

SUSITNA BASIN PLANNING BACKGROUND REPORT

Scenic Resources along the Parks Highway

Inventory and Management Recommendations

LAND AND RESOURCE PLANNING SECTION DIVISION OF RESEARCH AND DEVELOPMENT ALASKA DEPARTMENT OF NATURAL RESOURCES 1981

STATE OF ALASKA

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The scenic resources along the Parks Highway were inventoried by this Department during the summer of 1978; the results of this study and corresponding management recommendations have been compiled into a 600 page report. Due to the prohibitive costs of printing the complete document, we have copied those portions of the report which we feel will be most useful as a tool for visual resource management along the highway corridor. The introduction explains what data was collected at each assessment unit; if you feel that you have a use for a portion of the report which is omitted, contact us.

Visual Resources are important along the Parks Highway. Please make an attempt to put the enclosed information to good use. If you have any questions concerning the content or application of the report, feel free to contact us.

PART FOUR:

FURTHER ACTIONS NEEDED FOR MANAGEMENT OF SCENIC RESOURCES ALONG THE GEORGE PARKS HIGHWAY

This report is, in many ways, only the beginning step towards the conservation and management of scenic resources found along the George Parks Highway. The following paragraphs identify approaches and tasks which need to be considered as "next steps". Three of these are of fundamental importance and immediate concern:

- 1. Educational informational progamming.
- 2. Integration of scenic resource management recommendations into ongoing land and natural resource management plans and policies.
- 3. Adoption of scenic highway designation management statutes and regulations.

EDUCATION

Throughout this report, the importance of a public education - information program, particularly with a focus on scenic resources, has been stressed. Only through education will planners in public agencies and private individuals dealing with land and resource developement begin to see the importance of scenic resource identification and management. Only through education will the public and legislators who represent them begin to support such concepts as greenbelts, scenic zoning ordinances and scenic highway corridors. Only through education will private individuals see that they too can affect scenic resource management through litter control, sensitive design considerations in private land development, management of the visual clutter on their own land, and demanding laws, regulations and policies which help to protect Alaska's rich endowment of unique and spectacular scenery. Any public information - education program would need to be multi-faceted to address these various levels of concern, responsibility, and involvement in scenic resource management.

Public education - information programs could take on a variety of forms, ranging from community workshops, special classes at the community college, high school and junior high school level, brochures, and even television and radio spots. It is not in the scope of this report to define a specific education - information program - only to point out the need and importance of such programs. Initial energy in this respect should be directed towards state and local government elected

representatives in an effort to adopt scenic resource management related statutes, ordinances and regulations, and towards land planners presently involved with the use and development of lands and resources adjacent to George Parks Highway.

INTEGRATION INTO OTHER LAND PLANNING - MANAGEMENT EFFORTS

This report contains some of the only scenic resource information in Alaska today. Since there is no specific George Parks Highway land management plan, this information and set of recommendations need to be integrated into ongoing planning programs which deal with the lands which the George Parks Highway traverses. Two such programs, presently being coordinated by the Alaska Department of Natural Resources would benefit from this report - the Susitna Basin area plan and the Tanana Basin area plan. Additionally, three borough governments, the Municipality of Anchorage, the Matanuska-Susitna Borough, and Fairbanks North Star Borough should find this scenic resource data of interest in land use planning within their boundaries. Cook Inlet Region, Inc., AHTNA and Doyon Unlimited all will own land adjacent to the George Parks Highway. They could benefit from this report in the determination of how they will develop these lands. Land management recommendations related to those areas within the highway right-of-way and development of roadside rest areas should be of interest to the State Department of Transportation and Public Facilities which has direct responsibility and control of right-of-way lands. Additionally, various other federal and state agencies such as the National Park Service, Department of Fish and Game, and the Division of Parks and Division of Forest, Land and Water Management within the Department of Natural Resources are involved in decisions related to the use of land adjacent to the George Parks Highway. This scenic resource information should be available to them to help guide decisions which could have an impact on roadside visual quality. Finally, many private consultants doing studies related to land and resource development along the George Parks Highway would benefit from this information. For example, it should be of primary importance in studies related to the location of a powerline intertie between Anchorage and Fairbanks, and as an example of scenic inventory techniques which may be applicable to other developments such as pipelines and coal mines. A concerted effort needs to be made to see to it that this report is available all of those identified above and that they comprehend those ways that it can be of use to them.

SCENIC HIGHWAY DESIGNATIONS

The George Parks Highway could be the prototype for a means of officially recognizing scenic resources along Alaska's highways. Many such techniques and consideration could be extended to the designation of scenic waterways and scenic trails. Research needs to be done as to ways to legally and functionally designate and manage those lands adjacent to the roadway within areas identified as scenic highway routes. Official designation initially should be made at the state legislative level - through the adoption of appropriate scenic highway statutes and regulations and at the borough government level through adoption of zoning ordinances, performance standards and other implementation tools for management of lands adjacent to the highway. The appendix to this report contains information regarding such a process for scenic highway designations in the State of California. Additional research into scenic highway designation and management techniques employed by other states would be helpful in the design of a program specific to Alaskan highways. An important first step in this effort would be an education information program directed towards state and local government elected officials which clearly communicates the value of a scenic highway designation and points out some ways it might be accomplished. Obviously, for any such porgram to occur it requires that someone take an interest in it. Such an initial push and support should come from both the Department of Natural Resources and the Department of Transportation and Public Facilities.

While the above recommendations are the most important, mention should be made to other tasks which would be of value to scenic resource management along the George Parks Highway.

Development of design guidelines for commercial and residential development adjacent to the highway.

Research regarding methods available to the state for the acquisition of privately owned roadside lands where they have been identified as highly desirable for public use as scenic turnouts and roadside rest areas.

Research highway right-of-way landscaping and maintenance techniques which could help to reduce the visual impact of the highway on the land, aid in reducing wildlife road kills, and help to screen visually objectionable roadside land developments. A set of right-of-way

design guidelines, adopted by the Department of Transportation and Public Facilities would be a useful tool along all Alaska's highways.

Development of policies and standards for the location, size and visual impact of commercial signs adjacent to the highway particularly within those corridors identified as highly suitable for scenic highway designation.

Policies and standards related to the number, spacing and character of public and private access roads to state highways in an effort to control commercial strip development and hazardous intersections.

Develop similar techniques for the identification of scenic resource values around communities, recreation areas, along rivers, coastlines and trails with the objective of developing appropriate management recommendations.

Complete scenic resource inventories and recommendations for other Alaskan highways - particularly those subject to rerouting, upgrading and other alterations. In this way work can be done in a fashion which optimizes the value of scenic resources.

As a matter of policy, complete an on site visual analysis of state land adjacent to a highway prior to any land disposal actions and retain developemnt rights of those portions determined to be of significance to scenic resources management.

Land management decisions affecting the Parks Highway's scenic character are routinely being made, often without the benefit of site specific visual information. Examples are state land disposals to private citizens and conveyances to municipal governments, the location of material sites and timber harvests and the routing of utility lines and secondary roadways. Land managers and planners have often expressed a desire for accurate, visually-oriented information on the highway corridor.

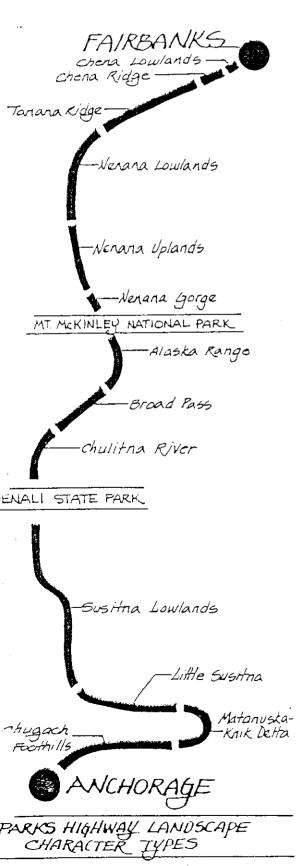
A listing of certain visual landscape characteristics such as which lands are visible, the screening ability of existing vegetation and topography, and the quality of visual experience if available would contribute significantly to the land manager's information base. This field inventory, conducted during the summer of 1978 attempts to fill this gap and provide the information necessary to routinely consider the highway's visual characteristics alongside other land use determinants.

INVENTORY OBJECTIVES

The field inventory attempts to: (1) provide a common terminology with which land managers and planners concerned with scenic resources generally, and the Parks Highway specifically, can begin to discuss their concerns: (2) describe, analyze and assess the intrinsic visual quality of the highway/landscape; (3) describe, analyze and assess the visual impacts of both roadside development and of the roadway itself; and (4) provide other such visual information on the highway corridor as may be needed to incorporate scenic resource considerations into the decision-making process.

OVERVIEW

- l. The highway is divided into visual Character Types. A character type is an area of land that has common distinguishing visual characteristics of landform, rock formations, waterforms, and vegetation patterns. Based primarily on physiographic and vegetative divisions, character types are used as a frame of reference to classify specific highway stretches for their visual qualities. The Parks Highway traverses 13 character types, ranging in length from ten to over fifty miles. (Note the accompanying map.)
- 2. The character types are further divided into Assessment Units. An assessment unit is a small highway section, limited to a maximum of 3 miles, exhibiting distinct visual characteristics and used as the basic analysis unit or increment. Along the Parks Highway between Anchorage and Fairbanks there are 192 assessment units excluding those lands within Denali State Park and Mt. McKinley National Park.
- 3. Each assessment unit is evaluated for its Intrinsic Visual Quality. Intrinsic visual quality is defined as the degree of expression exhibited by a landscape through the interplay of its various components or elements; the landscape's ability to create visually distinctive and pleasing patterns of form, line, color, and texture. An underlying assumption here is that diversity plays a major role in creating visually distinctive landscape experiences. Thus, those landscapes exhibiting a greater variety in their combination of natural elements (land-sky interface, landform, landcover, waterform) generally are of higher intrinsic visual quality. These elements are evaluated from



Other factors used to determine the intrinsic visual quality of an assessment unit include surprise, anticipation, sequential diversity, and views. To the extent possible, the intrinsic visual quality is evaluated without consideration of human development, as if the landscape were in an untouched state.

- 4. Human activities are inventoried and, where appropriate, their visual impacts are assessed. The Cultural Impacts heading encompasses a broad range of human activities occurring adjacent to the highway's right-of-way. Typical categories are residential, commercial, recreational and institutional land use, historical and/or cultural sites and visual clutter.
- 5. The Roadway Impacts heading addresses the immediate highway right-of-way area and how it affects the visual experience. Roadway factors are inventoried and where appropriate assessed. These include shoulder characteristics, number and types of intersections, management of the right-of-way, and the impacts of the road's design.
- 6. The Composite Visual Quality rating is a measure of the assessment unit's existing visual quality, and is derived from its intrinsic visual quality, its cultural impacts and its roadway impacts. It is a measure of the unit's relative scenic value as it presently exists.
- 7. Additional characteristics of each unit are also provided in mapped form. Each map indicates the assessment units' location, areas seen from the unit ("viewsheds"), vegetative screening potentials, visual magnitudes of adjacent lands, and views outward to distant landscape features.

Definitions of the above terms, as well as a more detailed description of how each factor was evaluated follow.

DEFINITIONS AND METHODOLOGY

The intrinsic visual quality is calculated from the following 9 factors: Land sky interface, landform, landcover, waterform, surprise, anticipation, sequential diversity, laterial views, and unique visual elements. These were evaluated in both directions. The total intrinsic visual quality for each assessment unit here was calculated as the arithmetic average.

LAND SKY INTERFACE

This element addresses the visual expression of the horizon, or the edge between land and sky. One of four basic components used in Character Type descriptions, Land-Sky Interface is most highly valued when displaying diverse shapes and forms.

Assessment units are evaluated for landsky interface with criteria developed for each of the 13 Character Types, and take the following general form:

3 (Distinctive): Horizon displays a wide variety of slopes, shapes and textures in several distance zones.

INTRINSIC VISUAL QUALITY



- 2 (Common): Intermediate characteristics between those described above and those below.
- I (Minimal): Horizon displays little diversity of form or shape and is generally confused to a single distance zone.

LANDFORM

One of the four basic Character Type descriptors, Landform addresses the unit's topographic expression, such as plains, valleys, mountains, and moraines. As with the other basic descriptors, diversity of expression is highly valued.

LANDFORM criteria are developed for each of the 13 Character Types, and take the following general form. Assessment units are evaluated from these criteria.

- 3 (Distinctive): Landform expression is significant, displaying a great deal of topographic diversity seen in all distance zones, providing visual variety and allowing for viewer awareness of his position in the landscape.
- 2 (Common): Intermediate characteristics between those described above and those which follow.
- 1 (Minimal): Landform expression is limited, displaying little topographic diversity and limited awareness of the overall landscape context.

LANDCOVER

LANDCOVER refers to the character of the land surface. This is generally a type of vegetation community, such as mixed spruce/hardwood forest or black spruce dominated bogs, but may also include such other surface types as exposed bedrock, alpine tundra, and snowfields.

Specific landcover criteria are developed for each of the 13 Character Types. Assessment units are evaluated using criteria specific to each character type which might be generally summarized as follows:

- 3 (Distinctive): The foreground and middleground distance zones provide visually pleasing colors, patterns and textures created by all or most of the vegetation communities and successional stages possible in this character type.
- 2 (Common): Intermediate characteristics between those described above and those which follow.
- l (Minimal): Land surface characteristics take one general form, which predominates throughout the assessment unit.

WATERFORM

The WATERFORM category addresses the role of water in the landscape. As with the other basic Character Type descriptors, diversity of expression is highly rated. Specific WATERFORM criteria are developed for each of the 13 Character Types, but they might be summarized generally as follows:

- 3 (Distinctive): Several types of waterbodies are present and prominent within the assessment unit, i.e. lakes, streams, marshes, and rivers.
- 2 (Common): Intermediate characteristics between those described above and those which follow.
- I (Minimal): Water features are entirely absent, or their visual impact is very low.

SURPRISE 4

A highway, like any linear experience such as a river, trail or railroad offers the potential for surprise as one moves through the sequence of spaces. SURPRISE is a sudden, unexpected view revealed through a change in the highway character (curves, topography, vegetation). This element of surprise adds to the richness, aesthetic value, and diversity of the roadway experience.

Each unit's expression of the unexpected, of surprise, is evaluated, traveling both north and south, as follows:

- 3 (Present): Some unexpected, yet distinctive or memorable man-made feature, view, landform, or other landscape feature is encountered.
- 0 (Absent): No unexpected landscape change or feature is encountered.

ANTICIPATION (

Anticipation is the quality of the landscape to lead or draw the viewer forward into the following unseen landscape. This is most often accomplished through visual clues such as short, partial views into the following landscape or by vegetation and/or topography leading the viewer's eye forward.

Each roadway assessment unit is evaluated for this ability to instill a feeling of anticipation, in both northerly and southerly travel.

- 3: A sense of anticipation is present.
- 0: No sense of anticipation.

POINT OF VIEW

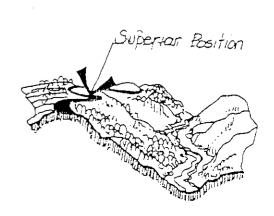
Point of view is the position of the viewer relative to the surrounding landscape. Three possible points of view exist: superior position, equal position, inferior position, and variable position.

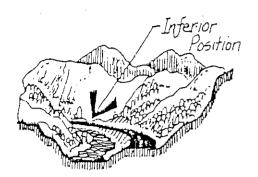
Point of view is recorded in the forward and lateral directions, traveling both north and south.

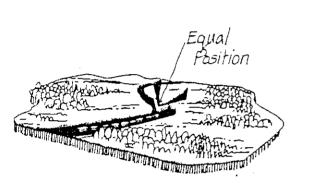
S (Superior): The viewer is above a major portion of the seen area, increasing distant view opportunities.











E (Equal): The viewer is at the same level as the surrounding landscape, particularly with respect to the foreground and middleground.

I (Inferior): The viewer is below the major portion of the seen area, minimizing most distant views.

V (Variable): Viewer position varies throughout the assessment unit. No position predominates.

SPATIAL EXPRESSION

SPATIAL EXPRESSION is the manner in which the (foreground) topography and/or vegetation create impressions of enclosure, semi-enclosure or openness.

Spatial expression is recorded traveling both north and south, as follows:

N (Enclosed): Foreground vegetation and/or topography on both sides of the roadway create a feeling of enclosure or containment.

SN (Semi-enclosed): Foreground vegetation and/or topography create a feeling of partial enclosure that is open to one side or partially open to both sides.

O (Open): Foreground vegetation and/or topography create a feeling of openness or exposure.

V (Variable): Variable expression within the unit, from feelings of enclosure to semi-enclosure, or any other combination of the above factors.

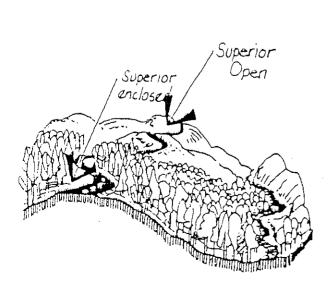
SEQUENTIAL DIVERSITY

Sequential diversity is an index of degree and frequency of visual and experiential change in the landscape. It is based on changes in point of view and SPATIAL EXPRESSION from one roadway assessment unit to the next.

Sequential diversity ratings are derived mathematically. An assessment unit's point of view and spatial expression values are compared with the same values for the previous and succeeding units. Each time there is a change in any one of the elements, one point is recorded. Thus totals for the sequential diversity of an assessment unit range from a high of 8 to a low of 0.

Sequential Diversity is recorded as follows:

- 3 (High): Point of view and spatial expression differences in this assessment unit compared to the previous and following units are six or greater.
- 2 (Moderate): Differences in point of view and spatial expression are greater than 2 but less than six.
- 1 (Low): Differences in point of view and spatial expression are two or less.



LATERAL VIEWS

LATERAL VIEWS attract attention away from the direction of movement and add to the diversity of the scenic experiences.

The number of lateral views on each side of the roadway is recorded and identified in the notes. These lateral views are also indicated on the unit maps.

UNIQUE VISUAL ELEMENTS

Unique visual elements are certain outstanding landscape features, landmarks and scenes, such as Mt. McKinley, Mt. Susitna or other named mountains, volcanoes, glaciers, unique and distinctive rock formations, some rivers, and large valleys.

Quality ratings are not performed. It is assumed that these elements can only enhance the visual experience of driving the highway. Therefore, each unique element seen within the unit is awarded a value of one. These elements are recorded traveling both north and south and are identified in the inventory notes.

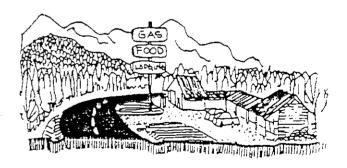
CULTURAL IMPACTS

LAND USE INTENSITY (1)

Because specific land use information is limited for most areas adjacent to the highway, the field inventory records residential, commercial, recreational, and institutional land uses and relative intensities.

Structures are categorized, counted (to maximum of 20) and recorded. Counts beyond 20 are recorded as "720." Additionally, the overall visual impact of these structures and their associated landscape modification is evaluated as follows:

- 3 (High): Severe modifications are evident. Land usage and structures occur at such a density or location as to be dominant and out of scale with the surrounding landscape.
- 2 (Medium): Medium visual impact. Activities and associated structures demonstrate partial modification of the landscape and occur at such a density or location as to detract from the view.
- l (Low): Activities and associated structures are present, but occur at low densities and/or are sited in visual harmony with the scale and character of the surrounding landscape.
- 0 (None): No activities and/or structures are apparent within the viewed area.



VISUAL CLUTTER

INTERSECTION COMPLEXITY

Intersection complexity refers to the number and type of roadways entering or crossing the highway. This factor is an indicator of the road's potential for modification such as overpasses, turning lanes, road widening, and traffic control mechanisms as well as the intensity of surrounding land usage.

Within each assessment unit, the number and type of intersecting roads are recorded, using the following symbols:

O: Overpass

P: Paved

G: Gravel

U: Unimproved; road is passable by passenger vehicles, but no gravel or rock has been added to increase bearing capacity and drainage.

R: Recreation; some indication of use by four-wheel drive or other recreational vehicle. Road is generally impassable for passenger cars.

T: Turnout: off-road access, but leading only back to highway, i.e. litter barrel turnouts, scenic overlooks.

