuttle roadway that can also serve as a bike corridor. Bicycles will be speeding down the steep slope and need clear lines of sight, room to maneuver, and a good braking surface that this asphalt roadway provides. This improves both the biking and hiking experience if a less expensive foot trail is developed parallel to the roadway to accommodate hikers. Hikers seek a more intimate and quietly reflective experience than they can find on the roadway. Eliminating the fast moving bikes adds to the pedestrian's sense of seclusion and safety.

If bike trails are developed on the lower slopes of Curry Ridge, they should be segregated from hiking trails. The main loop system from the visitor center should be maintained as discreet walking trails in order to allow quiet reflection and passive encounters with wildlife. Bike trails in alpine habitats will invite harmful incursions into the fragile environment. It would be desirable to develop the vast majority of bike trails in the lower terraces of the site, nearer the transportation hub.

The planners have some safety concerns about cyclists as they careen down trails along the ridge. The area is home to a significant population of both black and brown bears. The instinctive behavior of these omnivores is to chase fleeing prey. There have been attacks on bicyclists on Anchorage trails in less brushy and enclosed areas than Curry Ridge. The potential of inciting encounters should be investigated by surveying similar Alaskan sites and calculating the potential risks.

If a series of cycling trails are developed, local cycling clubs should be invited to join the planning process. This will facilitate communications and support with the user group, result in better trails, and will set the groundwork for self regulation and long-term trust and cooperation with agencies.



Meandering front-country hiking trail in Denali National Park.

Appendices



South Denali Visitor Center Complex: Interpretive Master Plan

Appendix 1

South Denali Visitor Center Complex Visioning Meeting: Results

To establish a clear direction for the visitor center project, a visioning workshop was held on August 16, 2007 with project stakeholders. The purpose of the workshop was to determine:

- Specific goals of the project
- Target and potential audiences
- Important stories to be told
- Development and activities that should and should not be planned for the facilities

Workshop participants included representatives from the Alaska Department of Natural Resources, National Park Service, Denali Concessions, and a private business.

The following are the results of the visioning meeting. Answers for each question were ranked by participants through a nominal group technique. The number in parenthesis after each response indicates the number of points that participants gave to it. The higher the point value, the greater the perceived importance by participants.

Participants

- Monica Alvarez, DNR-DMLW planner
- Penny Bauder, Alaska State Parks
- Wayne Biessel, Alaska State Parks
- Jane Burks, Doyon / Aramark Joint Venture, Denali Concessions
- Jenni Burr, NPS-Talkeetna
- Chris Degernes, Alaska State Parks
- Carol Harding, NPS-Interpretive Planner
- Bill Kiger, Alaska State Parks
- Eileen McGurk, Owner, Cantwell RV Park
- Missy Smothers, NPS-Talkeetna
- Miriam Valentine, NPS-Talkeetna

Visioning

The written Vision Statement of the South Denali Visitor Complex is:

The South Denali Visitor Center will be a sustainable learning and recreation gateway, providing a welcoming and accessible interpretive transition for people of all ages, abilities, and backgrounds. The visitor center, trails, and viewing areas will be unimposing and harmoniously nestled within the surrounding landscape, furnishing venues for education, study, and wildlife and scenic viewing.... This year-round gathering place will enable visitors to experience migrating and resident wildlife, breath-taking view of Denali and the Alaska Range, and Alaskan

nights painted with sheets of dancing aurora. Visitors will come to experience and stay to enjoy.

In your opinion, what specific goals will the South Denali Visitor Complex help to achieve?

- Demonstrate commitment to stewardship (LEED, Green architecture and development, alternative fuels, view shed preservation) (17)
- Very active use-outdoor recreational activities-indoor hands-on, multi-generational and abilities (14)
- Incorporate a wide variety of viewpoints of the resource and facilitate understanding between user groups (10)
- Exploit multi-modal opportunities (9)
- Education connection with local youth (7)
- South Denali should release pressure from Denali NP-economic growth of communities-enhance scenic byways experience (6)
- Connect cultural and recreational resources with the natural resources-celebrate community heritage (6)
- Connect the people of Anchorage and communities north of year-round recreation and enjoyment (5)
- Access and facilitate responsible use of resources- promote resource

- protection (5)
- This will be a destination facility (5)
- Promote casual enjoyment-common-must be affordable (4)
- Celebrate the stunning natural setting (4)
- Interpret stories that other centers have not addressed (mountains) (4)
- Come for the view of Denali and landscape (4)
- Appreciation for the South Denali region and its unique natural resources (3)
- Central axis point to multiple agency lands-cooperation (2)
- Connect local communities to the area-get communities involved along with tourists (2)
- Strong connection to the environment and environmental changes in the area (2)
- Provide information/infrastructure for recreational activities (1)
- Expand access to the park (0)

Audience

Who are the target audiences and potential audiences of the South Denali Visitor Complex?

- Local residents-nearby (Trapper Creek, Sunshine, Talkeetna) (9)

- Winter recreationists (9)
- Alaska residents (especially off-season) (9)
- Ethnic groups-diverse (8)
- Motorized and non-motorized visitors (9)
- Schools and education (7)
- Special interest groups-photographers, birders (6)
- Virtual arm-chair visitors (4)
- Group meetings and retreats (4)
- Package tourists (3)
- Families (3)
- Independent travelers (3)
- Visitors of all ages (3)
- Eco-tourists (3)
- Multigenerational family units (3)
- People of economic walks of life (3)
- Alaskans hosting visiting friends and relatives (2)
- Convention groups (2)
- Native Alaskan population (2)
- Denali in a day tourists (1)
- Anchorage residents
- Seasonal employees (1)
- People of all abilities (1)
- Boy Scouts (1)
- International travelers (1)
- Return visitors (1)
- Mat-Su residents/Denali residents (1)
- "Drop in" visitors (1)
- Hikers (0)
- Active adventure tour groups (0)

- Bus stops-transportation (0)
- Local businesses (0)
- Artists (0)
- Politicians (0)
- Retirees (0)
- Elder hostels (0)
- Scientists (0)
- RV Drivers (0)

Stories

What are the important stories to be told at the South Denali Visitor Complex?

- Interpretation of Alaska recreation (8)
- Future trends should be planned for-changeable exhibits-current issues (8)
- Global connections (migration, tourism, global warming, pollution) (8)
- Stories of ecosystems-interconnections and vulnerability-connection to the Greater Denali ecosystem (7)
- Mountaineering (Cook, etc.) (6)
- Expedition history of the Region (6)
- History of the railroad, Curry, hotel, skiing (6)
- Pioneering the Parks Highway-Alaska' frontier culture both past and present (6)
- Alaska native perspective (6)
- Uncloaking the Great One-

- interpreting Mt. McKinley when it is hidden (5)
- Gold discovery-1905 (4)
- Multi-modal history (human transportation) (4)
- Wilderness values (3)
- River systems (highway to interior) (3)
- Homesteading the area (3)
- WWII Bomber crashed on the ridge-Rupert Pratt (3)
- Alaska perspective on hunting and fishing (game management units) (3)
- Differences and partnerships between state and federal agencies (3)
- Mount McKinley-what can you see? Spotting scopes (3)
- Historic and prehistoric use of South Denali region (2)
- Susitna Station-supply hub during gold mining (2)
- Story of Transition-weather, vegetation, transportation (2)
- Wildlife story (2)
- Adaptations of plants and animals in alpine tundra (2)
- The Alaska Range-backbone of south central Alaska that has a place in its history, both natural and cultural (1)
- "Gateway" to the interior (1)
- Alpine sensitivity-vegetation (1)
- Story of salmon (1)
- Story of geology-plate tectonics, etc. (1)

- Sustainability (1)
- Environmental Change (glaciers, etc.) (0)
- Story of glaciers-sculpted by ice (0)
- Story of bears and safety (0)

Facilities

What developments and activities should be planned for the visitor center? What should not be?

- Earth sheltered facility (8)
- Low energy footprint, but practical for the site (6)
- No plastic wildlife (5)
- Tundra garden (ID plants) (5)
- Program/meeting space (4)
- Complements National Park (doesn't duplicate) (4)
- Comfort area-fireplace, seating, area rug (4)
- Activities that don't rely on weather (3)
- Year-round technology opportunities (Wi-Fi, Geo caching, cell phones, outlets, charging) (3)
- Feature universal design throughout (3)
- Caretaker facility (3)
- Trails should be designed to encourage discover and protect fragile environment (3)
- Overnight EE Center/room with cooking facilities (3)
- Unobstructed view (no roads, buildings, etc.) (3)
- Four-season trails, multi-use trails (motorized and non-motorized) (3)
- No noise or air polluting energy generation (3)
- No large mounted animals (3)
- Easily changed exhibits (3)
- Allow for guided activities (ski touring, nature guiding, etc.) (2)
- "Hands on" trail (2)
- Thematic commercial businesses (coffee shops) (2)
- Opportunities for independent travelers to experience site away from tour groups (2)
- Kid's corner/Junior Ranger area (2)
- Adequate storage space (possibly heated) (2)
- Computer kiosk linking to other recreational opportunities (2)
- Interpretive trails (1)
- Backcountry trip planning area (1)
- Interactive exhibits (1)
- Space to show a movie (theater with sloped floor or multi-purpose room with flat floor?). Consider numbers (could be 50+ people) (1)
- Mountain web cam (1)
- Reading room-reference library (1)
- Adequate office space for interpreters, rangers, and staff (1)