RR: Railroad tracks

RIGHT-OF-WAY MANAGEMENT

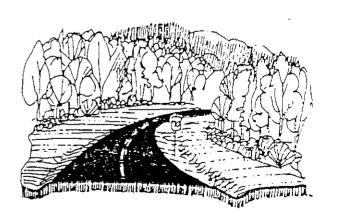
The right-of-way immediately adjacent to paved portion of the highway has important visual quality implications. This foreground area dominates the viewshed and serves as a frame for more distant views. Management practices in this prominent area therefore assume increased importance. The width of tree and brush clearing and landscaping are aspects of right-of-way management having particularly strong influences on scenic values.

The inventory measures the width of right-of-way clearing and/or landscaping effects as follows:

- 10: Maintained and/or landscaped area extends less than 10 feet from the pavement edge.
- 10-35: Maintained and/or landscaped area extends between 10 and 35 feet from the pavement edge.
- 35: Maintained and/or landscaped area extends more than 35 feet from the pavement edge.

In addition to the maintenance width measurement, the right-of-way is evaluated for its effects on the seen area's visual quality, taking into consideration its width, visibility, vegetation, and slope in relation to the surrounding landscape. Visual impact is then recorded as follows:

- 3 (High): The highway right-of-way is visually dominant and of such character as to detract from the scenic quality of the surrounding landscape.
- 2 (Moderate): The right of way is visually evident as



natural landscape has been encroached upon by man-made objects, such as refuse (trash, litter, abandoned cars) and objects such as billboards, and commercial signs.

The inventory records the type of visual clutter, its location and distance zone, and its visual impact. Impact ratings are as follows:

- 3: (High): Seen area, especially the foreground dominated by the the presence of man made objects which significantly detract from the surrounding landscape.
- 2: (Medium): Visually distracting objects present and visible but of a quantity and location to be of only moderate visual dominance.
- 1: (Low): Visually distracting man made objects present, but of only minor visual dominance.
- 0: (None): Visual clutter absent.

MANAGEMENT ACTIVITY

MANAGEMENT ACTIVITY is a record of the types and impacts of land management practices. Included in this category are tumber harvests, gravel extraction and storage, road construction and maintenance, construction staging areas, mining, agriculture, power generation and transmission facilities, communications structures, and docks, pilings and other water-related structures.

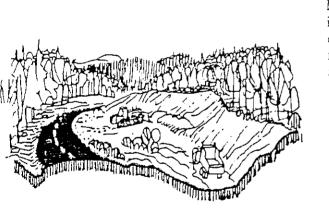
The field inventory notes management activity type its viewed distance zone, and its visual impact, as follows:

- 3 (High): Severe modifications are evident, and/or occur at such a density or location as to be dominant and out of scale and character with the surrounding landscape.
- 2 (Medium): Medium visual impact.
- l (Low): Activities and associated structures are visible, but occur at low densities, are partially screened by vegetation and topogrpahy or are sited in visual harmony with the scale and character of the surrounding landscape.
- 0 (None): No management activities and/or associated structures are visible within the viewed area.

HISTORICAL/CULTURAL SITES

This category identifies sites of cultural and/or historical significance. Included here are such things as old highway and railroad bridges, original school sites, archeological sites, railroad stations, and roadhouses.

Types, locations and distance zones of historical or cultural sites are noted. Visual impacts are not assessed.



being out of character with the surrounding natural landscape but does not demonstrate extreme alteration.

I (Low): The right-of-way is not visually dominant and detracts only minimally from the surrounding landscape's scenic quality.

O (None): The highway right-of-way is visually subordinate to the entire viewshed and has no negative impact.

DESIGN IMPACT

The DESIGN IMPACT category addresses the highway's interaction with the landscape topography. It is a index of how the highway design reconciles engineering requirements for gentle curves and gradual gradients with sometimes severe topographic conditions. Because "cutting and filling" is the construction technique most commonly employed to achieve engineering requirements, it is used as the indicator of design impact.

Highway design impact is evaluated as follows:

- 3 (High): Roadway reflects extreme landscape modification, with large and numerous cuts and fills.
- 2 (Medium): Roadway follows topography, with cutting and filling present but less obvious due to reduction in size and frequency.
- l (Low): Topographic nature of land is such that cutting and filling is only rarely noticeable.
- 0 (None): No apparent cuts or fills.

HIGHWAY CLUTTER

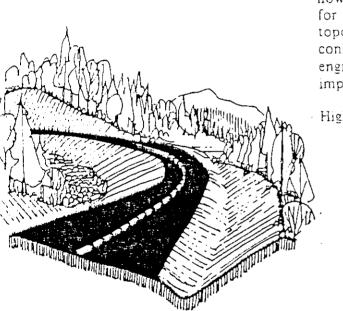
The types, amounts, and visual impacts of highway-related objects such as signs, right-of-way fencing, and lighting, are evaluated in this category. Because of their foreground location, visual implications are significant.

Both the types of objects and their visual impacts are recorded, with visual impact ratings as follows:

- 3 (High): Number, location, size and design of objects dominate and distract than the view.
- 2 (Moderate): Moderate impacts.
- I (Low): Number, location, size, and design of signs, fences, etc. makes them fairly unnoticeable.
- 0 (None): No noticeable highway-related facilities within the assessment unit.

HYDROLOGIC INTERFERENCE

The hydrologic interference category is one indicator of how the highway accommodates the surface and subsurface



movement of water. There are obvious direct implications for wildlife and fisheries, and more subtle implications for development suitabilities of surrounding lands.

The number and types of hydrologic interferences are recorded based on the following symbols:

B Bridge

C Culvert

F Fill

SHOULDER CHARACTERISTICS (1)

Highway shoulder type is an important consideration with respect to road safety, efficiency of travel flow, bicycle access, and turnout space for recreational aecess.

Shoulder width is recorded in feet. Surface type is recorded as follows:

P (Paved): Shoulder surface is the same as the highway.

G (Gravel): Gravel shoulder.

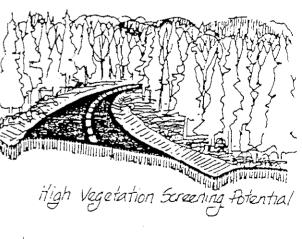
The following characteristics are displayed in map format for MAPPED INFORMATION each assessment unit.

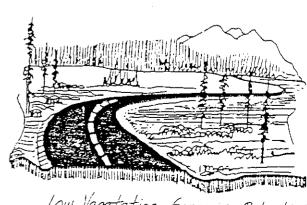
VEGETATIVE SCREENING POTENTIAL

Screening potential is a relative indicator of the vegetation's ability to screen objects from sight, and is dependent on density, seasonal character (coniferous/deciduous) and canopy height. It is an important measure of an area's sensitivity to visual modification, and is useful in anticipating visual impacts of proposed land uses.

The inventory evaluates the vegetative screening potential of all seen areas. The ratings appear on the assessment unit map, as the numerator of the fraction. The numerical rating is as follows:

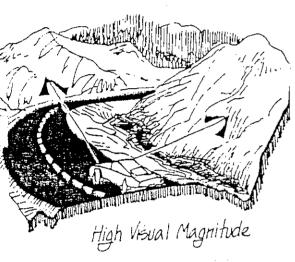
- 3 (High): Tall, dense stands of evergreen or mixed evergreen/deciduous treecover provide an effective vear-round visual screen.
- 2 (Medium): Primarily open to semi-open stands of deciduous or mixed evergreen/deciduous treecover provide moderate screening potential.
- I (Low): Scattered trees and low shrubs provide limited screening ability. Extreme depths of vegetation are required to adequately screen a structure or activity.
- 0 (None): Open grasslands and low shrubs prevent visual screening.





Low Vegetation Screening Potential

Low Visual Magnitude



High Vegetation Screening Potential Algorithms against Jow Visual Magnitude and High Vegetation exceening Potential.

VISUAL MAGNITUDE

VISUAL MAGNITUDE refers to the slope of the visible land in relation to the position of the viewer. For example, a surface perpendicular to the line of sight allows the entire surface to be seen. This surface would have a high visual magnitude. A surface in the viewer's same plane creates a line of sight so oblique that most areas are barely visible. This surface would have a low visual magnitude.

Visual magnitude is delineated on all seen area maps, as the denominator in the fractions. Ratings are as follows:

- 3 (Low): Visible landscape surface parallel to or sloping away from viewers line of sight.
- 2 (Medium): Visible landscape surfaces gently sloping (25%) to somewhat steep (100%) as perceived from viewer position.
- I (High): Visible landscape surface vertical or nearly vertical as perceived from viewer's position.

VISUAL ABSORPTION CAPABILITY

VISUAL ABSORPTION CAPABILITY is an indicator of the landscape's ability to absorb visual modification such as roads, housing development, and timber harvests. It is here derived from vegetative screening potential and visual magnitude information.

A relative index of the Visual absorption capability is evaluated for all seen areas, using the following mathematic formula:

Visual Absorption Capability (VAC) = Vegetative Screening Potential (VSP) + Visual Magnitude (VM)

Capability ratings are as follows:

- 3 (High): Vegetative screening potential and visual magnitude together indicate that most landscape modifications can readily be screened if properly sited and designed, VSP + VM 4.
- 2 (Medium): Vegetative screening potential and visual magnitude are such that most landscape modifications remain visible from the highway. The actual visual impact of modifications will depend on its type, design, considerations and siting, but can generally remain subordinate to the overall landscape character. VSP + VM = 4.
- l (Low): Vegetative screening potential and visual magnitude values indicate that landscape modifications are highly visible and generally cannot be screened. VSP + VM 4.

Additional characteristics recorded on the assessment unit maps are the following:

ASSESSMENT UNIT BOUNDARIES (

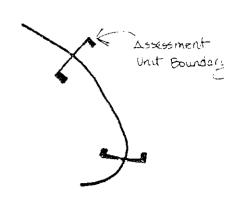
The approximate location of each assessment unit is indicated by this symbol:

VIEWSHEDS (seen areas)

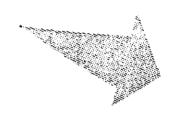
VIEWSHEDS is a term commonly employed to describe all those land surfaces that are visible from a given viewpoint. In this inventory, mapped viewsheds correspond to those land surfaces seen from the road from all points within the assessment unit. Viewsheds were determined in the field. using 1:63,360 (1 inch equals one mile) U.S.G.S. topographic quadrangles and aerial photographs, when available. Viewsheds are indicated on the inventory maps by heavy parallel lines. Those seen areas with similiar visual absorption capability characteristics are indicated with their parallel lines running in the same direction.

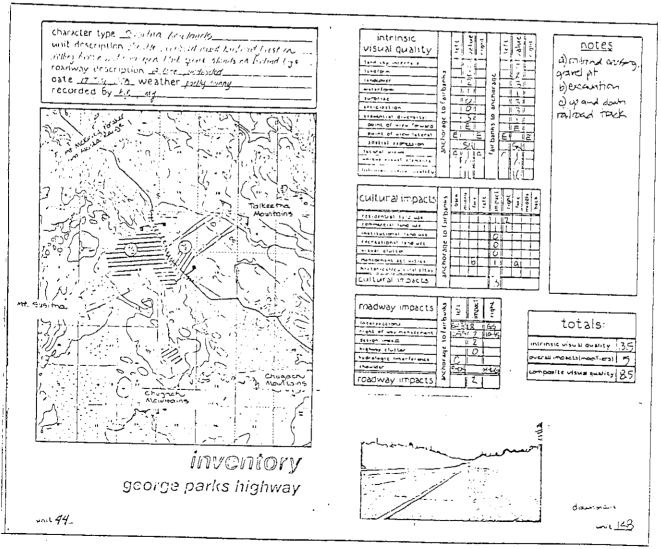
DISTANT VIEWS

Viewshed maps were prepared for only those lands within 2 1/2 to 3 miles on either side of the roadway. More distant visible landscape features were recorded by shaded arrows indicating the direction of the view, its dominance, or duration and what is seen.

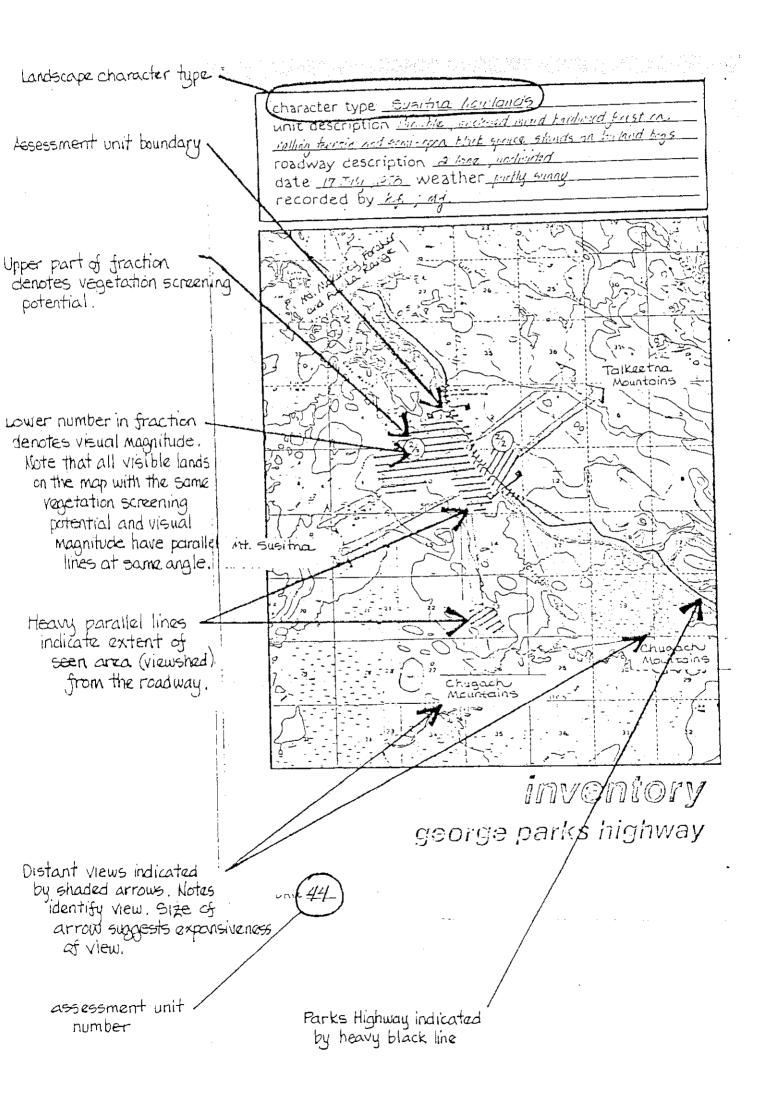


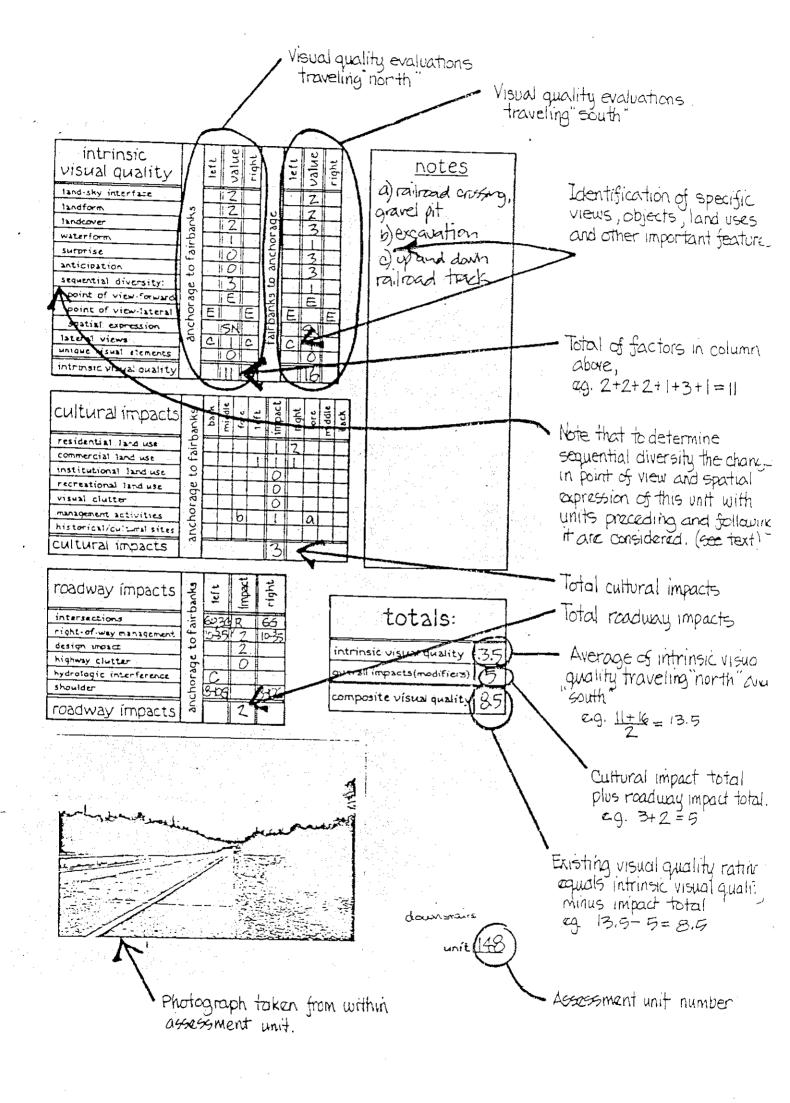
seen lands
not seen
from highway





A sample inventory sheet for one assessment unit is shown above some hints on how to interpret this information can be found on the following pages. Definitions of terms, cavaluation criteria can be found in the preceding text and in the glossays.





PART TWO: SOME WAYS TO INTERPRET SCENIC RESOURCE INFORMATION

The reader should be familiar with such terms as viewshed, intrinsic visual quality, landscape character type, assessment unit, visual absorption capability—all of which were described in part one. Part two demonstrates some of the ways scenic resource information can be displayed and interpreted to help guide land and natural resource decision—making. While the examples given here are specific to the George Parks Highway—the concepts and techniques are applicable to scenic resources along any highway as well as along rivers, trails, around recreation areas and communities.

Probably the most useful way that scenic resource information can be displayed is in map format. In map form it can most readily be used in combination with other landscape physical, biological and socio-econmic characteristics to aid in land planning and management decisions. Six different illustrative maps are shown here, each demonstrating a different aspect of the scenic resource inventory data. A portion of the George Parks Highway around the community of Nenana has been used to illustrate these mapping techniques.

Interesting and significant patterns emerge from scenic resource data in mapped form. Continuous stretches of highway with exceptional scenic resource value, areas with high visual absorption capability such that land and resource development might more easily be accommodated from a scenic resource point of view, and important views are some of the patterns which can have significance with respect to land use planning decisions.

Other graphic display techniques can be helpful in identifying additional patterns. Graphs displaying scenic resource values by assessment unit for the entire highway can be helpful to understanding overall resource distribution patterns. Following the six interpretative maps can be found five graphs comparing intrinsic visual quality, composite visual quality and visible roadside land use for the entire George Parks Highway. The field data from which these maps and graphs were developed can be found in part five of this report. This data may be used to generate similar maps and develop other graphic techniques for evaluating the scenic resources along the George Parks Highway.