- Covered deck areas (1)
- Self-guided trail tours (1)
- No depot-like shuttle drop-off area (1)
- Coffee shop, hot snacks-cozy area (0)
- Related sales outlet (0)
- Ability to reserve Denali National Park buses from this facility (0)
- Allow tour buses to drive up (0)
- Bathrooms (0)
- Space for "Ranger Chats," out of the rain (0)
- Sanctioned berry picking areas (0)
- Mounted animals (0)
- Staff parking (0)
- Need for handouts? (0)
- No horses near facility (0)
- No large private car parking lots (0)
- Minimize equipment maintenance (0)

What developments and activities should be planned for the transportation hub?
What should not be?

- Rental for skis, snowshoes, etc. (5)
- Screened from highway (5)
- Year-round restrooms and drinking water (5)
- Bike and ski trails (4)
- Ranger contact station (4)
- Off-peak season Alaska resident access without shuttles (4)
- Volunteer employee housing (3)

- Commuter trails (3)
- Warming hut for winter users (3)
- Information kiosks to catching shuttle, etc. (2)
- Shuttles need to be quiet (2)
- Winter RV-area (2)
- Backcountry information station (2)
- Campground
- Need interpreters on shuttles (1)
- Information/activities accessible for through/highway travelers (1)
- Limited interpretation/activities here... save for visitor center (1)
- Bus shelter and luggage storage (1)
- Commercial parking visually segregated from private (1)
- Include interpretation on the trail up to the facility (1)
- Local business information (1)
- Amphitheater/campfire ring associated with campground (1)
- Power generation facility and fuel storage (0)
- Have loop shuttle to visitor center for different activities (backpacking, boats, trains)

What other developments should be planned for the South Denali Visitor Complex?

- Shuttle system between state park trailheads (including rafting, riverboats, railroad, etc.) (9)

- Strategic view planning-road alignments, trail development, etc. (5)
- Accessible trails near visitor center (3)
- Consider concessionaires where appropriate (3)
- Public use cabins (2)
- Easy river access (2)
- Winter transportation to visitor center (2)
- Employee housing (2)
- Bookstore restaurant (1)
- Other trails to Lake 1787, Curry Lookout, Curry (1)
- Campers store (1)
- Maintenance facility- operational and buses-consider what is needed for winter (1)
- Showers, laundry, lockers (1)

Appendix 2

South Denali Visitor Center Complex Community Meetings: Results

From November 27-29, 2007, Schmeeckle Reserve facilitated three community meetings in Trapper Creek, Wasilla, and Anchorage.

The purpose of the meetings was to gather input about local and regional stories, benefits and concerns of development, and resources for further research.

The following are the results of the community meetings.

Trapper Creek November 27, 2007

What stories would you share with an out-of-town visitor? About your community... About Curry Ridge and this region...

- Pre-settlement days... Native Alaskans... First people stories
- Shem Pete's Alaska... travel along the Chulitna River... trading... hunting... tie to the view. James Kari and James Fall

- Trapper Creek archaeological site. Mat-Su historian
- Place names
- Mining History... Dunkel coal mine... Golden Zone Mine (west fork of Chulitna)
- Swinging bridges across the Chulitna river that accessed mines
- Early history of exploration... USGS expeditions... attempt to climb Denali... Visible from site
- 59ers. Homesteading... Mike Carpenter (Wal-Mikes)
- Curt Wagner... Talkeetna (history, artist)
- Natural history... moose, caribou (migrations in past), medicinal and useful plants
- Railroad history... building, surveying
- Curry Lookout, town of Curry, building of bridges, expeditions... looking for a route to the interior... bridge across river to Curry Lookout
- Ken Marsh... historian in Trapper Creek... Curry
- Swans (trumpeter recovery program)
- Sandhill cranes stop to feed on berries
- Bears... brown and black... prime feeding areas nearby... salmon, alpine, forest regions... tremendous amount of denning... Troublesome Creek and Byers heavily used

- Building of the Parks Highway... Scenic Byway study currently... bridges across Chulitna... historical route through the area... overgrown tractor trail... talk with Scenic Byway people... homesteads and native allotments...
- Aviation... military plane on Kesugi Ridge
- Climbing stories... Dave Johnston, Roger Robinson (NPS), Brian Okonek, Daryl Miller (NPS)
- Mining history... Chuck Hawley-excellent for geology (former USGS), business in Anchorage; Earl Foster
- Focus in on the smaller animals and plants
- Glaciers... shaped by glaciers... what it looked like at one time during glaciation... timeline... glacial erratics...
- Multiple seasons... what's it like in the winter... flagging trees

What effects do you foresee the South Denali facility having on the region, your community, or Curry Ridge? Potential benefits... Concerns...

- Negative impact on natural resources: habitat, bear denning areas, ease of use to high country
- Increased snow machine use could have impacts. Could also be a

benefit... good way to get people up there to see the area

- Concern about "glitter gulch" at entrance of NP. Avoid concentration of businesses... need limits.
- Concern about airport at mile 131. Entire area needs to be planned... this would be the first step to development.
- Protect the integrity of the entire region. Denali has a great draw. Planning for the whole region, not just around the visitor facility. Variety of activities, private in-holdings. Won't have the same attraction if not protected. Ensure long-term income.
- Flight traffic (climbers on Denali)
- This area is special because it is undeveloped and unspoiled. More than just staying inside a visitor center looking at exhibits. Need to experience the site.
- Previous selected site is tucked into the Ridge... difficult to see the building from other places on Curry Ridge. Create the facility so it cannot be seen from the lake or other places higher on the Ridge. Don't want to see the parking lot either. Can tuck different facilities into the spruce trees.
- Tour busses should not be allowed to drop off visitors at the visitor facility

site. How many shuttle busses needed to transport visitors. Don't need a large parking lot. Shuttles can be continuous route.

- New site... more buildings would be more exposed.
- What's the point of having an elaborate building if it is just a gateway to the site? Size, purpose.
- Any structure needs to blend in the landscape and use the resources on the site. Endemic materials. Wind and solar power to make self-sustaining.
- Three things to maintain natural opportunities
 - Avoid glitter gulch... purchase in-holdings along Parks Highway... land use controls south of the park
 - Need a comprehensive biological inventory of this area... identify important wildlife areas... protect or mitigate impacts
 - Budget related... operating and maintenance costs... burden on state parks... need a budget for maintenance. Long term sustainability and visitor experience quality.
- Avoid piecemeal development... secure the entire package... when developing the road, know that the visitor center will have funding.

- Address RVs. Camping areas.
- Connect to the South Denali Viewpoint, Troublesome Creek trailhead, trails, bike path. Number one thing at Princess Lodge people want is to hike. Make the entire area a destination. DOT should work on the highway for biking and pedestrian use. Bike Trail the entire length of the state park... bike between this visitor center and the Denali NP visitor center.

How can the South Denali facility be developed to benefit Alaska residents? Specific features of the visitor center... Specific features of the site...

- Make it comfortable for people who cannot be outside. Linger and watch the view from comfort of inside the building. Expansive view of the Alaska range. Don't have people be in front of the windows
- Outside deck
- Change seasonally. Room that changes for lingering. Different uses in different seasons.
- Development of many trails will benefit Alaska residents. Not many trails in the state for just hiking... most are multi-use.
- Educational groups... use in shoulder

seasons to bring in students from Mat-Su area.

What/who are some resources that we can investigate or interview to learn more about this area?

- NPS Staff... Phil Breese (geologist), Jane Bryant (cultural resources, historian),
- Local authors: Ken Marsh (Trapper Creek), Roberta Sheldon (Talkeetna author)... Don Sheldon's wife
- University of Alaska-Fairbanks: Museum, archives
- Fran Seeger-Boss (historian for Mat-Su)

Wasilla

November 28, 2007

What stories would you share with an out-of-town visitor? About your community... About Curry Ridge and this region...