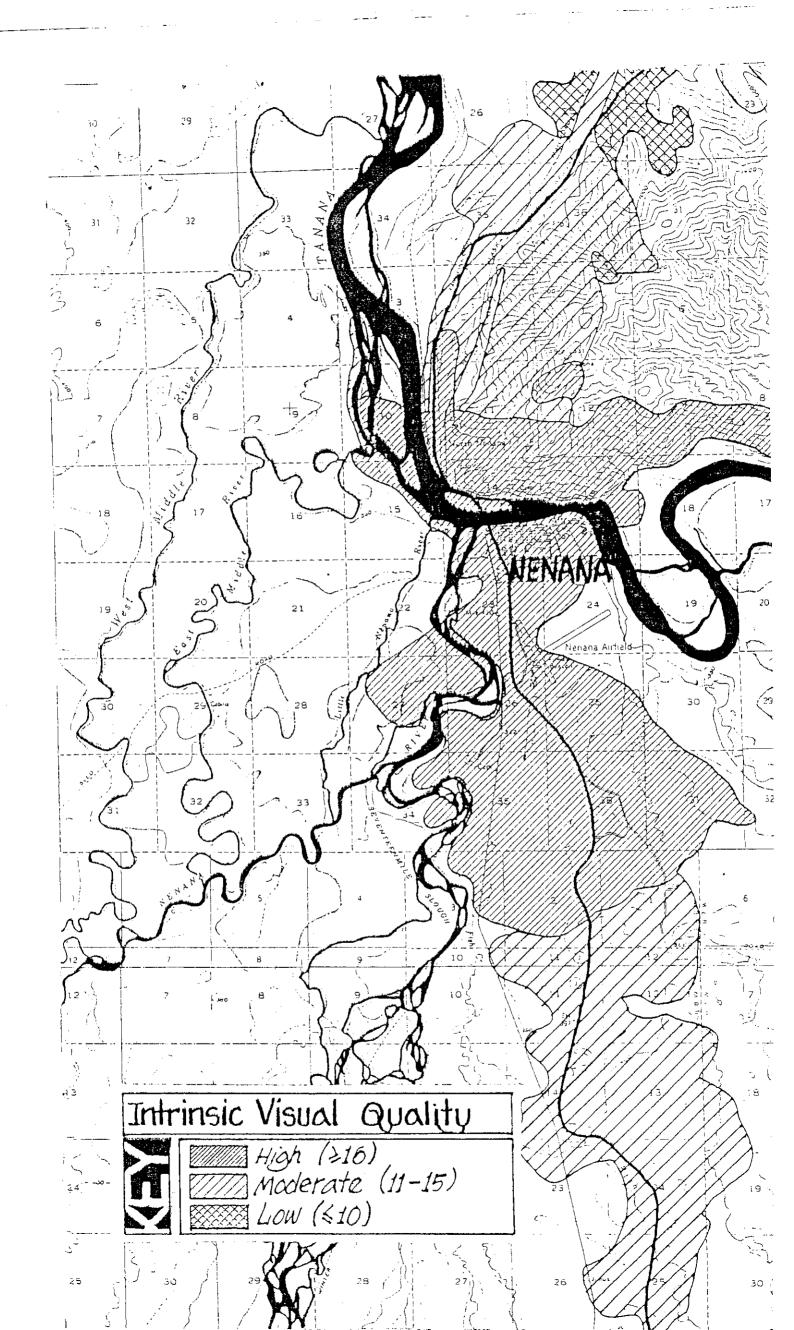
APPLICATIONS

The information contained within this scenic resource inventory was designed to be useful in conjunction with other physical, biological and socio-economic landscape characteristics in management and other land related decision making. Information set comparisons can be accomplished primarily through interpretative map overlays and graphs. The potentials also exist for computer based storage, mapping and analysis of this information alone or in combination with other data. Some interpretation techniques applications and recommendations. Interpretative maps will use that portion of the road passing through the community of Nenana for illustrative purposes.

1. Comparison of Intrinsic Visual Quality

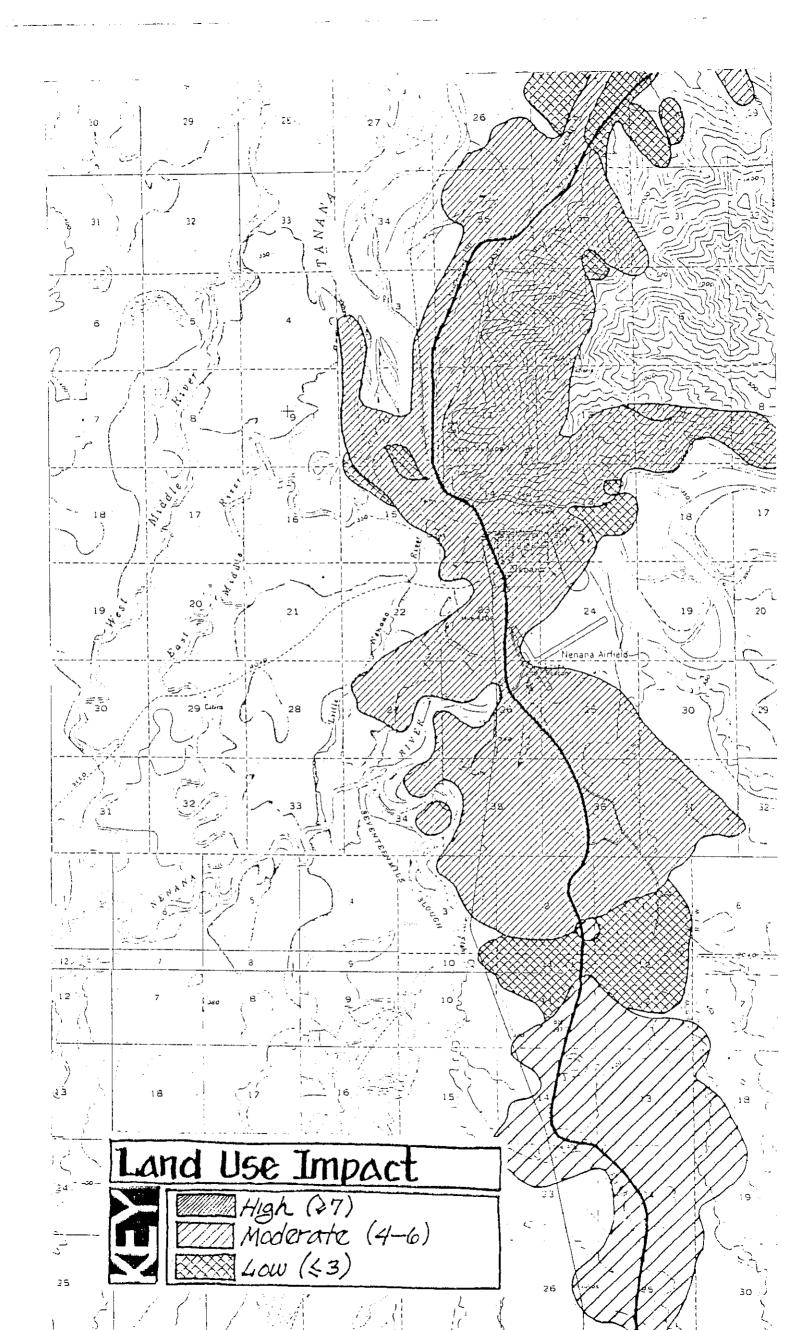
This can be accomplished in the following manner. Intrinsic visual quality values for all assessment units within a single character type (or for all character types) are grouped into three categories; high, medium, and low. The viewshed (seen area) for each unit can then be color coded or shaded according to its group rating. The resultant map gives a relative indication of areas of high scenic resource value. See facing page for an example of an intrinsic visual quality map for that portion of the road passing through the community of Nenana. Contiguous units with "high" intrinsic visual quality ratings suggest that scenic corridor or scenic highway designations, with appropriate management guidelines, might be appropriate. Similarly, those isolated units of intrinsic visual quality surrounded by lands of lower values could suggest that special consideration be given to these lands to take advantage of the special landscape characteristics occurring there. It should be noted that a variety of other important factors, such as land ownership. use patterns and important resource locations need to be considered in conjunction with the scenic resource information.

On the map on the facing page, note that the lands around the community of Nenana have high intrinsic visual quality ratings. The land use impact map on the following page indicates that these lands also are subject to commercial, industrial and residential development. This suggests that careful land management and design considerations could be employed to reduce these adverse impacts and respond to the high visual quality potential of this landscape.



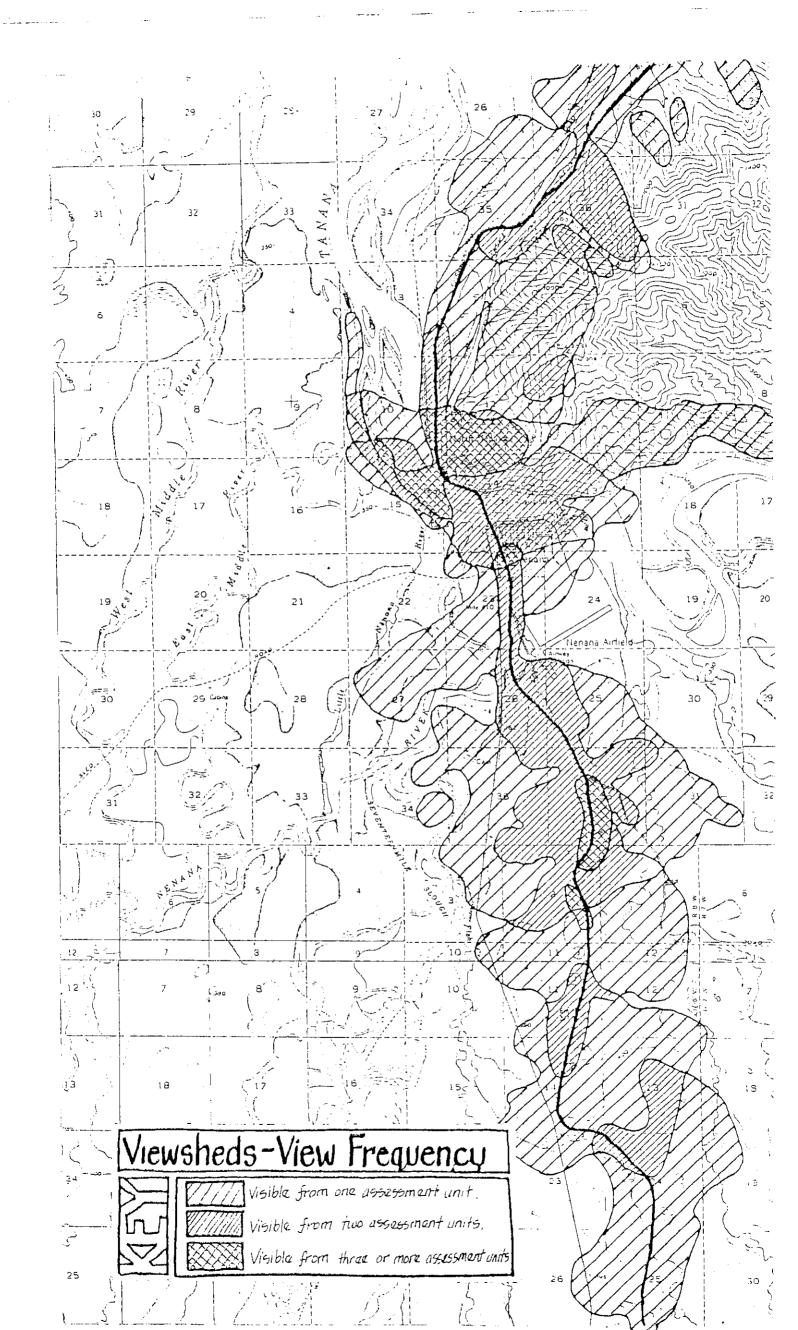
2. Land Use Impacts

The intensity of human activity and its impact on scenic resources is evaluated through the cultural impact data for each assessment unit. Values could be grouped into "high," "medium" and "low" categories. This information can be displayed graphically through a color coded or shaded viewshed map such as the one shown on the facing page. This type of map can indicate where existing land use patterns severely impact the scenic resources, as well as those areas where human activity has remained in scale and harmony with the character of the land. When this information is compared to the intrinsic visual quality map (see preceding page), those lands of high scenic resource value which have been impacted by land use activities can be identified. This would suggest that these areas may require careful onsite analysis to determine management techniques to reduce this impact.



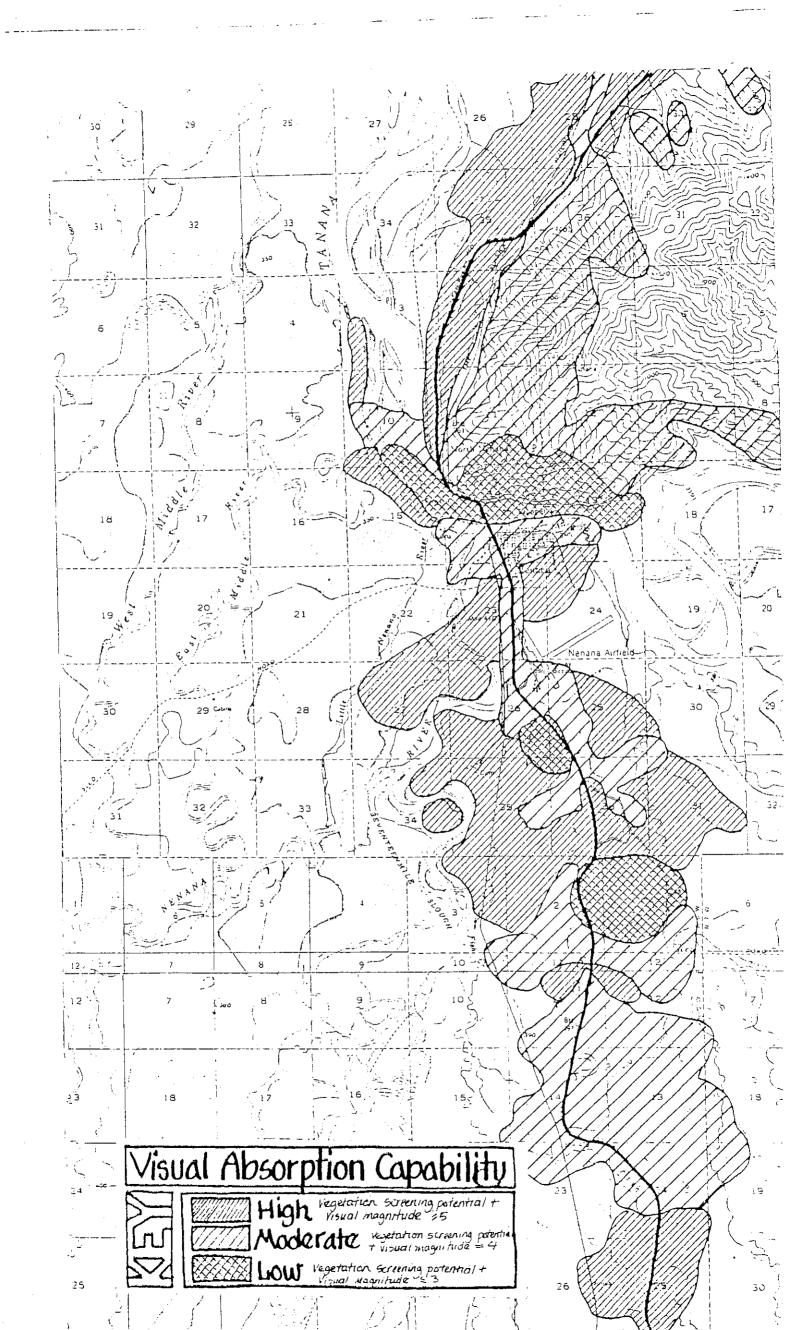
3. Viewsheds and Visibility Frequency

Often land planning and management decisions require a determination of whether a certain development or management activity will be visible or not. Composite viewshed maps give good approximations as to the extent of foreground and middleground seen areas, as well as an indication of which lands are viewed from more than one assessment unit. Thus for example, by using this map, a proposed clearcut or gravel extraction site could be evaluated as to whether or not it would be visible from the road as well as whether it might be viewed from more than one assessment unit. The map on the facing page depicts a viewshed and visibility frequency map. Note that lands across the Tanana River north of the community of Nenana are visible from three or more assessment units. These lands could be considered to be particularly sensitive since land development or modification could be highly visible from a number of vantage points along the highway.



4. Visual Absorption Capability

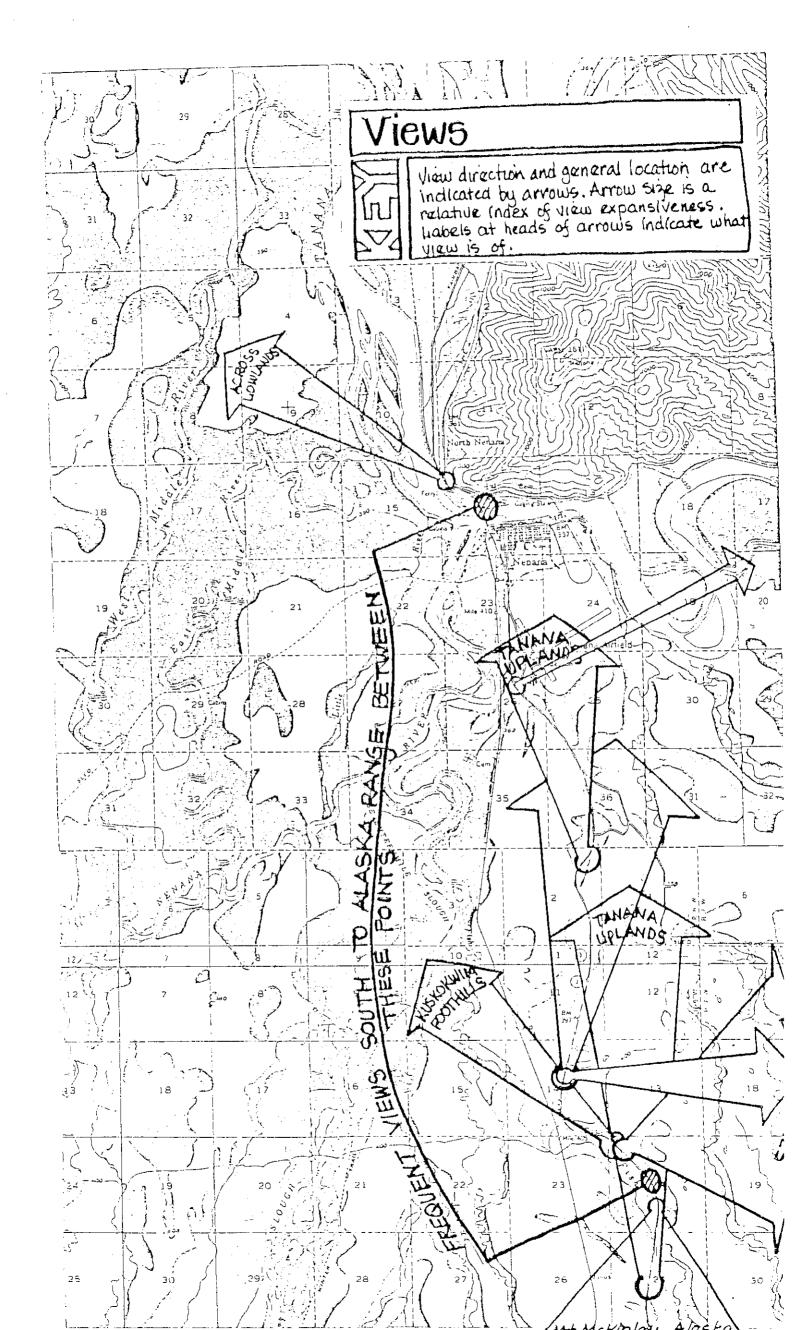
As noted in the preceding section, the visual absorption capability is an index of the ability of the topography and vegetation to screen or reduce the visibility of a landscape modification. Maps indicating "high," "medium" and "low" visual absorption capability can be generated from this inventory information (see map on facing page). Lands rated "high" suggest that development and/or landscape modification could occur without being highly visible, while those areas rated "low" indicate that any activity occurring there would be highly visible. It must be noted that onsite inspection and adequate design considerations need to be employed in all cases; however, the visual absorption capability reflects those areas where design costs and environmental impacts can be minimized.