- Ecology: Plant identification, each habitat area
- Rescue from plane crash
- Mountaineering: complement story on north side, early explorations... by river boat following drainages...

winter ascents (see signage at South Denali Viewpoint)... Dave Johnston story (living historical treasure)

- Mining story
- Indigenous use of the area. Connect with the elders for stories
- Interpretive trail systems... chance for people to explore sites and use all of their senses
- Alaskan artists... how the region inspires their work
- Curry hotel on the railroad... how advanced it was... tie into the Alaska railroad
- Dioramas, sculptures of the range, Sheldon Amphitheater, Ruth Glacier...
- Different viewpoints... not just linear... show depth of the mountains
- Glacial recession over time
- Geological history of the mountain range
- Bush pilots, Don Sheldon, Hudson
- History of the Parks Highway... development of the area... transportation corridor along the Chulitna River
- Wildlife story of the area... hunting and trapping
- Talk about a land ethic... how the visitor center is developed... philosophy of having a wilderness park... preserving the wilderness integrity

- Holding onto the value of what Curry Ridge is... tourism comes second.

What effects do you foresee the South Denali facility having on the region, your community, or Curry Ridge? Potential benefits... Concerns...

- Avoid "glitter gulch"... concern about the private property in-holdings within the park...
 - Emphasis on acquiring the in-holdings before development (access road) occurs
 - Develop land use controls
- Funding operations and maintenance
- Perform updated and current biological inventory of landscape and identifying important habitat
- Road is a significant impact on the site... it is a difficult area to access. Access will improve. Will degrade the qualities of Curry Ridge... the reason the visitor center is located at the site.
- Transitional area is important to black bears... spring and fall for berries... important post rut recovery area for bull moose... important travel area for moose... snow machine access will drive wildlife to other places

- It will also become a summer time hub for foot travel... increase access to the ridge
- Will this provide an advantage for multi-day hiking... where will the trail go in? Connection point to existing trail. Have the ability to develop trails correctly and minimize impact.
- Large number of people crawling over the alpine ridge top areas... difficult to anticipate the impact... prediction of 400,000 visitors during summer... some dispute over the numbers...
- Advantage of this road... park road instead of DOT road... management controls and access
- Restrict hunting in the area.
- Concern about snow machines having access to the road... no reason for people to walk up to the Ridge... one of the few places in Alaska that is quiet... management opportunity to restrict snow machines... management must be in place before the road is constructed... could move snowmobiles to Kesugi Ridge
- Many other opportunities are being offered along the Parks Highway and Petersville Road for motorized use. Might be a balance between this visitor facility.

**How can the South Denali facility be developed to benefit Alaska residents?
Specific features of the visitor center...
Specific features of the site...**

- Build physical shelter where a person can get warmed up... warm drink... concessions that are tasteful without impacting the environment
- Like the idea of condensing the campus of buildings to one
- Concern about the size of the building
- Some of the same educational opportunities should be available indoors
- Have it open more than 4 months of the year... year-round. Most of the winter, the mountain is visible. Denali National Park is closed.
- Facility that would encourage people to recreate... snowshoeing, cross-country skiing, non-motorized.
- Retreats, educational workshops that center around core values of the landscape (like Murie Center in Denali NP). "Wilderness" meeting space to work on issues of preservation...
- Open space area for classrooms or public meetings. Fireplace.
- Education for school children, training for teachers, graduate work... address Alaskan issues

- Key: Shoulder season and winter use. Function in the summer is different than in the shoulder/winter seasons.
- Access Blair Lake to the south of Lake 1787. Some concern about the Boy Scouts camp. Protect public's right to use the state park lake.

What/who are some resources that we can investigate or interview to learn more about this area?

- Dan Elliot... on the ground experience
- Brown bear habitat north of the site
- Dave Johnston: mountaineering, one of the first state park rangers, knows the area... lives in Talkeetna
- Pete Robinson... maintenance person in state park... mountaineer
- Dave Porter... Trapper Creek... ranger
- Mountaineering rangers in Talkeetna... Roger Robinson, Brian O.
- Alaska Natural History Association, Mat-Su, (indigenous, mining history)
- Johnny Baker... early miner and trapper... Talkeetna
- Cliff Hudson video... Talkeetna... put out this last year... history of the area and personalities.
- Alaska Railroad... Curry and Curry Lookout

- Trapper Creek Museum... Mr. Marsh
- Roberta Sheldon... Talkeetna
- Joe Richardson...
- Dennis Heikes... former superintendent of Mat-Su
- Dale Bingham... Eagle River, precedes Dennis
- Trapper Creek Planning Committee

Do you have other questions or comments concerning the interpretive plan for the South Denali Visitor Facility?

- Plans for security in the winter if the building isn't open? Staff would still be available in the Transportation Hub.
- Want as little impact as possible... small footprint, low profile

**Anchorage
November 29, 2007**

What stories would you share with an out-of-town visitor? About your community... About Curry Ridge and this region...

- Sydney Lawrence, artist... boat that would take tourists to cabin

- Parks Highway people built a trail along the Ridge to Byers Lake... 8 mile trail... develop a trail system (could be more bear activity at this location)
- One of the few native groups that were not nomadic... caribou access... try museum in Talkeetna
- Climbing/Mountaineering... Denali... adventures... Sourdough expedition... Cook
- History of town of Curry
- Rebuild the town and put a suspension bridge across the river... hike to the top of the Curry Ridge... testimony from people... railroad is mining behind Curry... stabilize the original lookout (grants are being secured to stabilize historic structure)
- Consider an alternative to "shuttle bus" designation that would be more usable for Alaskan residents... environmentally friendly and quiet (electric, propone, single-track tram, gondola)
- Traditionally, the area has always been used by snow machiners. All types of recreation should be allowed.
- History of mining
- Homesteading
- Mary Kerry... applied for 5 acres on top of the Ridge... quite a character

What effects do you foresee the South Denali facility having on the region, your community, or Curry Ridge? Potential benefits... Concerns...

- Airport has been proposed for the area... concern... airport already exists in Talkeetna... would affect the quiet atmosphere and the quality of life for residents
- Powering the site (generators near the Parks Highway). Bury lines. Wind turbines would provide alternative energy
- Changing an environment that will provide more access to non-motorized use... inviting conflict between two user groups... proper planning now will help to avoid conflict in the future
- Concern about noise from snow machines
- Center should be something for all Alaskans, not just specific user groups
- Concern about further developments along the highway... "Glitter Gulch"...
- Concern about allowing private vehicles up to the site during shoulder seasons. Would impact experience especially during fall.
- Trapper Creek would benefit greatly

from the increased traffic and commerce

- Concern about damage to tundra vegetation on the top of the ridge... will be a challenge to keep visitors on the trail system... route the trails correctly... education of visitors about sensitivity of tundra travel
- Concern about the increased number of people accessing the ridge.
- Historic numbers of people accessing the ridge during the Curry days?
- Concern about litter problem of increased visitors and impact on wildlife. Standard litter patrol will be needed.
- Boy Scouts trails into the state park area (state parks would be building the trails, other sites away from public use areas)
- Concern about state park funding (will be a variety of funding sources: state, federal, private... operations plan will be developed after interpretation plan)

How can the South Denali facility be developed to benefit Alaska residents?
Specific features of the visitor center...
Specific features of the site...

- Could convert the visitor center to a "lodge-type" facility as a warming

area for visitors

- Use Alaskan contractors to build the visitor center
- Keep the facility open year-round... let the Alaskans use the center as well
- Discount for Alaskans for user fees

What/who are some resources that we can investigate or interview to learn more about this area?

- Talkeetna museum... information about railroads, native tries
- Alaska railroad
- Locals in Talkeetna... Hudsons, Roberta Sheldon, Carol Young (served on implementation committee),
- Randy Crosby, Trapper Creek
- Ken Marsh, Trapper Creek Museum
- Wal-Mike
- National Archives and Records Administration, Anchorage
- Natural History Museum, Anchorage, library
- Alaska Lost Ski Area, Curry, Lookout, names, website
- Ken Marsh's book on Curry
- Retired state parks people: Dave Johnston, Dan Elliot, Mary's family

Do you have other questions or comments concerning the interpretive plan for the South Denali Visitor Facility?

- Should read through the Implementation Plan for South Denali
- May be some confusion with the conceptual drawings... need to emphasize that they are only conceptual

Appendix 3

South Denali Economic Impacts Assessment: Key Findings

Employment Increases

- Visitor Center construction and related construction activities will provide employment for 116-213 people over a period of 2-3 years.
- Ongoing employment created by the Visitor Center and related activities, including additional hotel rooms, would be 221-549 jobs.