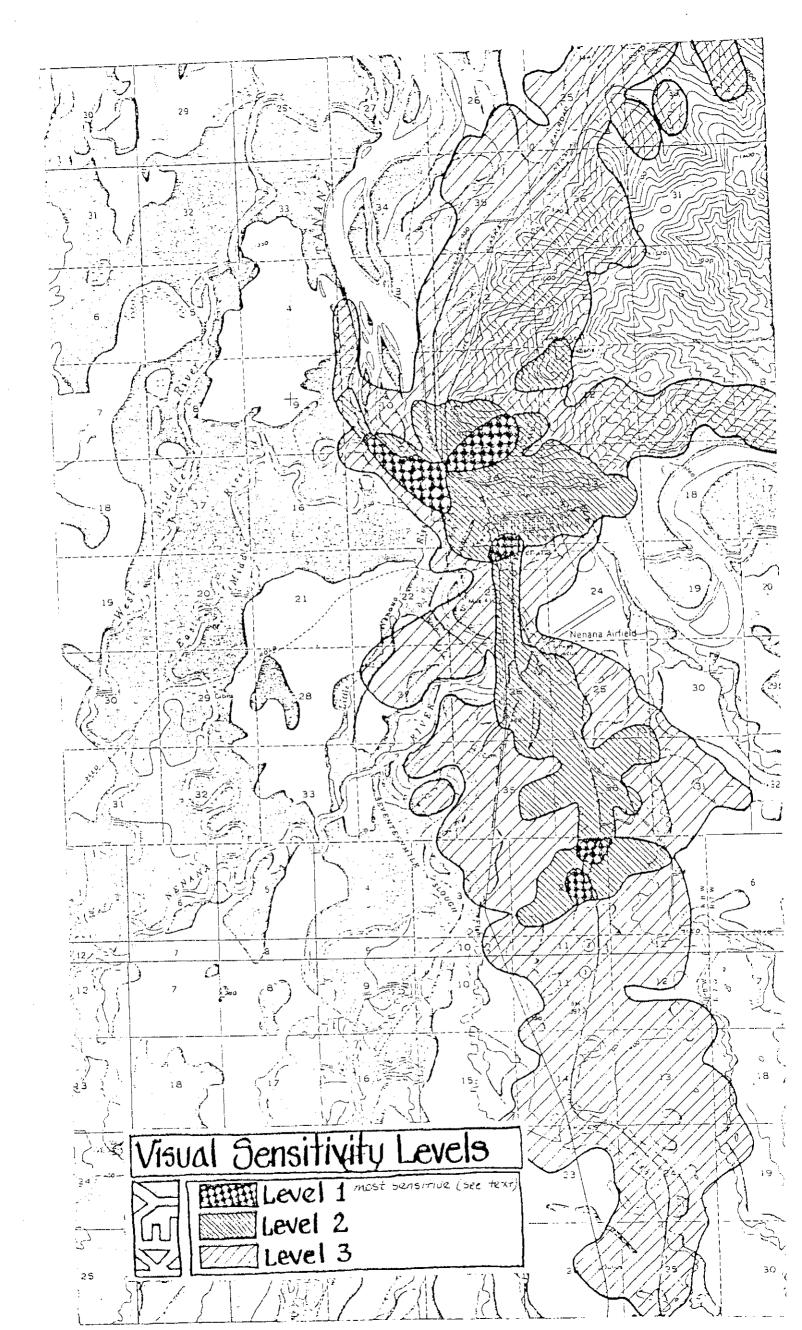


5. Views

Maps indicating the location of viewpoints and unique natural and manmade visual elements can be generated from the inventory data. This information can be useful for evaluating places for potential recreational wayside or scenic turnout development. These maps can also be helpful in determining where large structures (buildings, communication towers, power lines) may block or interfere with distant views. Furthermore, stretches of road with only limited views out can be evaluated to determine if vegetation modification or alternative road alignments may be employed to improve the quality of the experience by creating distant views.

Note the view patterns on the map on the facing page. Numerous views both due north to the uplands above the Tanana River and south to the Alaska Range occur from the community of Nenana south. Mt. McKinley is visible only from the southernmost assessment unit shown on the map. North of Nenana, distant views are for the most part absent. This information suggests two opportunities. First, north of Nenana there may exist places where views across the Tanana lowlands to the distant Kuskokwim foothills could be created through landscape modification. Secondly, the southern portion of the highway may be a good location for a turnout or rest area due to the expansive views in all four directions and the view of Mt. McKinley.





GRAPH 1 INTRINSIC VISUAL QUALITY

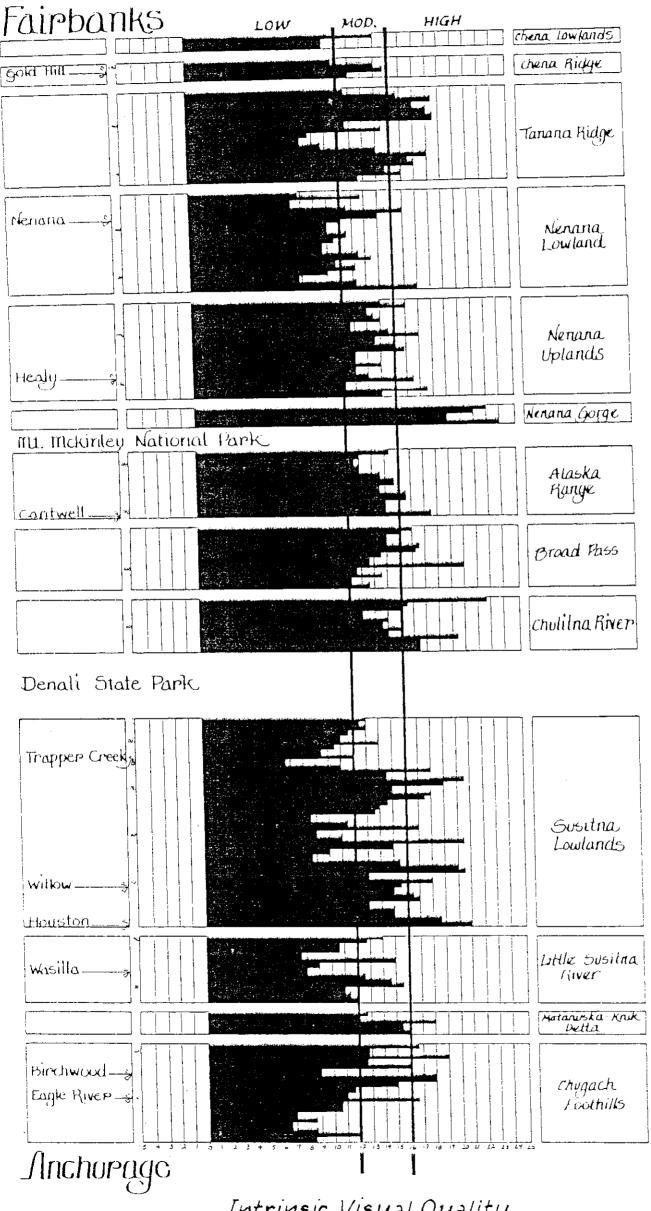
The intrinsic visual quality is defined as the degree of expression exhibited by a landscape through the interplay of its various components or elements. It is the landscapes ability to create visually distinctive and pleasing patterns of form, line, color and texture. Mathematically the intrinsic visual quality is the numerical sum of the following variables:

land-sky interface landform landcover waterform surprise anticipation sequential diversity lateral views unique visual elements

Along the George Parks Highway, intrinsic visual quality values range from a low of 6.5 to a high of 24. The mean value was 14. The intrinsic visual quality ratings were grouped into three categories:

High (16) Moderate (13 16) Low (13)

It is of interest to note that aside from the Nenana Gorge character type in which all assessment units scored high, all other character types generally display a wide range of intrinsic visual quality ratings. Consequently, the recommendations found in part three break the character types down into smaller units (called visual resource management units.)



Intrinsic Visual Quality

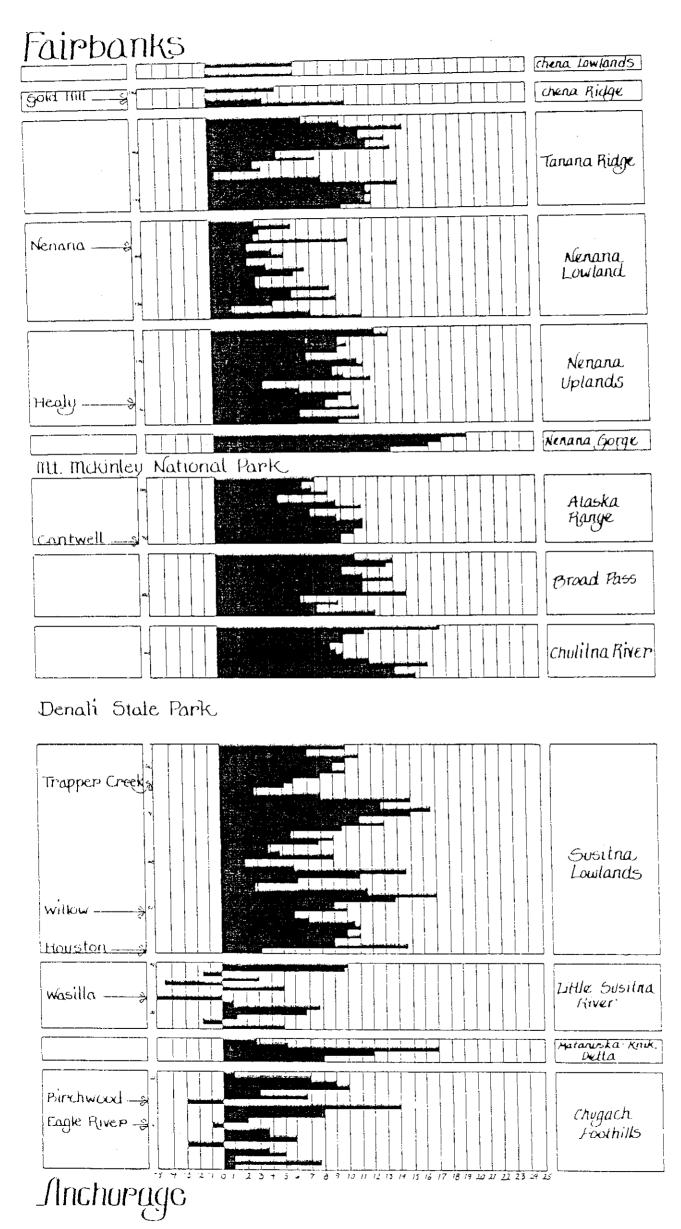
GRAPH 2 COMPOSITE VISUAL QUALITY

The composite visual quality rating is a measure of the assessment units present visual quality. It is derived from the intrinsic visual quality (see Graph 1) minus the visual impacts of land and resource development. Composite visual quality is a measure of the units relative scenic value as it presently exists. Along the George Parks Highway, the composite visual quality ranged from a low of -6 to a high of 20. The mean value was 8. The composite visual quality ratings were grouped into three categories:

High (11) Moderate (8 11) Low (8)

High composite visual quality ratings were part of the criteria used to determine scenic highway designation recommendations.

The reader should compare the patterns on this graph with those of the previous one. The visual impact of some land developments can be significant - as can be seen in some assessment units ending up with negative values. It is of interest to note that while the lowest composite visual quality values were clustered in the area form Wasilla south to Anchorage - there still were many assessment units which scored high enough for scenic highway designation recommendations along this portion of the highway. This graph is a good indicator of where work needs to be done to restore some of the scenic resource values intrinsic to these landscapes.

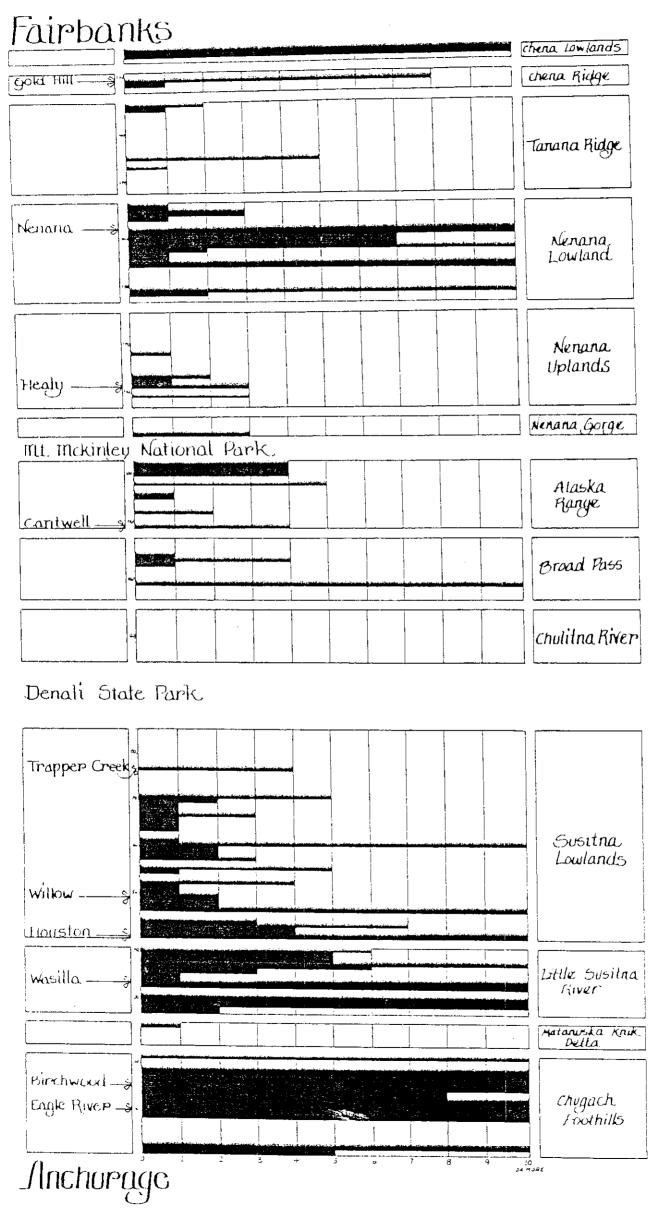


Composite Visual Quality

GRAPH 3 NUMBER OF RESIDENTIAL STRUCTURES VISIBLE FROM THE HIGHWAY

Permanent and part-year residences are visibly the most prevalent roadside land use along the George Parks Highway. From a scenic resource perspective, residential land use generally has a lower visual impact than almost any other land use. Residential use tends to disturb the land less, leave trees and shrubs, and prefer an orientation away from the road. Additionally, residences provide points of interest and variety along many portions of the George Parks Highway. Only when residential development disturbs large portions of the natural landcover, when it results in large accumulations of junked autos and other trash, and when it uses materials and is at a scale out of character with the surrounding landscape does it detract from scenic resources. At present this happens in only a few locations. Yet the potential for more adverse impacts of roadside residential development does exist as more and more land is developed.

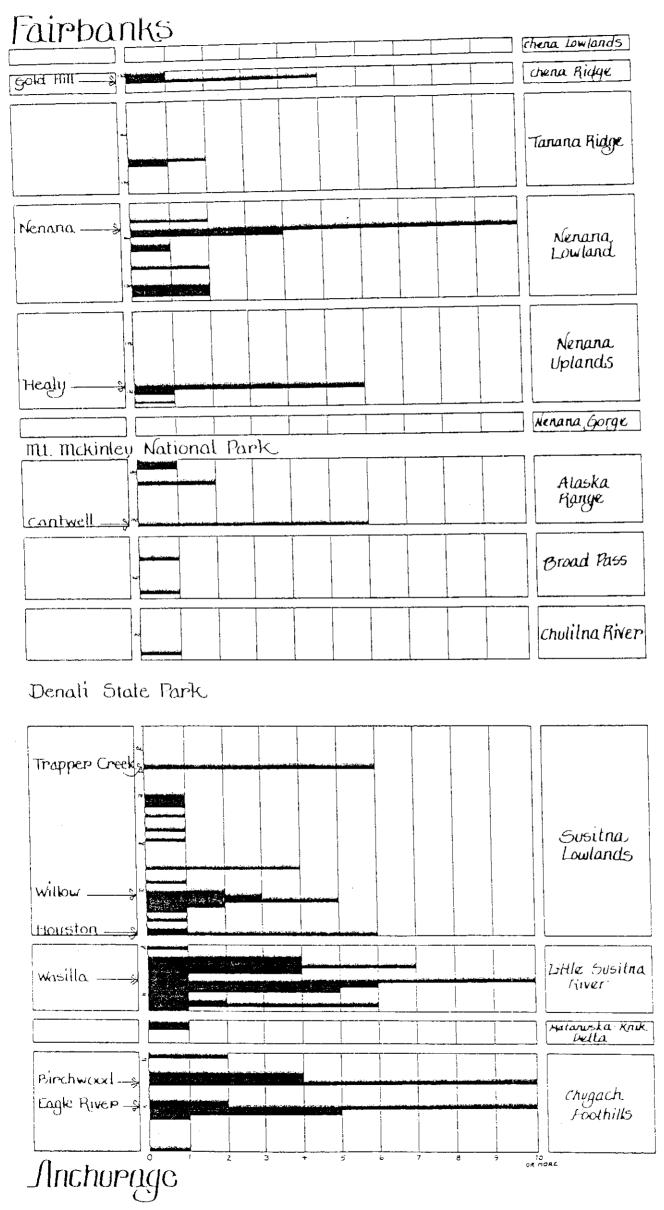
Some interesting patterns emerge from theis graph. Not suprisingly visible residential development tends to be high near Anchorage and Fairbanks, and decreases progressively as one moves farther away from these areas. Breaks in this pattern indicate large areas of public lands - such as the Tanana Ridge lands southwest of Fairbanks and Fort Richardson Military Reservation east of Anchorage, or areas which are undevelopable such as the Matanuska-Susitna Delta. The greatest visual impact of residential development is found near Anchorage (assessment units 10, 11, 12, 15, 17, 18, 21), Wasilla and the lower Susitna Valley (assessment units 28, 30, 33, 36, 41) and near Fairbanks (assessment unit 188).



Number of Residential Structures

GRAPH 4 NUMBER OF COMMERCIAL STRUCTURES VISIBLE FROM THE ROADWAY

Commercial land development (stores and other private businessess) along most of the George Parks Highway is still relatively low. As would be expected, "relatively intensive" development (5 stores visible from roadway) occurs only around existing communities (Eagle River, Birchwood, Wasilla, Willow, Trapper Creek, Cantwell, Healy and Nenana). This graph most clearly points out the intensive strip commercial development presently occurring for miles both north and south of Wasilla and the long stretches of highway with only one or two scattered commercial structues. Clearly today, aside from the Wasilla commercial strip, there exists great opportunity to play a role in the sensitive commercial development of the lands adjacent to the highway in a way which provides the necessary services and at the same time takes into consideration the scenic resource values present.



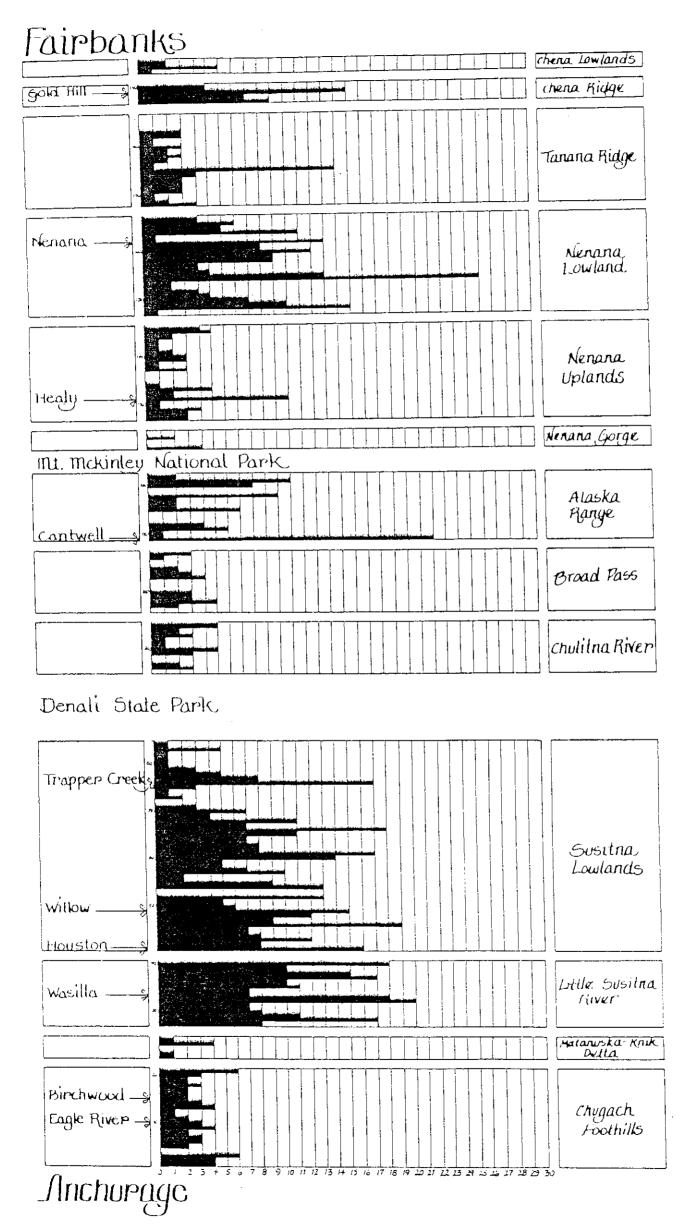
Number of Commercial Structures

GRAPH 5 NUMBER OF INTERSECTIONS WITH THE GEORGE PARKS HIGHWAY

The number of highway intersections can be an indicator of a variety of concerns related to roadside land management. Some of these concerns include the following:

- strip commercial development
- potential safety hazards. Numerous intersections in short distances create many potential traffic hazards as a result of entering and leaving vehicles.
- intensive recreational use of areas adjacent to the highway.
- visual distractions to motorists, both as a result of the need to be aware of entering and leaving vehicles as well as the required signing, turning lanes and other visual clutter needed to manage numerous intersections and turnoffs.
- potential future roadway development requirements such as frontage roads, turning lanes, overpasses, and controlled access sections to safely deal with some of the problems intrinsic to highway intersections.

At present, there appears to be two distinct situations along the George Parks Highway. One is the controlled access situation as found on the roadway leaving Anchorage. This provides a minimum of intersections and, as a result, a minimum of safety hazards along with relatively safe system for moving vehicles through communities. The price for this is very high economically, and environmentally because it requires wide roadways and extensive landscape alteration. The other situation is at the opposite extreme - no control along a narrow two lane roadway. This is typical along most of the highway. What is needed is a method of realizing the advantages of the controlled access highway while not requiring the enormous economic and environmental costs. The most direct way to accomplish this would be to today develop control of intersections with the highway and developing frontage commerical roads along those areas where roadside commercial development requires visibility and easy access. The total lack of any control as is evident today, generally leaves as the only other option an expensive controlled access freeway bypass. This graph indicates some of the problem areas which Alaskans are going to have to pay for sometime in the near future such as around Wasilla and Nenana.



Number of Intersections with Parks Highway

PART THREE: SUMMARY OF MANAGEMENT RECOMMENDATIONS SPECIFIC TO THE GEORGE PARKS HIGHWAY

The scenic resources of the George Parks Highway are of considerable value to Alaskans living and commuting along it as well as the thousands who travel it for business and pleasure. As with any valuable resource, some type of management strategy or planning is deemed necessary to preserve areas with very high scenic resource values, to improve those areas where man made diversity can enhance the driving experience, and to restore areas where the scenic quality has been severely eroded by landscape alteration.

How can one manage scenic resources? The visible landscape often includes thousands of acres of land. The seen area or viewshed constantly changes with the movement of the viewer. Scenic resources are often subjective, what is beautiful to one person may not be as attractive to another. Additionally, scenic resources do not stand alone. Lands with valuable scenic resources are often the very same lands with valuable stands of timber, good agricultural soils, high mineral potential, as well as subject to recreational, commercial and residential use pressures. Despite these problems, scenic resources are manageable.

Management of scenic resources is generally not a question of scenery verses mining, scenery verses residential development. Scenic resources most often lend themselves to a multiple use management strategy. Such a strategy generally focuses on how to realize land development and resource use while at the same time not destroying the scenic resource values. There are places when, in order to respect high scenic resource values, other intensive land uses such as clear cut logging or strip mining might not be allowed. At the same time there are many times where, through careful predevelopment planning and design considerations, a mine or logging may be realized and scenery not significantly devalued. For the most part, this set of recommendations strives to point out places and types of actions required to protect the unique scenic values found along the George Parks Highway while at the same time allowing other land and resource uses as deemed necessary by public demand and planning study.

Before going into detail regarding the nature of the scenic resource management recommendations, it must be mentioned that this material should be used in conjunction with other physical, biological and socio-economic data for sound land and resource planning decisions. This scenic resource data, and these recommendations need to stand side by side with soil capability and

suitability studies, vegetation maps, mineral potential, animal habitat concerns, human land use patterns and other information. A scenic resource inventory is yet another piece in the puzzle we call the environment, and an understanding of it helps to make more environmentally and socially sound decisions regarding the use of the land and resources around us.

Scenic resource management considerations regarding the lands along the George Parks Highway are closely linked to two important considerations - foreground lands and land ownership patterns. The viewshed or visible landscape perceived from a vehicle moving along the highway, is commonly divided into three zones; foreground, middleground and background. The foreground is that portion of the visible area to a distance of ½ to ½ mile from the viewer. The middleground refers to the visible area beyond the foreground to a distance of approximately 5 miles. The visible landscape beyond the middleground is referred to as the background. Of these three distance zones, in most instances it is the foreground which is most critical to the quality of the view experience. Foreground areas can create spaces, frame and define views, and screen objectionable areas. Foreground lands are where landscape details such as colors and textures are most clearly evident. Foreground lands create variety and visual change in the perception of the landscape more so than the less dynamic middleground and background distance zones. The foreground areas invite the viewer to stop, rest, and participate in the environment. And, foreground lands can either "make" or "break" a view. For example, a very pleasing view of Mt. McKinley or Mt. Susitna would undoubtedly be considered of greater value if a quiet lake, trees and a cabin define the foreground rather than if it is dominated by an open gravel pit or a jumbled array of signs, parking lots and commercial establishments.

The George Parks Highway scenic resource recommendations focus on foreground lands. Such an emphasis is logical in light of the above mentioned considerations and at the same time allows for another important consideration. It means that scenic resource management -- rather than attempting to deal with thousands of acres comprising the highway viewsheds -- can concentrate on a small but most important part of these thousands of acres.

Land ownership is the second important concern with respect to scenic resource management along the George Parks Highway. It is undoubtedly the most important factor to be considered with respect to the implementation of these or any other land and resource management recommendations. Successful implementation of most

recommendations would be relatively easy if all foreground lands were under the ownership and responsibility of a single private owner r public agency. However, the ownership patterns along the George Parks Highway are extremely complex. Ownership includes the Federal government (managed by a variety of separate agencies such as the Bureau of Land Management, National Park Service, and U. S. Army) the State of Alaska (similarly with anumber of separate managing agencies such as Department of Natural Resources, Department of Transportation and Public Facilities and Department of Fish and Game), local governments (three boroughs and numerous large and small communities), native village and regional corporation (AHTNA, Cook Inlet Region, Inc., Doyon Ltd., regional corporations and Cantwell, Nenana, Montana Creek village corporations), as well as hundreds of other private individual landowners. It should be obvious that any effort to develop a consensus and unified land management direction for such a diverse array of interests and points of view would be extremely difficult - particularly with respect to something as new, subjective and of nonquantifiable economic return as scenic resources.

Along the George Parks Highway there are generally three different land ownership patterns, each with a somewhat different set of implications regarding management implementation. The first condition is where a single public agency has responsibility over a considerable contiguous portion of the foreground landscape. This condition provides the easiest opportunity for visual resource management. Examples would be stretches of road through Denail State Park (under the primary jurisdiction of the Department of Natural Resources, Division of Parks), the roadway in Mt. McKinley National Park (under the jurisdiction of the U. S. Department of the Interior, National Park Service), forested roadside uplands between Nenana and Fairbanks (under the jurisdiction of the State Department of Natural Resources) and portions of Fort Richardson Military Reservation outside of Anchorage. Since we. are dealing with public lands in this case, decisions are subject to public influence and review, however, the need for considerable interagency coordination would be minimized. Unfortunately, this condition is typical only to a few portions of the highway.

The second condition is where foreground roadside lands are predominantly under the jurisdiction of two or three public agencies. In such cases, the opportunity exists for cooperative land management strategies without the intensive demands for coordination and interaction amongst a great many people. As noted above, such management decisions again would be subject

to public participation and review, however, the task is much simpler when one or two public entities are involved. Foreground portions of the highway in the Matanuska Susitna borough, where it is predominantly a mixture of state and borough ownership, offer such an opportunity for joint scenic resource management. It should be noted that this opportunity may soon be lost if either the state or borough dispose of this roadside land. It is important that actions be initiated now in these cases.

The third condition is where the foreground lands are a complex pattern involving many landowners -particularly private individuals. Unfortunately, a large portion of the Parks Highway is this way. With respect to visual resource management, this complex ownership pattern presents the greatest challenge -to coordinate the variety of interests, points of view and management responsibilities. Small private landowners are often not specifically concerned about scenic resources. They often feel that their individual lots are not of great significance, and they often have a poor understanding of scenic resource management options such as greenbelts, design standards and site planning techniques. Consequently, one important task of a scenic resource management strategy is that of public education -- convincing landowners and managers of the value of scenic resources and the options available to manage them for their benefit. In those areas where this complex ownership pattern exists, public meetings seem like a valuable first step in in developing this public consensus regarding the sensitive management of these resources.

For purposes of making the management recommendations easier to grasp, the George Parks Highway has been divided into a series of short segments which are called visual resource management units (VRMU). Visual Resource Management Unit Number One begins in Anchorage and visual resource management unit 27 is at the George Parks highway entrance to Fairbanks. Each visual resource management unit is a stretch of highway subject to similar land management strategies and concerns. Management recommendations fall into four broad categories: scenic highway designations, design and planning considerations, opportunities, and problems.

1. SCENIC HIGHWAY DESIGNATIONS

Those stretches of the George Parks Highway with the very higest scenic resource values as identified by this inventory are recommended for official designation as "scenic highway." Such a designation would need to be made by the State Legislature through the State

SUMMARY OF SCENIC HIGHWAY RECOMMENDATIONS (FIRST PRIORITY)

LANDSCAPE CHARACTER. TYPE(S)	Tanana Rube	Tanana Ridge	Nenana Uplancks-Avenana Ruck howlancks	Nenana Uplands	Nienanze Uplands	Nenana Uplands	Nenana Ckrge	Broad Pass- Alaska Range	Chulitha Ruler -Broad Pass	Chulitha River	Susitna Ruer Lewlands	Susitna River lowlands	Liffle Susitia River - Susitina Lowlands	Chugach Foothills-Matanuska Kuk Delta	Chugach Foothills	 -	
VISUAL RESOURCE MANAGEMENT UNIT	76	25	72	1¢.	9	20	ପ୍ର	41	R	13	01	0	9	7 -	4		
Assessment Units	581-001	168-174	145-147	01-921	051	921	123-136	2)1-00)	93-30	85-89	61-73	五-33	39-47	18-34	12-14		
LENGTH	11.4 miles	15 miles	4,4 miles	B.O miles	1.0 miles	2.0 miles	5.5 miles	25.5 miles 100-115	6.0 miles	5 miles	11.5 miles	7.5 miles	0'21	ñ	7		
LOCATION-(DESCRIPTIVE)	Hills asst of Estar	Hills northeast of Nanava	south of clear-Anderson	north of Haaly	west of Healy	wast of Haally	Menana Gerge - McKnaley	gummit-lantwell area	colorado	Huppicane Gulch	Gualtha River Crossing	Willow Cross to Kashwithe	RICHARE read to Nancy	Lake Grossing Knik-Matanuska Rivers	Fire Lake - Chugiak		
LOCATION (Mileposts)	337.2 to 349.7	314.7 to 327.8	271.6 to 276.2	895,7 to 204.1	247 to 248	244,5 to 246.5	237,9 to 243,4	194 to 217.5	182 to 188	(69,2 to 177	97.3 to 108.9	71.4 to 78.5	15. (36.05)	23.5.0 to 55.6			

Department of Transportation and Public Facilities and the Department of Natural Resources. A system of signs could be posted along these stretches of roadway, along the public to the fact that the scenic resources along these portions of the highway are exceptionally high.

"Official designation" as a scenic highway could accomplish a number of things. First, it would be an important step towards building a public awareness of scenic resource values. It could create a public demand and expectation for special land management within these areas. Such demands and expectations would be important leverage to the implementation of roadside highway land management strategies. It could influence private landowners to take special considerations in roadside land development within these areas, as well as spurring a public pride in keeping these areas free of litter, signs and other unsightly visual clutter. Finally, such a designation would set an important precedent -- paving the way for similar designations and management strategies throughout Alaska's state highway system.

"Official designation" could also set the stage for the formation of a commission or advisory group to explore implementation strategies for scenic resource management within these areas. Team membership should be directed or coordinated by representatives from the Department of Transportation and Public Facilities and the Department of Natural Resources. One of these representatives should be a professional landscape architect with experience in visual resource management techniques. Representatives of the various public agencies and private individuals owning or managing foreground lands within these designated scenic highway areas would also be asked to participate, as well as any other interested individuals.

One of the most important tasks of this commission or team would be to develop an education-awareness program designed to inform public and private landowners and managers as to the value of scenic resources, and some of the techniques employed in managing them. These would include special zoning ordinances and development standards within boroughs and municipalities for foreground lands adjacent to highways; greenbelts and scenic easements along public lands bordering highways and along streams and rivers which highways cross; performance standards for the removal of vegetation or the alteration of topography within foreground lands adjacent to the roadway; standards for the location size and materials used in commercial signing along scenic highway stretches of roadway; retention of

development rights of lands adjacent to the roadway in state and local government land disposal programs; requiring professional design services including landscape architects for large land developments adjacent to the roadway; developing state and local government policies on the character of commercial, residential and industrial land developments adjacent to roadways; encouragement of special land development management considerations in particularly fragile areas from a scenic resource point of view (open tundra, bogs, salt marshes); integration of scenic resource data and management strategies in regional and local planning efforts. Those visual resource management units where a scenic highway designation is recommended contain additional concepts and strategies for the management of the scenic resources. appendix to this report contains a copy of The Scenic Route, A Guide For the Official Designation of Scenic Highway, July 1975 developed by the State of California. of this information would be useful to implementation strategies for a similar concept in Alaska. Included in it is a sample ordinance cities and counties could use in designating a scenic highway and managing private lands adjacent to scenic highways.

2. LANDSCAPE DESIGN AND LAND PLANNING CONSIDERATIONS

Many of the recommendations regarding the care and management of the scenic resources along the George Parks Highway might be classified as either employing a landscape design or land planning skill. While in many ways landscape design and land planning skills and techniques may be considered to overlap, for purposes of this discussion they will be dealt with separately. Landscape design may be considered to refer to all of the ways that one can conscientously manipulate the topography, land cover and man-made objects to accomplish a "task." Some of these tasks might be to hide, to enhance, to restore, accent, or organize. Trained landscape architects are those most commonly versed in the variety of techniques related to landscape design. Land planning considerations are a bit broader in scope than the more site specific landscape design considerations. These focus more on the way lands and natural resources are used. Land planning techniques often set the stage, or provide the context where landscape design skills can be employed. Since these two concepts, land planning and landscape design (specific site planning) are complementary they are considered together here. All of the land planning and landscape design tools and techniques mentioned here are relevant to the other three recommendation categories (scenic highway designations, opportunities, and problems).

LANDSCAPE DESIGN CONCEPTS

Descriptions of some landscape design techniques follow. Place where some of these ideas might be applied can be found within the narrative for each visual resource management unit.

Landscaping and roadside vegetation management within the existing right-of-way.

This would be one way to very quickly influence the scenic quality of the foreground lands along the George Parks Highway because right-of-way lands are entirely within the jurisdiction of a single managing agency - the State Department of Transportation and Public Facilities. The greatest impediment to implementing these types of recommendations are the generally very standardized and unimaginative right-of-way management techniques presently employed along roadways in Alaska and throughout the country. Federal highway support funds often carry with them numerous standards and restrictions. However, the following concepts, all of which are presently employed along some highways throughout the country, would not diminish the Parks Highway's utility or safety and would significantly add to the scenic quality of the particularly sensitive foreground distance zone. Some rightof-way design consideration might include:

Median strip tree and shrub plantings on divided portions of the highway. Such plantings can be especially effective with the use of native plant materials. In many cases, native vegetation will invade an area naturally if intensive measures to prevent this are not taken. Such a concept is particularly applicable along the George Parks Highway as it leaves Anchorage. It would also be a significant concern with respect to new highway construction, whereby vegetation within the median strip could be left as undisturbed as possible.

Imaginative use of wildflowers, grasses and other visually distinctive erosion control plantings on the cut and fill banks of the highway. Presently, the poppy plantings near Eklutna, and the wild iris displays near Eklutna Flats are good examples of how wildflowers add to the scenic quality of the driving experience. Such extremely colorful plantings would not be desirable everywhere because they would lose their distinctive charm and uniqueness. However, they can be

an important accent. Experimentation into the use of other flowers along the right-of-way should be conducted.

Develop more imaginative treatment of the highway right-of-way edge. Presently, the highway right-of-way is for the most part maintained equally on both sides of the road and for most of its length. The result is that visual variety is minimized. This is of particular concern where the roadway passes through level terrain with dense stands of trees on either side of the highway. Variability in the clearing and maintenance of the right-of-way could be a function of more than aesthetics; wider clearing could be done on southern edges to aid in the heating of the road surface during the spring and fall, selective clearing around common moose crossing areas could help to reduce moose kill problems, and leaving trees and shrubs closer to the roadway can in certain instances reduce drifting and blowing of snow. The key to this design concept is not to treat both sides of the road equally - rather to create spatial and experiental variety through the variable clearing and suppression of right-of-way trees and shrubs.

TURNOUTS AND LITTER BARREL SITES

Along the George Parks Highway there presently exists numerous roadside turnouts, some with litter disposal facilities, a few with toilets, many without any facilities. Many of these turnouts were previously used as gravel extraction or construction staging sites - suggesting that aesthetically and functionally they lack many characteristics desirable for a roadside rest area. Most of them are simply de facto rest areas, since there are at present few developed roadside rest and camping areas. Consequently, almost all places lack any sensitive site design and organization characteristics and site development often consists of no more than orange litter barrels and an active suppression of any form of vegetative cover within a poorly delineated parking area. Two things are of concern here. First, roadside rest areas and turnouts need to be a part of a system of such facilities, all properly located, sensitively designed, constructed, and maintained so as to adequately meet the demands of the traveling public. At the moment there does not exist a system of roadside rest areas all along the highway. This subject is dealt with more carefully on

the following discussion concerning "opportunities." The second concern relates to the actual site design of these rest areas and turnouts. The following basic design principles should be the basis for the development of rest areas and turnouts once they are properly and systematically planned and located.

Locate a visual and sound buffer between the roadway and the parking areas. All parking facilities, toilets, picnic tables and litter barrels should be screened from the roadway - and enough vegetation retained to reduce highway noise.

Litter barrels do not need to be highly visible from the road to be effective. For those areas where the only roadside facility is a litter barrel the simple technique of signs alerting drivers to the presence of a litter barrel is sufficient. In this way they can be more discreetly located along the road, and be less distracting to the scenery.

Rest areas should, as much as possible take on a unique character and take advantage of surrounding landscape features. Not all rest areas -turnouts should look and feel alike. They should take advantage of lakes, rivers, scenic overlooks, and unique geologic, biologic or historic features. Provision should be made to try to draw the traveler away from the vehicle for a short time to see, appreciate, and learn about the landscape he is driving through.

Rest areas and turnouts should clearly delineate where vehicles are permitted and not encourage vehicular movement beyond this area. This is particularly important along streams, rivers and lakeshores - and is at present a serious problem in many places along the George Parks Highway.

There needs to be a clear differentiation between day use and overnight use rest areas. Day use areas can be sited relatively close to the highway - and should provide limited facilities which do not encourage overnight camping. Overnight use areas should be located at least ½ mile away from the road. Such facilities are more properly termed campgrounds, and should be available near highway rest areas where possible.

Rest areas should take advantage of passive solar heating. In Alaska, where temperatures are almost always below the human comfort level, it is essential that rest areas are oriented to the south, that wind protection is provided, and that rain shelters, toilets, picnic tables all have a proper solar orientation and design. Trees are important design elements more to create spaces, act as windbreaks and provide visual scale and variety rather than for purposes of shade for most of the year.

GREENBELTS

Greenbelts are relatively narrow strips of land within which special land use and management considerations are deemed necessary to protect scenery, recreational lands, wildlife, accessibility or other valuable resources or conditions. Greenbelts are most commonly associated with linear landscape features such as roads, trails, rivers or shorelines. Greenbelts are often retained in a natural condition or with a minimum of land development or alteration. However, a greenbelt is not always left untouched. At times a variety of land uses are compatible within and adjacent to greenbelts the greenbelt designation simply alerting people that special considerations need to be taken to protect certain identified valuable resource or conditions. Consequently, it is not as simple as designating an area "green belt" - the types of land uses permissible within it need to be clearly defined. Often these uses may vary from one side of the road to the other, and from one place to another.