Increase in Employment and Business Owner Income

- Over a 2-3 year period, Visitor Center construction related income will range from \$6.8 million to \$12.4 million.
- Ongoing Visitor Center related employment income, including additional hotel facilities, etc., will range from \$7.6 million to \$18.6 million per year.

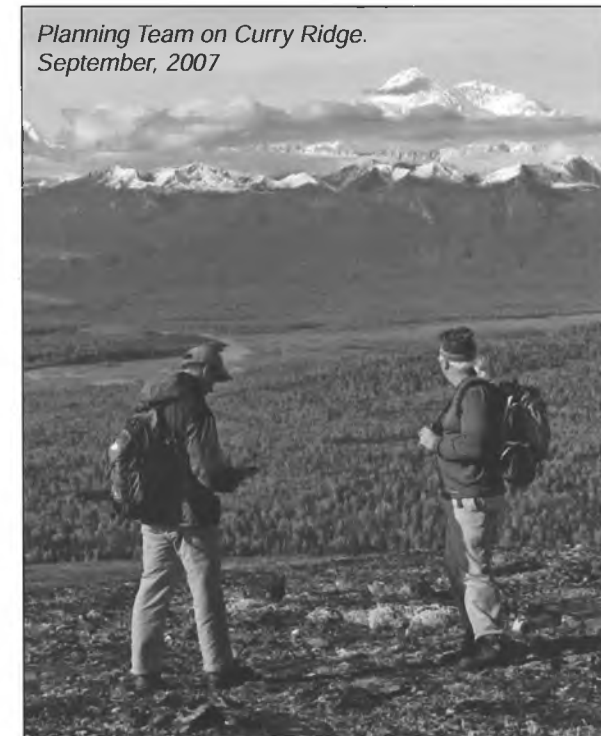
Additional Tourism Expenditures

- Tourism expenditures stimulated by the existence of the Visitor Center will range from \$17.8 million to \$44.8 million per year

Non-Resident Visitor Increase

- The increase in non-resident visitors stimulated by the new Visitor Center will range from a 10% increase in visitors staying an additional half day to a 20% increase of visitors staying an additional day.
- It will also result in a likely 10%-20% increase in 3-day, 2-night land tours provided by the major tour companies.

Colt, Steve, Fay, Ginny, Szymoniak, Nick. February 2008. Economic Impact of the South Denali Implementation Plan. Prepared for the National Park Service, Denali National Park and Preserve and the Matanuska-Susitna Borough Planning and Land Use Department. Anchorage: University of Alaska Anchorage Institute of Social and Economic Research.



*Planning Team on Curry Ridge.
September, 2007*



Plan developed and submitted by:
Schmeckle Reserve Interpreters
University of Wisconsin-Stevens Point
August 11, 2009

Denali State Park



- Provide a quality visitor experience while protecting resource values in the South Denali Region;
- Enhance recreational and access opportunities throughout the South Denali Region for the benefit of a wide variety of visitors including Alaskans, independent travelers, and package tour operators; and
- Develop interpretive components that offer interactive programs, and enhance visitor appreciation of, and connection to the cultural and natural history of the South Denali Region.