Along the George Parks Highway greenbelts would be a landscape management tool to help protect the sensitive foreground lands adjacent to the highway and visible waterways. The width of a greenbelt varies primarily according to the character of the topography and vegetation - in some areas a 50 to 100 ft. wide greenbelt beyond the highway right-of-way may be sufficient, in others it may extend for 300 to 1,000 ft. or more. Because of the nature of the vegetation, and the nature of surrounding views, some greenbelts should receive only minimal development. In other instances, houses, campgrounds and other more intensive land uses may occur adjacent to and within a greenbelt. Some specific considerations regarding greenbelt location, width and land uses are pointed out in the discussions regarding each visual resource management unit.

The greenbelt concept needs additional research regarding its implementation in Alaska. The State of Alaska

presently has a land classification category called greenbelt, but it has presently received little use because it is viewed as too restrictive in the land uses allowed. The legal aspects of a greenbelt designation through areas of complex ownership patterns needs to be explored. It appears that the most direct way of accomplishing a greenbelt type landscape management strategy would be through zoning laws within organized boroughs and municipalities, and through the state's zoning power in the unorganized borough. In spite of these problems, the greenbelt concept remains as potentially the single most powerful strategy for scenic resource management.

LAND PLANNING CONCEPTS

The above narrative focused on landscape design considerations relevant to scenic resource management. Another whole set of tools, techniques and considerations would fall under the heading of land planning. Land planning considerations are some of the most difficult. to actually implement yet they can be the most effective with respect to protecting scenic resource values. Many of the existing problems, from a scenic quality point of view are the result of the improper use of lands immediately adjacent to the highway. These include improper siting of gravel extraction and construction staging activities, uncontrolled commercial, residential and recreational access to adjacent lands, inefficient strip commercial development, and a lack of an adequate mix of public and private lands adjacent to the road - particularly around existing communities and along rivers, lakes and streams. Land use problems such as these not only impact scenic resources, but numerous, uncontrolled highway intersections pose safety hazards, strip commercial development results in inefficient use of energy resources and costly provision of utilities, and a lack of public land results in trespassing and access problems as well as requiring significant expenditures of public monies to buy back lands for needed public purposes. Problems such as these can be eliminated through foresight and careful planning. The following are some of the more relevant land planning concepts relating to scenic resource management along the George Parks Highway.

State Land Disposals

Due to their immediate accessibility, lands adjacent to the highway are under heavy demand for private ownership and use. It should to be pointed out that considerable roadside lands along the Parks Highway are already privately owned - particularly along the Lower Susitna Valley and near Anchorage and Fairbanks.

The following recommendations should be considered in any future state land disposals immediately adjacent to the roadway.

No state land disposals of land immediately adjacent to the highway along stretches under recommendation for scenic highway designation -not until further research into methods available to protect the sensitive foreground distance zone.

Agricultural development would be permissible on state lands immediately adjacent to the highway. In most instances, agricultural development is compatible with scenic resource management provided the necessary management techniques to prevent soil erosion (contour plowing, windrows) are employed.

State land disposals of parcels immediately adjacent to the highway and within 2 miles of existing communities should not be permitted until further study is done. Such public lands can have significance as future public open space, for a variety of future public uses, and as a means of controlling visually distracting commercial strip development.

Roadside land disposals should focus on those stretches of highway where greater diversity is desirable. In these areas, the most compatible roadside uses would be residential development or agriculture on lands capable of supporting this use.

Borough and Local Government Land Disposals

At this time, it is recommended that local governments should not dispose of any land it owns which is adjacent to the highway right-of-way and within an area under recommendation for scenic highway designation. Further site specific field work would need to be conducted in order to determine how to protect the valuable scenic resources and at the same time realize the best economic and social value for the local government. Along some stretches of roadway, a specific "greenbelt" width has been recommended, while along others an additional field determination needs to be made.

Boroughs and other local governments should retain all lands they own which are adjacent

to the roadway and within two miles of existing communities. This land should undergo careful study as to its best use. Such lands can help to create visual diversity - particularly if they remain in a natural or low development stage while surrounding lands undergo intensive development. They also may be possible future locations for parks, schools or a variety of other public facilities. Around most communities, such remaining public lands can be instrumental in controlling unsightly and inefficient commercial strip development.

Borough and other local governments land disposals should focus - to as much an extent as possible, on those stretches of highway where visual diversity is desired and where the foreground landscape has a high visual absorption capability.

Local governments should explore methods available to them for managing scenic resources within their boundaries. Local governments, through their zoing power can influence private land development. Indeed, this is probably the most direct and easily realized way that some control over scenic resources where private landowners are involved is possible. As already mentioned, the most important factor is informing the public about the value of scenic resources. Consequently public education programs would need to be a first step in this process. This could lead to the actual adoption of a zoning ordinance and performance standards for land use and development adjacent to the highway. The appendix to this report has a sample zoning ordinance developed for use in scenic highway designations in California.

State Land Classification

On state owned land, classification is the existing tool for management. With respect to scenic resources, a greenbelt classification could be useful. As with local government zoning, significant efforts need to be directed towards selling the public on the concept of a greenbelt. It is recommended that those stretches of highway identified for scenic highway status and under state ownership, be placed in a greenbelt classification. Widths of such greenbelts should be a minimum of 150' along those portions with a high

visual absorption capability, and field determined for portions with low visual absorption capability ratings.

INCORPORATION OF SCENIC RESOURCES IN LAND PLANNING STUDIES

A variety of borough and other local government, state and federal planning efforts are presently being done for lands through which the George Parks Highway passes. It is recommended that this scenic resource data and set of recommendations be made available to everyone involved in land and resource planning along the highway so that these resource values may be recognized and steps taken towards implementing or realizing the recommendations. This study should also help generate interest or demanding scenic resource data for planning efforts throughout the state and make scenic information a part of the information set commonly used in land and resource decisionmaking.

Visual Impace of Roadside Land Use - Guidelines for Land Planning Recommendations

To date, commercial land development and surface mining (sand and gravel extraction) have had the most significant impact on scenic resources along the highway. Two concepts can act as guidelines in encouraging - zoning - or restricting future use of roadside lands by public agencies as a result of the planning process. First, diversity is better than monotony. This principle is valid for land use as well as for ecological principles. This suggests that a mix of land uses (residential, commercial, recreational, industrial) is visually more desirable than a predominance of a single one. This is why commercial strip development has such a high visual impact - the predominance of a single type of land use over an extended portion of the visible landscape. Land planning recommendations for lands adjacent to the highway should encourage this diversity wherever appropriate. The second principle is that the visual impact of different types of land uses is quite different. In a general sense the impact may be categorized or classified into high, medium and low categories. Visually sensitive areas would be where land uses in the low visual impact category might be encouraged, while high impact land uses would most generally be located in areas of low scenic quality and/or high visual absorption capability. It must be remembered that without proper site design considerations and in extreme cases, land uses indicated as having low impact could conceivably have high impact - however, these classifications are valid for the types of land uses typically seen along the George Parks Highway today.

LAND DEVELOPMENTS	VISUAL IMPACT RATING	COMMENTS AND IMPLICATIONS
Commercial Industrial	High	Individual commercial develop- ments can have a relatively low impact. However, when groups of unrelated commercial developments occur - the impact increases.
	High to moderate	Industrial development can have a high impact in those lands immediately around it - however, unless extensive industrial developments occur - the visual impacts can be minimized through sensitive site planning
Residential	Low to No Negative impact	1
Recreational	Low to No Negative impact	

LAND DEVELOPMENTS	VISUAL IMPACT RATING	IMPLICATIONS
Surface Mining - Including Sand and gravel extraction	High	Do not permit immediately adjacent to road - leave buffer strip - preferably of dense vegetation to screen. Visually surface mining takes on visual interest and leaser impact as it becomes farther away from the viewer.
Timber Harvesting	Moderate to High	The visual impact of clearcut logging is significantly reduced in those lands beyond the foreground. Generally a buffer of 100 to 200 feet from the roadway right-of-way is desirable for clearcut activities
Intensive Agriculture row crops	Moderate to Low	Agriculture is generally compatible with scenic resource management. Smaller fields leaving hedgerows between fields and leaving poorer soil areas in a natural condition all help to reduce the visual impact of agriculture.
Less Intensive Agriculture - Grazing and Dairy Farming	Low	Viewed from the road, animals can be important to enhancing the scenic resources, particularly in Alaska where it is for the most part on nontypical land use.

OPPORTUNITIES

Many of the scenic recourse management recommendations might best be described as opportunities. Opportunities relate to areas along the highway where the existing scenic resource values, or the driving experience might be improved through some type of action. The following are some of the types of opportunities identified along the George Parks Highway as a result of this inventory.

Rest Areas

There exists the opportunity to locate a system of highway rest areas along the George Parks Highway. While rest areas and scenic turnouts exist, they are for the most part undeveloped and not part of any system. Undoubtedly a system of developed highway rest areas will be needed along this highway sometime in the future. The opportunity exists to acquire or retain land now in appropriate locations rather than having rest areas in places which are less appropriate. The following guidelines were used to identify those ideal locations suggested in this report for future highway rest areas.

At least one developed-interpretive rest area per landscape character type. This would allow the motorists to experience first hand the variety of charateristics found in each landscape that the roadway traverses. Short trails, educational displays and other techniques can be helpful to providing added significance to this rest area. There are 13 landscape character types along the George Parks Highway. The following table identifies what should be considered as ideal locations for these rest areas.

Rest areas should be located near attractive places. The sites recommended here are either those with a good potential for views outward or near attractive landscape features such as rivers or lakes, or both.

Land ownership was not considered in the location of these rest areas. Further research needs to focus on land ownership around the sites identified

	H -	15 MCAMPLETE	カムのグ	1 11/1/ GRADY 15/1
	coal mining - history of Healy, Uplands Natural history	Nenana Ruier Uplands	247.5	Hezily Overlock
	Neriana River lowlands natural history	Nenana River Lowlands	275,5	Bridge over Nenava Ruich
	Interior Alaska river bottom natural history- river boat transport. Nonana Tre Classic	Nenana River Lowlands	305,8	Junction of Tanana and Nenana Rivers
	Tanana River natural history	Tanana Ridge	≈ 324,5	North-South vistas along Tamana Kidge
	Tanana Ridge natural history	Tanana Ridge	≈ 344-345	Trunama Ridge - George Parks Memorial plaque
	gold mining	Chena Ridge	>> 3×19,6	Ester-Gold Hill
	Chena-Tanara Ruis Lowkind Fairbants on floodplain— Information center	Chena Rwer Lowlands	50 m	Bridge over Chera River Entervied Fairbanks
WENDATIONS DISTANCE TO AUTHEN REST AREA NORTH SOUTH	OF ROADSIDE REST AREA-INTERPRETIVE CENTER RECOMMENDATIONS MILEPOST LANDSCAPE CHARACTER THEME OISTANCE TO A (approximate) Type (approximate) SC	LANDSCAPE CHARACTER		LOCATION (DESCRIPTIVE)

and measures taken to protect these lands if owned by the state, or acquire them if owned by other public entities or private individuals, or look for other appropriate sites.

Views

The opportunity exists along some portions of the roadway to manipulate the vegetation and/or landforms in a manner which could open up views from the highway. Such opportunities are particularly significant along those stretches of road with no outward views for considerable distances and where good views of special features (Mt. Susitna, Mt. McKinley, the Susitna Rivers) are presently possible but hidden by vegetation.

Absorption of Land Development Opportunities

There exists the opportunity to use the natural ability of the landscapes vegetation and topography to hide or absorb roadside land uses. Such areas require a minimal amount of land to protect foreground scenic resource values and should be the first choices for considering land developments adjacent to the road.

Create visual diversity where needed

There exists the opportunity to encourage land development in areas where presently little visual diversity exists. Appropriate land developments and uses can be encouraged in these areas in a manner which enhances the driving experience along the George Parks Highway.

PUBLIC OWNERSHIP OPPORTUNITIES

Roadside lands are of especially high value in Alaska because of their ease of access. With so few roads, these lands can definitely be considered to be a limited resource. Already the ownership pattern around the lower Susitna Valley (Palmer-Wasilla-Willow) of almost total private ownership of roadside land is extending northward from Anchorage and southward from Fairbanks. While indeed there is a recognized need for accessible private land, similarily there is a need for some of it to remain under public ownership.

Such public lands can be important for recreational use, access to surrounding lands, provide public open space, be future sites for needed public facilities and contain natural resource values which are of statewide significance and best utilized under public management techniques. Consequently, retention of some of the public land adjacent to the road is desirable. It should be pointed out that from a scenic resource management point of view, public lands can be more easily managed under public ownership. The following points highlight some of the considerations with respect to keeping or acquiring lands adjacent to the Parks Highway.

All roadside lands suitable for agricultural development should remain under public ownership. Only agricultural development would be permitted. As already mentioned, agriculture is a land use which has low negative or generally positive visual impact and consequently would be desirable in areas suitable for farming.

Retain or acquire public lands around lakes and along riverbanks adjacent to the highway. These immediately accessible recreational lands should. At least one river bank of the four banks adjacent to highway bridges should be public should be retained. This land would be used to provide location for camping, turnouts, fishing and other recreational use. Public easements along the other banks for fishing and hiking access.

The state should retain (or acquire) lands in those areas identified in this report for roadside rest area location.

Retain roadside lands which are undevelopable or have a high development cost. Such lands have steep slopes, bogs, muskegs, mudflats, tideflats, and primary floodplains. These lands are marginal with respect to developability, and often have higher visual as well as ecological significance.

Retain under public ownership all public roadside land within 2 miles of

existing communities until further study identifies the appropriate use for such parcels.

PROBLEMS

The George Parks Highway scenic resource inventory identified places where existing land management and land development significantly impacts upon scenic resource values. In some places, the combinations of signs, buildings, autos and other man-made objects are so visually strong as to distract from the surrounding landscape views. The expectation of many highway travelers is high towards seeing wildlife and vast stretches of wild - undeveloped land. Such viewers are for the most part not interested in seeing familiar land developments typical of any other place. where high levels of man-made visual distraction do occur, particularly in areas of high scenic value and where viewer expectations of undeveloped landscapes are present, the scenic resources can be adversely affected. This is not to suggest that all man-made land developments are visually bad or detract from the scenic resources. On the contrary, developments such as homes, towns, and stores are what most viewers feel comfortable with. Viewers remember human places (Eklutna Village, Big Susitna Lodge, Mary Carey's Mt. McKinley View Lodge, Hurricane Bridge) more so than natural untouched landscapes. It is when such developments are out of scale, inappropriate and not in harmony with viewer expectations and the surrounding landscape that it can be of a negative impact on the scenic resources.

The following set of recommendations identifies those places where land development has had a significant negative impact on the visual resource values, and suggests some steps which need to be taken to remedy the situation. It needs to be remembered that almost all of the problem areas identified here are associated with private land. This suggests that landscape reclamation and removal of visually disturbing features would be largely the responsibility of the individual landowners. The Department of Transportation and Public Facilities could have some control through highway right-of-way landscaping. However, it again suggests the need for a public awareness - education program to develop a public understanding and consideration of the visual quality of the landscape in which they live.

The following pages contain the more specific recommendations for the management of the scenic resources along the George Parks Highway. As already

mentioned, these recommendations are organized around visual resource management units (VRMU) which are stretches of highway with similar management considerations. Visual resource management Unit No. 1 begins at Anchorage, and the last VRMU, Number 28 is at Fairbanks.

Visual Resource Management Unit Nº 1

Chugach Footbills character type

Approximate mileage //

GENERAL

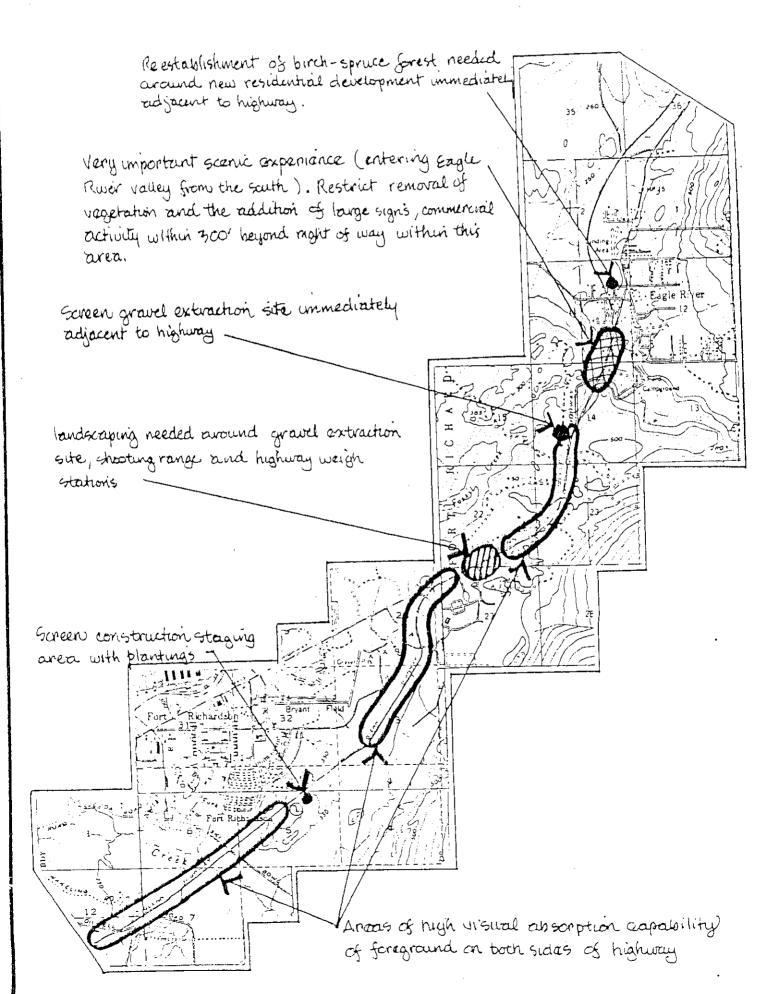
Nexual Resource Management Unit number one bagins at the Muldoon Road interchange north of Ancherage and extends northward for approximately ill miles to a few miles bayond Eagle River. Scanic resource values were generally law, consequently it does not warrent a scanic highway designation. However, this stratch of road is of vary significant value from a scanic quality perspective because it is the entrance-exit to Anchorage and is traveled upon daily by thousands of people. It now creates a definitive visual edge to the city as well as a pleasing entrance and exit. Are sent roadside land uses are primarily graved extraction sites, shooting ranges and other military uses, some land clearing, and commercial and residential land uses mostly confined to the Eagle River area. The southern portion of Vernu number 1 is generally within fort Richardson military reservation lands while the northern portion around Eagle River is largely under private ownership.

PRIMARY MANAGEMENT RECOMMENDATIONS

Although scanic resource vakings are generally low to moderate, this stretch of highway should receive special attention with respect to readside land management because of the high daily and annual use it receives, its role as an entrance point to from Anchorage, its role as a definitive edge to the urban area of Anchorage and its potential to curb further distracting roadside strip development. With this in mind the following measures are supposted.

- Establish a team of land managers representing the following) agencies: Fort Richardson, the municipality of Anchorage, the City of Euglo River, the state Department of Highways, and the state Department of Fish and game. This committee would review land developments adjacent to the road and explore measures to mountain the visual quality (and anhance it where possible).
- Use the often high visual absorption capability where possible to screen roadsule land uses. In areas with a high visual absorption capability (see map) a 100 st wide best of undisturbed land adjoint to the highway right of way can be an extremely affective way of maintaining the scenic quality of this landscape.
- To explore rocusside land management strategies which would help to reduce the number of auto-moose collisions
- Where possible to introduce and encourage native tree and should plantings along the median strip between the north and south bound traffic lanes. Trees and shrub plantings are also recommended between the highway and the existing and proposed bike trails.

- to require that future roadside land uses particularly residential and commercial activity around Eagle River attempt to retain a portion of the natural landcover immediately adjacent to the highway.
- · other apecific recommendations as pointed out on the map below,



Lecuninenvailons

Visual Resource Management Unit Number 2 Chugach Foothills character type

Assormant Units 12,13,14'
Approximate mileage 4

GENERAL

Visual resource management unit number two contains approximately four miles of highway through hilly, birch-spruce covered forest. This stretch of roadway has very high scanic resource values. It also receives heavy use throughout the year. VRMU Nº 21 is very important to prevent roadside strip development between the rapidly growing areas of Eagle Rivar and Peters Creek-Chugiak-Birchwood.

PRIMARY MANAGEMENT RECOMMENUATIONS

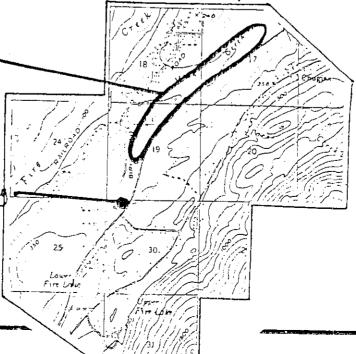
Designate this as a scenic highway and take necessary measures to protect the high intrinsic scenic resource values contained herein. (See p. for a discussion of what a scenic highway designation might entail). Some of these measures should include the following:

- Establish a greatest along the highway within this VRMU. Due to the generally moderate visual absorption capability of the foreground lands; a 300 ft, wide greenbelt should be established beyond the highway piont-of-way. Within this area, only residential development should be permitted, and no more than 50% of the native firest should be removed from a given lot. Additionally land development should leave as much forest as possible undisturbed between the highway and adjucent lands. This serves both as a visual and sound barrier. Road accas to developments should be outside of this greenbelt. Large billboards, signs and other distructing visual alements within this greenbelt should not be permitted.
- establish native shrub and tree plantings along the median strip
 dividing the north and south-bound lanes of traffic, and also between
 the roadway and the bicicle trail.

· other considerations as noted on the map.

particularly sensitive lands ______ because generally below the highway and semi-open nature of the vegetation.

landscaping both within the highway right of way and on the school site itself could reduce the high visual impact of the high school complex - particularly around southeast corner.



Recommendations

Vioual Resource Management Unit Number 3

Assessment units 15,16,17

Chugach Foothills character type

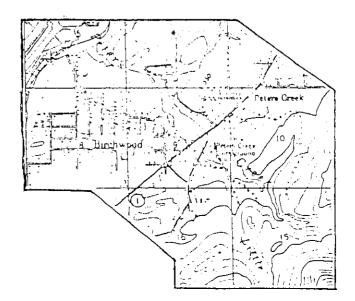
Approximate mileage 2.5

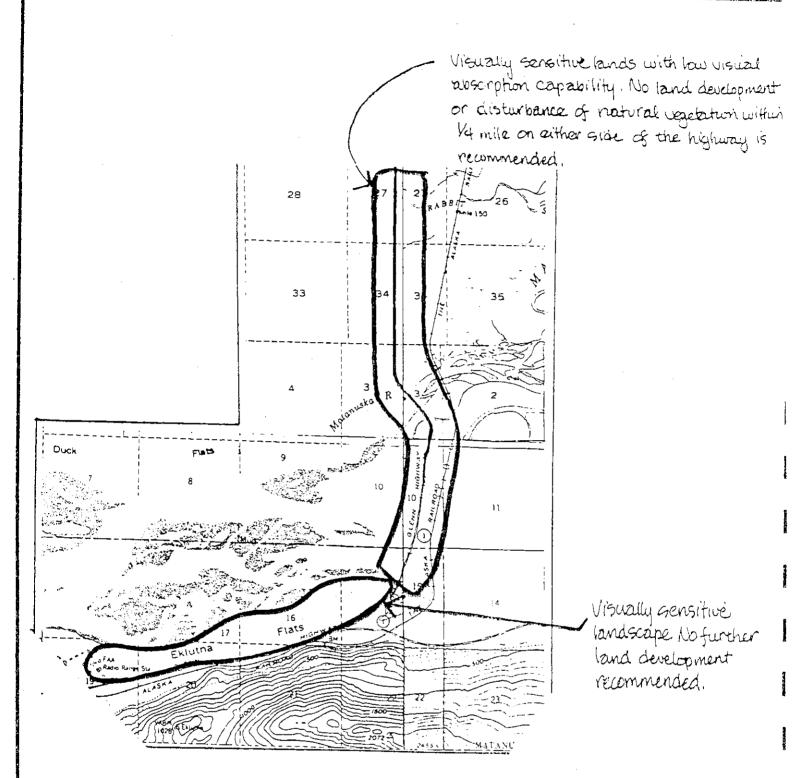
GENERAL

Usual Resource Management Unit number three is approximately 21/2 miles of highway passing through the urbanizing areas of Birchwood and Petar's Creak. The scanic rescurce values of this strekh of highway are kew, and there is considerable visible roadside commercial, residential activity, numerous intersections, signs, lights and other distractions. This area is bounded to the north and south by stretches of roadway of very high scanic resource value. Thus, it is here recommended from a scenic resource management point of view, that necessary future highway related land clevelopments be encouraged in this area and not in vemu no 2 immediately to the south and URMU no. I to the north.

PRIMARY MANAGEMENT RECOMMENDATIONS

- Encourage necessary future roadside related commercial development within this area rather than immediately to the north or to the south.
- Encourage free and shrub plankings both within the median strip and the shoulder area within the right-of-way. Nature trees (birth, sprice, estimwoods) would significantly soften the visical impact of intensive land development within this area
- Encourage landscaping around existing commercial developments and recommend that in the future siting of structures which will be visible from the roadway attempts to retain portions of the natural spruce-birch forest are taken.
- * Maintain a greenbelt of neutural vegetation along the banks of Peters Creek from the bridge upstream and downstream (minimum of 1/4 mile up/down stream and 200 feet beyond the streambank, Residential development could occur within this greenbelt, however removal of over 50% of the notural existing landcover should be discouraged.





(-continued from facing page). The width of a greenhelf depends primarily upon the vegetation and land form character (visual absorption capability) of the poadside land. Within those areas with a high visual absorption capability the greenbett width should be a minimum of 150 feet beyond the highway pight-of-way. Other areas need additional on site evaluations to determine what width might be appropriate. (see map), within the greenbelt, removal of over 75% of the existing natural vegetation on any given lot should not be permitted.

- Within the divided portion of the highway, it is recommended that native shrub and tree planting's be astablished in various locations along the median strip to add to the visual variety and reduce the visual impact of the wide hythway night of way.
- · other specific recommendation's us noted on the maps.

Recommendations

Visual Resource Management Unit Nº 4 Assassment Units 18-24 Chugach Foothills- Matunuska-Knik Delta Character Type Approximate mileage 13

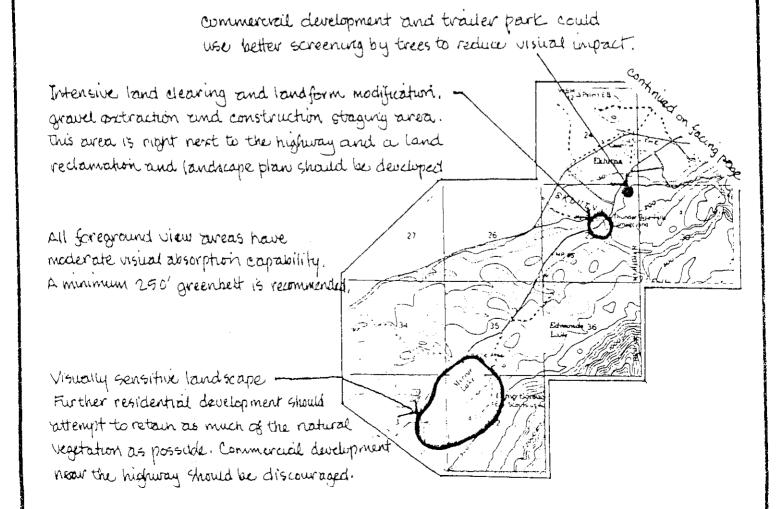
GENERAL

Visual resource management unit number four extends from Mirror Lake to approximately two miles north of the Matanuska River bridge. This Stretch of highway contains exceptional scanic resource values. It is aspecially important because of its proximity to Anchorage and the resultant intensive use it receives year round. Numerous recreational and scenic attractions occur along the highway or are assily accessible from it (Thunderbird Falls, Ekluma Natwevillage, Mirror Lake, Matanuska-Knik Delta, old Ekluma highway bridge). Furthermore, good views of muony prominent landforms including Twin Peaks, Pioneer Peak, The taltactna mountains and Mt. Susitna abound. Roadside land use is rostricted primarily to the area around the new Eklutna highway bridge,

PRIMARY MANAGEMENT RECOMMENDATIONS

Visual resource management unit number 4 should be officially designated a scanic dighway and measures should be taken to protect the exceptional scanic qualities within this stretch of roadway. (See page for a discussion of what a scenic dishway designation might entail). The following measures can holp to insure that scanic quality is maintained

· Establish a highway greenbelt (see page for description) along the highway within this management unit. (continued bottom of facing page)



· LECUII: IIETIGE TICAS

Vigual Resource Management Unit 5

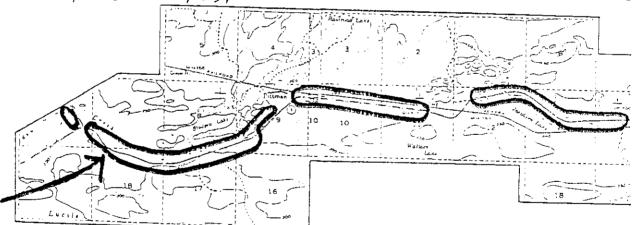
Little Gusitna River Landscape Character Type Approximate mileage 19

GENERAL

Visual Resource Management Unit number 5 begins at Palmer hay stats near the junction of the Parks highway and Glenn highway cut off to Palmer, and extends westward for approximately 19 miles to the Big trake cutoff. It includes the community of wasilla. This section of the Parks Highway is characterized by generally low scenic resource values and intensive roadside land use. Management recommendations are directed ret specific areas where measures should be taken to prevent further deterioration of scenic resources, use the natural visual absorption capability when possible, and restore the foreground visual quality where it has been severely encroached upon by development and intensive land use, Land ownership is the primary limitation to the management of scenic resources within this area because roadside hands are almost exclusively under private ownership. Consequentlymanagement implementation would be restricted to the following three stratagies: landscaping and site planning within the existing highway projet-of-way by the State Department of Highways, roadside yoning ordinances and development standards by the Matanuska-Susifina borough, und through the individual initiative of private landowners.

PRIMARY MANAGEMENT RECOMMENDATIONS

• To utilize the existing high visual absorption capability of this landscape (see maps),



Areas circled in heavy black line have high visual absorption capability. The Stretch of highway shown on this page is characterized by mixed residential and commercial development, gravel pits, clearings, and numerous intersections. However, it is in the very early stages of strip development. The generally high visual absorption capability throughout this stretch of highway suggests that roadside development can take place without severely affecting the existing visual quality if measures are taken to not totally remove all natural landcover and make the land totally level, we suggest that a minimum of 2570 of the natural landcover and topography be undisturbed on those lots immediately adjacent to the highway. Those areas not wicked in black have lower visual absorption capability and need additional on site evaluations to

determine how the land might be developed with minimal implact on scenic versurces.

By fig. 4. The highway through wasilla needs a study by landscape architects to develop a strategy for transposing this into a three mile long shopping area into a unique Alaskan community, of their specific recommandations as inducated on the maps.

See note 1 on following

See note 1 on following

See note 2 on these tendent the perks Highway choopen the perks Highway continued the perks Highway continued the perks Highway continued the perks Highway choopen the perks Highway to perks Highway the perks Highway the perks Highway to perks Highway the perks Highway to perks Highway the perks Highway to the highway)

- NOTE 1. This area is the baginning of intensive roadside commercial development. More vegetation riving the highway-particularly shrubs and trees needed. The north side of the road in particular needs landscaping and revegetation efforts.
- NOTE 2. The crossroads and downtown wasilla is a particularly important area from a visual point of view. Real definition of a downtown area can reduce the feeling of extensive strip developments on either end of downtown. While this is an urban design problem and we recommend a study rumed at exploring what can be done to the wasilla strip, a number of things can be done immediately.

• Planting of street trees, construction of sidewalks in the downtown-crossroads area could help create a Sense of place

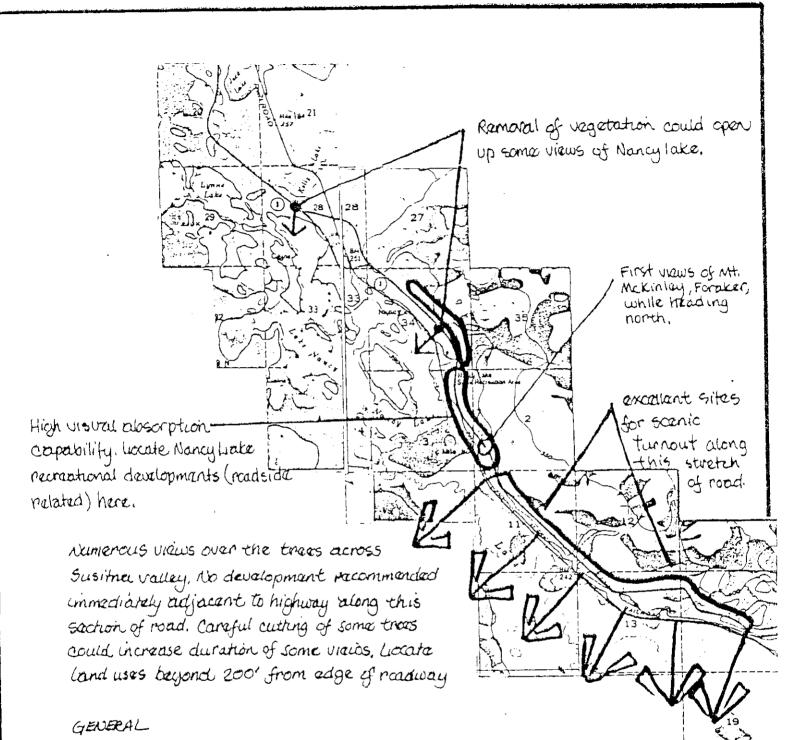
- Taller buildings should be ancouraged to provide a visual accent and focus to the downtown area and make it look and feel different from the commercial areas away from downtown. The railroad station and a few old historical buildings near this cross-roads are extremely important to giving wasilla a sense of a historical heritage because most of the buildings lock like they were built within the past 10 years.
- NOTE 3. Intensive strip development and land clearing. Areas from note I through note 3 should be considered as the focus of a waxila visual analysis study which should be conducted by a landscape architecture firm.
- NOTE 4. The railroad provides an affective edge to the community to the South. A few areas of natural vegetation between the highway and railroad would provide added visual interest and reduce the monotony of the road paralleling the highway. (The railroad also effectively blocks views to bucille lake).

Vioual Resource Management Unit Nº 6

Assessment units 39-47

Little Eusitha Rwir-Susitha lowlands character type

Approximate mileage 17.0



Visual Resource Management whit number six extends from just north of the roig lake cut-off to south of the community of willow. It includes approximately 17 miles of some of the most scenic portions of the Parks highway. This high scanic resource value is the result of a very diverse landscape with numerous vixws to distant mountains and constantly changing panoramas as the road climbs over and winds around the gently rolling low hills. It also contains the only extended views from the highway cut across the broad lower susitina valley. Due to the proximity of this area to Anchorage and the numerous recreation attractions nearby (Nancy Lake, willow creek.) this portion of the highway is subject to relatively intensive use, especially during the summer. Only in assessment unit 41, which includes the community of Houston, is the visual landscape significantly disturbed by human development (extensive land clearings igraval pits, commercial strip development). Also, much of the lands immediately adjacent to the highway have high visual absorption capability natings. This suggests that there are numerous places where roadside development can occur without detracting from the excaptional driving experience (if proper six dayalrament considerations are taken

PRIMARY MANAGEMENT RELOMMENDATIONS

- Designate this section of the Parks highway as a scenic highway corridor (see discussion, page)
- Encourage roadside commercial development around the existing community of Houston, and Nancy lake while encouraging residential, agricultural and other non-auto related land uses be located along the remaining stratches of road if the need to occur near the roadway.
- · Use the natural visual absorption capability of the land to raduce the visual impact of intension land uses actifacent to the highway (mining gravel pits, legging, subdivisions) Some map for areas with high visual absorption capability.
- Establish a greenbelt along this portion of the highway. This would be 100 ft. minimum width beyond right of way along stretches of road with high visital absorption capability (see map). Other areas would require a wider greenbest, the actual width determined in the field. (see discussion on greenbests, p.

• Other site specific recommendations as pointed out on this map.

→ good views to Talkeetna Mts. - protect foreground

Foreground landscape restoration needed around the community of Hawton. Remove yink cars. Screen gravel pits with vegetation. Reduce visital impact of readside commental development with landscaping of parking areas.

Reduce visual impact of intensive recreation use of land immediately adjacent to bridge. See recommendations

for VRMU NO 8
along the Little
Willow Creek

High visual absorption a

Vibual Resource Management Unit Nº 7 Assessment units 48-49
Susitna River Lowlands character type Approximate mileage 3

GENERAL

Visual Resource Management thit number 7 includes the lands bordering the highway as it passes through the community of Willow. The scenic resources along this stretch of roadway were rated moderate. However it is important to note that scenic resource values both immediately to the north and the south are very high (see VRMU Nº's 6 and 8). Willow is otill in the very early stages of development, and while some signs of strip development are visible (eg complete removal of vagetation on lands bordering the roadway, numerous intersections, extensive roadside parking areas, numerous signs) if is not as extensive as areas further to the south.

PRIMARY MANAGEMENT ICECOMMENDATIONS

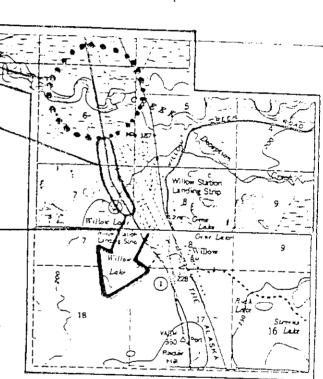
- To encourage necessary highway related commercial development within this area rather than areas immediately to the north and to the south.
- to reduce the visual impacts of land developments in the foreground distance zone (44 to 1/2 mile either tide of the highway). Within this character type this can be affectively accomplished by leaving some of the natural forest vegetation between the highway and the development, and in those lots bordering the highway right of way trying to maintain at least 25% of the land uncleared.
- Reduce the number of intersections with the highway, Developmant of a frontage road, with some of the existing vegetation left standing between the highway and this road would significantly help to maintain existing scenic quality and to soften the visual impacts of development.
- Encourage landscaping around parking areas, particularly where they are immediately adjacent to the highway. Specifically, native buch and spruce trees, and mounds of earth can be quite effective.
- Encourage the growth of native trees and shrubs within the highway pight of way. Presently the right of way is neatly clipped back to the forest in a straight line parallel to the roadway. Some areas, particularly where the issued beyond the right of way is publicly owned, could have the natural vegetation extend into the right of way. This would create visital interest and diversity and soften the impact of the road on the landscape.

Willow creek is an intensive recreation node. Extensive removal of vegetation and overuse of the land immediately adjacent to the highway by vehicles has resulted in sovere erosion, litter, treospassing on private property and visital blight. To remedy this the following recommendations are made.

1. Establish a greenbest along the river a minimum of 1/4 mile either direction from the bridge, and at least 150 feet back from the water's edge. Within this area only pedestrian movement would be allowed and no removal of vegetation would be permitted.

Area of high visual absorption capability in the foreground. Take advantage of this in roadside land developments.

frotect views across willow take.—
from the highway hand development,
thee removal and other land uses
should not black or destroy this
important view



(continued from above)

2.

Establish auto-camper access and campung-parking facilities outside of this greenbett and away from the bridge. Easier access to other portions of willow Creek, especially via paved roadway would help to disperse intensive salmon fishing activities presently highly concentrated around the bridge

The state of the s	
Assassment units 50-54	Visual Resource Maragement Unit Nº 8
Approximate mileage 7.5	Susitna River Lowlands character Type

GENERAL

Visual Resource Management thit number 8 includes the lands from willow Creek to approximately two miles north of Kashwitna Lake. It is characterized by very high scenic resource values. It also includes lands receiving particularly high recreation use, especially willow and willow Creeks during the summer salmon runs.