Goal
State Park

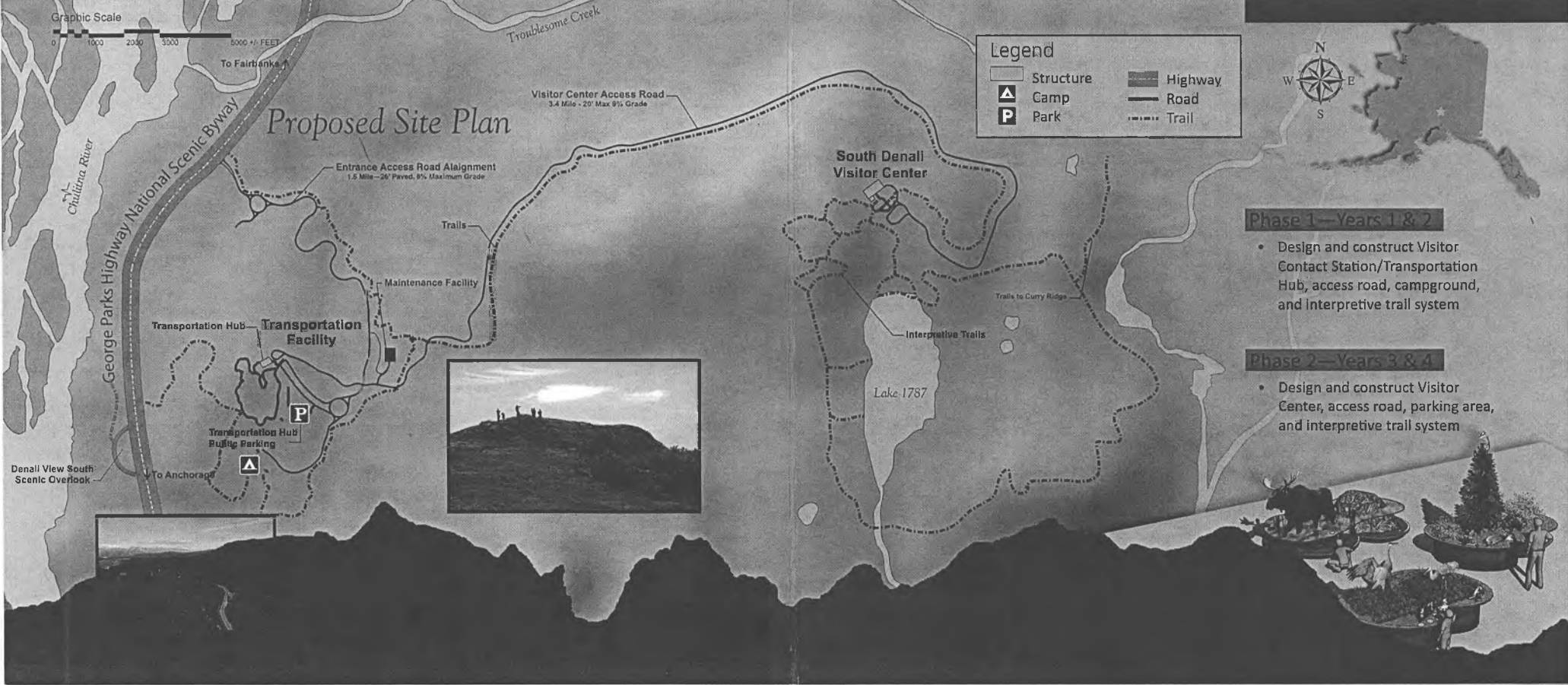
South Denali

Visitor Center Complex

A Visitor Center on the Horizon

January 2012





The proposed South Denali Visitor Complex will...

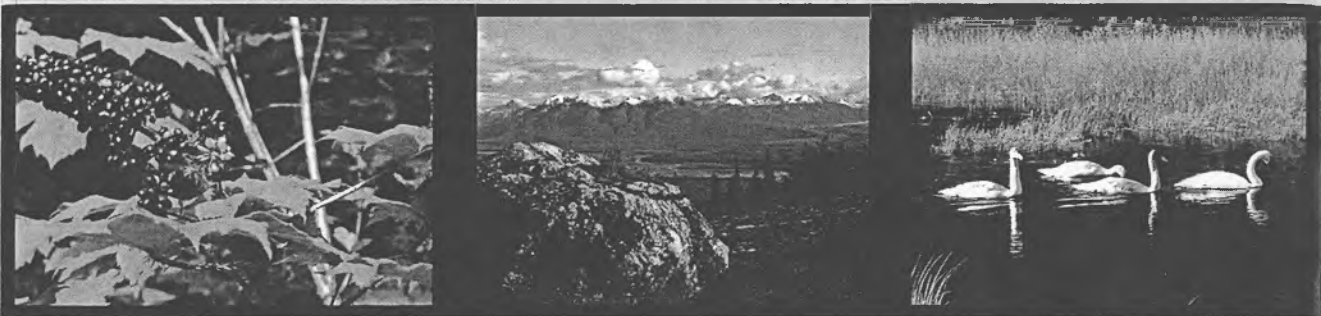
Purpose



- Showcase the natural beauty of the South Denali Region
- Provide access to Denali State Park
- Enhance outdoor recreation opportunities
- Educate visitors and residents on the natural history and ecology of the area
- Highlight partnerships that support the mission of the facility
- Inform visitors of opportunities along the Scenic Byway

Conceptual Floor Plan





Nestled atop the rolling foothills of Curry Ridge, the proposed South Denali Visitor Center will provide an unparalleled visitor experience that offers dramatic views of Mt. McKinley and the Alaska Range, while highlighting the wilderness values of the South Denali Region.



For more information www.southdenali.alaska.gov