PRIMARY MANAGEMENT RECOMMENDATIONS

- Designate this section of the Parks highway as a scenic highway corridor. (See discussion, page
- Use existing visual absorption capability of lands to reduce the visual impact of land development. This is especially important in the foreground distance zone-from 1/4 to 1/2 mile from the highway. See map below for areas of high visital absorption capability.
- Establish a greenbalt to protect the respecially sansitive foreground scanic resource values. By greenbalt is meant that at least 75% of the land within the designated area is left in a natural state. Minimum greenbalt width of 100' beyond highway right of way in areas of high visual absorption capability, wider in other areas. Actual width should be field determined.
- Extend greenbett around areas of high highway related recreational
 use-specifically willow and wittle willow orack bridge crossings and
 the Kashwitna lake turnout.
- · See map on facing page for other site specific recommendations.

Important view across Kashwitna lake when driving south. Restrict removal of vegetation and intensive roadside development.

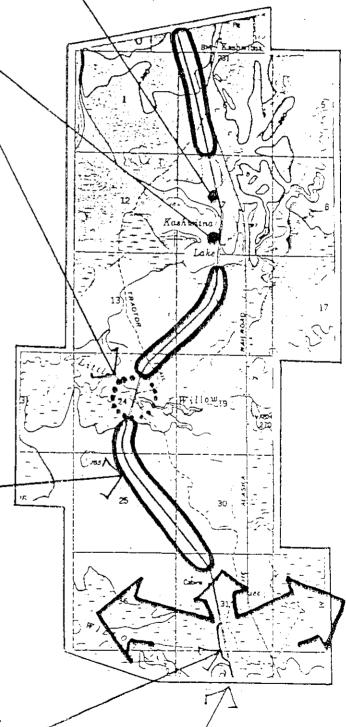
Excellent scenic turnout site. Presently It is a large gravel area with a few trash barrels by the lake. By simply encouraging some treas along the highway, relocating trash barrels away from lakeside a much nicer area could be created.

Little Willow Overk intensive recreation node. Removal of vegetation and overuse of land unimediately adjacent to the highway by vehicles has resulted in severe erosion, litter and visual blight. To remedy this the following recommendations are made.

- Extend highway greenbett 1/4 mile up and down the creek (100' minimum beyond waters edge.) Only pedestrian use permitted ut this area.
- Establish auto access and campungparking facilities cutside of this greenbelt and away from the bridge.

Areas of high visual absorption capability where a 100' greenbelt would be sufficient. These also are the places where roadside development might occur with minimum impact on the high scenic resources of this section of highway.

Excellent views across open muskegs to Mt. Mckinley, Alaska range rund Talkeetna Mountains



Willow Creek intensive recreation node. See VRMU Nº 7

recommenuailons

Visual Resource Management Unit Number 9
Susiting River lablands character type

Assessment units 55-66 Approximate mileage 20

GENERAL

Usual resource management unit number nine is characterized by moderate to low scenic resource ratings but with nodes and short stretches of highway with particularly high ratings, these areas are generally near the numerous creek and river crossings (kashwitna, shoop, Caswell, Goose and Montana) and are the areas subject to intensive recreation use. This approximately twenty miles of highway typically has a few scattered residential developments, a few commercial structures mostly around the creak crossings and some land clearing and gravel pits.

PRIMARY MANAGEMENT RECOMMENDATIONS

- o while this stretch of nonduray is not of high enough visual quality to warrent consideration as a scenic highway, two short stretches are of particularly high scenic resource value and measures should be taken to protect the particularly sensitive foreground areas (see map for location).
 - Naccessary intensive roadside land uses (eg gravel pits, commercial developments, inclustries) should be encourage when possible to locate along stretches of road with high visual absorption capability (see map)
 - Special land use considerations need to be taken around the highway crossings of the pivers and creeks because these are the foci of intensive pecreation activity. These should include
 - I. Establishment of a green belt along the riverbanks around the highway crossings. These should be a minimum of 300' beyond the piver's edge and extend up and downstream from the bridge for a minimum of 1/4 mile. Within this area only pedestrian use would be permitted, and removal of vegetation should not be bermitted.
 - 2. Establishment of adequate auto-camper accass to these pivers for fishing and other recreational use away from the bridge and outside of the area suggested for greenbalt.
 - 3. Establishment of publicly owned and maintained highway related stopping parking areas near the bridge where people can safely and easily pull off the road, view the river, dispose of trash and possibly have a picnic. These river crossings are the most ideal locations for turnouts, however they need to be properly designed and located to prevent the existing pattern of uncontrolled

auto access to the riverbanks and the resulting accumulation of trash, beach arosion and destruction of vegetation.

• other specific recommendations as indicated on the maps on this and the following page.

this stretch of road has very high scenic resource values and excellent views to Mt. McKinley and other distant mountain areas.

High use area, see narrative forspecial management considerations

Areas of high visual absorption capability a unithe foreground. Intensive roadside hand uses can be sited with minimal visual impact in these areas.

continued on following page good views to distant

mountains, keep foreground areas natural if possible.

Intensive recreation related land use around highway erosoing of Montana creek. See narrative on preceding pages for specific recommendations.

Mote that extensive stretches of roadway have - moderate to low visual absorption capability ratings, indicating that care must be taken in locating intensive land use or resource development activities adjacent to the highway. (High visual absorption capability areas are indicated by heavy black circles on this map).

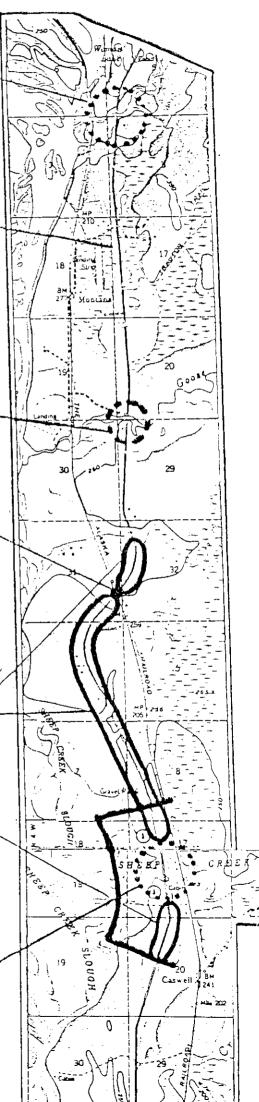
Gose Creek highway bridge (see narrative).

Extensive land clearing and industrial activity of this crossing. Revegetation could reduce the visual impact.

Areas of high visual absorption capability in the foreground distance yone. Intensive roadside land uses can be sited with minimal visual / unipact in these areas.

Area of high scenic resource values. Landuse and natural resource development adjacent to the road should not destroy these values. See narrative for recommendations around the sneep creek highway bridge.

particularly sensitive landscape.



i (Econumendations

Visual Resource Manzaement Unit Number 10 Assessment Units 67-73
Susitna River Lowlands character type Approximate mileage 11/2

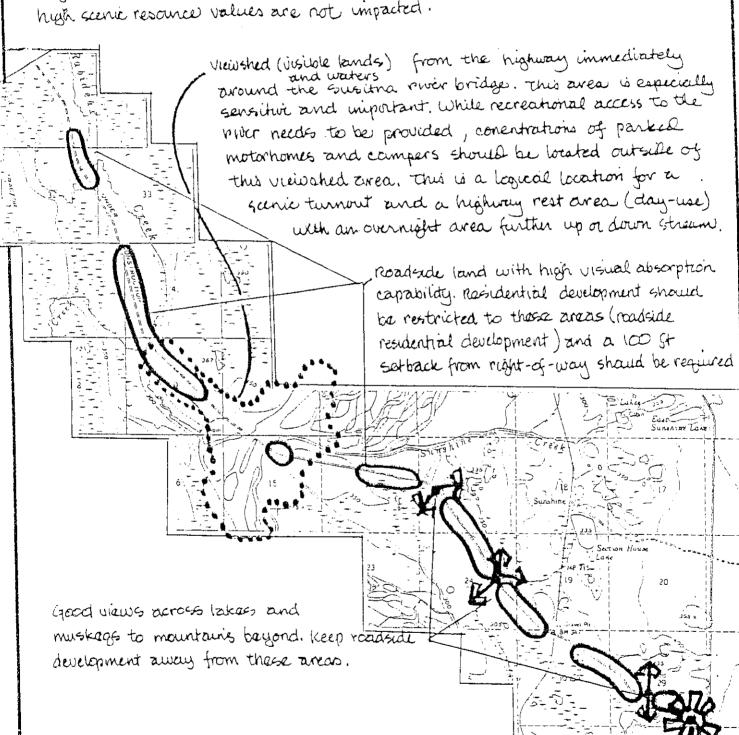
GENERAL

Visual Resource Management unit number 10 baguis just north of the Parks Highway crossing of Montana Creek and tends north-northwest for 11.5 miles. Included within VRMU number 10 are the Talkertna cutoff as wall as the only highway crossing of the Susitna River. Scanic resources along this stretch of roadway were rated very high, the lands adjacent to the highway are characterized by generally danse stands of birch-sprice forast with relatively little visuble human use the gently rolling glacial moraine topography affords numerous vious in all directions-including Mt. Mckinley to the north and the Chugach Mins to the south. Future roadside land usas should recognine the high intrinsic scanic resource Values as well as the generally high visual absorption capability. It should be noted that this stretch of highway still has considerable foreground land under public ownership (matanuska-Susitina borough and state of Alaska). Consequently the State and borough should recogning the valuable scenic resources before extensive land disposal are made.

PRIMARY MANAGEMENT RECOMMENDATIONS

- Designate this section of the Parks highway as a scanic highway comidor (see discussion, page
- establish a 150 fast wide granbalt along either side of the roadway within those sections indicated as having high visual absorption capability. Within this greenbelt land developments would be required to retain a minimum of 33% of the existing natural landcover. A wider granbalt, determined by additional field surveys would be needed for those lands adjacent to the roadway with moderate to low visual absorption capability, gravel extraction and other surface mining activities would not be allowed within this greenbelt.
 - Retain under public ownership lands adjacent to the highway near the Susitna River bridge. These lands would be set aside for future development into a roadside pert area.

All roadside lands not outlined by a heavy back line have moderate to low visual absorption capability. Here a greenbelt needs to be wider than 150 feet beyond the highway right-of-way, and land developments adjustent to the road need special design considerations to insure that the high scenic resource values are not impacted.



sansitiva area: Parks Highway-Tailkeetha cutoff junction this area is already experiencing intensive land clearing and appears to be a prime location for commercial development. Any commercial hand development should be ancouraged around this node rather than at any other point within this visual resource management unit. Land developments around this node should be required to leave a minimum of 25% of a site in a neutral, undeveloped state.

Visual Resource Management Unit Number 11 Assessment Units 74-80

Susitna River Lowlands character type Approximate mileage 15.5

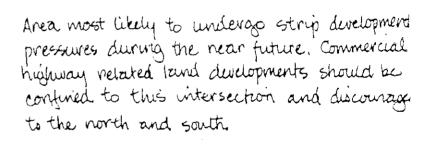
GENERAL

Visual resource management unit number // begins approximately 434 miles north of the Parks highway crossing of the Susitna Ruier and extends almost due north for 15,5 miles. While this stretch of roudway parallels the Susitna Ruier and later the Chulitna Ruier, they are not visible from the highway. This is because the topography is generally cf the road. This visual resource management unit is characterized by generally low scenic quality patings and high visual absorption the most part concentrated around the community of Trapper Onet which is located at the junction of the Parks Highway and the Paters Creek access poad.

Recommendations involve creating more visual diversity and opening up lateral views when possible, preventing strip development and taking advantage of the high visual absorption capability of this landscape.

PRIMARY MANAGEMENT RECOMMENDATIONS

- To most drivers this stretch of highway lacks visual diversity. This is primarily because most views are confined to the dense forested foreground with accassional views to distant mountains. Greater roadside visual diversity could be created by encouraging some land uses which create spatial diversity by removing some of the dense treedver (selective looping), create more topographic diversity (sand and gravel mining or other mining with sensitive land reclamation program), or introduce structures which most drivers identify with (clusters of residential structures). A combination of these land uses, as well as some agriculture or graying would be deriveable to create the needed visual diversity?
- · Commercial development should be confined to the Peters Creek access road intersection. Commercial development should remain in scale and character with the surrounding landscape. This means low buildings, generally of wood construction, and vetention of zes much of the native landcover as possible. A general rule of thumb would be to leave 25% of every acre in an undesturbed state.



High visual absorption capability on both sides of the roadway. As was noted in the text, some roadway and roadside hand uses should be encouraged to reduce the visual monotory of this stretch of highway. (These areas are indicated by a necwy brack line surrounding those breas with high visual absorption capability).

: NECOMMENDA TIONS

Visual Resource Management Unit Number 12 Assessment Units 81-84
Susitna Ruier Lowlands Character Type Approximate miloage 8

GENERAL

Visual Resource Management Unit number twelve includes approximately & miles of roadway immediately south of the southern highway entrance to Danali State park, Scanic resource values as determined by this methodology were moderate, this stretch of roadway is important as an entrance to the State park. It is also a transitional area going from the subdued topography of the Susitna lowlands up into the more mountainous uplands of the children River. Roadfide land wes within this V.R.M.U. are presently restricted to a number of gravel extraction sites used during the construction of the highway.

the visual absorption capability of this stretch of roadway is generally lower than that of the preceding management unit. This means that roadside land uses rued to be more carefully located in order to maintain the existing visual quality. While the scenic resource values were not high enough to qualify this v.r.m.u. as a Scenic Highway, due to the proximity to Denali state park it should be considered to be an area where roadside development is not encausaged.

· PRIMARY MANAGEMENT RECOMMENDATIONS

- of these areas with a high visual absorption capability where possible.
- · Protect the numerous views towards the Alaska Range and Mt. McKinly to the northwest, This suggests that the east side of the road would be the preferred side for the location of readside fand developments.

Visual Resource Management Unit Nº 13 Chulitha River Character tupe

Approximate mileage B

GENERAL

Visual resource management unit number 13 extends from the northern boundary to Denali State Park (milepost 163.2) to approximately 14 mile beyond tha crossing of Little Hondulu Creek (milepost 176.8). The most notable features found in this unit are the highway and railroad bridges over Hurruane Gulch. This portion of the George Parks highway is characterized by exceptionally high scenic resource values. This stretch of highway is an exceptionally pleasing driving experience as the road curves through rolling topoography with expansive views in all directions and unique features such as Hurruane Gulch. Visual absorption capability is low to moderate. Other than four turnouts and one moderately visible gravel extraction site this stretch of roadway remains virtually untouched, adding to the high scenic resource value. If should be noted that this stretch of highway provides a distinctive entrance—exit to Denali State Park.

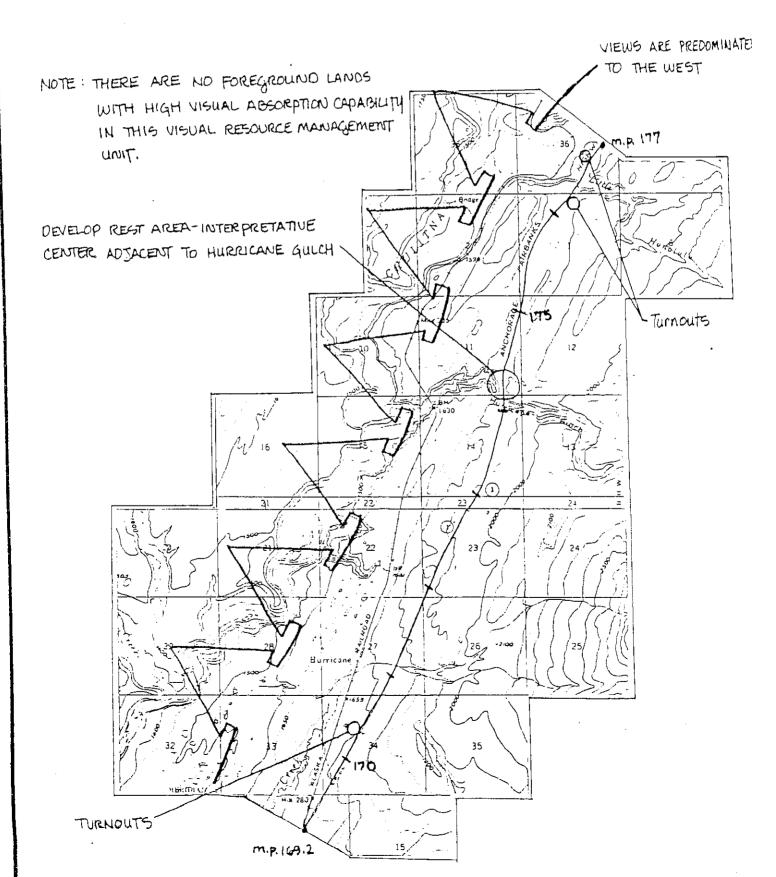
PRIMARY MANAGEMENT RECOMMENDATIONS

To officially designate this portion of the George Parks Highway as a examic highway and develop quidelines to manage the particularly sensitive foreground lands in a manner which conserves these especially high scenic resource values. Due to the moderate to law visual absorption copability, additional field work is needed to determine the actual width and specific nature of a greenbelt along this portion of the highway.

commercial, industrial and residential development should not be permitted immediately adjacent to the roadway in this visual resource management unit. The only land use which would not impact upon the high scenic values would be scattered residential and recreational homesites. Such developments would best be extuated at least 14 mile beyond the highway. Bacause distant views are oriented to the west across the children River to the Alaska Range, residential development would have a lower visual impact on the east side of the highway. Roadside commercial development should be permitted in visual resource incuragement units 14 or 16 rather than here.

Develop a day-use roadside rest-interpretive center at the bridge crossing of Hurricane Guich. Such a location would be ideal for providing the traveler with interpretative information about this landscape. Use rest stop would be a part of the

System of rest stops-interpretive canters recommended in this report. A trail system should take the developed to provide the traveler with an opportunity to seak good vista points and experience this timberline-cpen tundra landscape more readily. Already the lack of such an well organized trail system has resulted in a hodge-podge of improperly located footpaths, litter accumulation, devegetation and soil arosion. A professional landscape architect should prepare a master development plan for this pest-interpretative center. This should be a day use facility. An overnight facility should be sited in visual resource management unit number 14 along Honolulu Creek.



Visual Resource Management Unit Nº 14 Chulitna River Character Tupe

Assessment Units 90-92 Approximate length: 5 miles

GENERAL

Visual resource management unit number 14 15 a five mile stretch of highway which includes the crossing of Honolulu Creek. Scenic resource values are moderately high while visual absorption capability is moderate to low. The only visible land uses include a series of roadside turnouts, a picnic area adjacent to Honolulu Creek at the highway bridge, and a commercial radio tower.

PRIMARY MANAGEMENT RECOMMENDATIONS

Because scenic resource values for this portion of the highway through the chulitra River character type were not quite as high as those immediately to the north and south, this stretch of highway is not being recommended as a first priority for scenic highway status. This should not be taken to mean that scenic resource values are low - on the contrary they were close to being high enough for a scenic highway recommendation. One reason to not consider this a scanic highway stretch of roadway would be to encourage meeting future demands for roadside commercial and residential development here rather than in the more scenic lands to the north and south. IT should be noted that the best location for commercial roudside development, from a scanic resource management point of view, would be in visual resource management unit number 16, approximately ten miles north of here.

while development may be permitted here to meet public demands for land and services, it should be developed in a fashion which respects the high scenic resource values intrinsic to this landscape. The following giudelines are suggestive of some of the considerations necessary to accomplish this.

O No development should be permitted along Honolulu Creek within 1/2 mile of the highway crossing. Public access along the creek should be preserved through an easement along one or both banks.

Visual Resource Management Unit Nº 15 Chulitna River - Broad Pass Character types Assessment units 93-96
Approximate length: 6 miles

GENERAL

Visual resource management unit number 15 is approximately six miles of highway with exceptionally high scenic resource value. This unit includes the East Fork highway maintenance station and the highway crossing of the East Fork of the Chulitna River. The abandoned railroad stop at Colorado is a mile to the northwest, however if is of minor visual significance. Distinctive views to the Alaska Kange and Mt. McKinlay as well as nearby views of the picturesque cliffs above the East Fork Chulitna River contribute to this areas very valuable sconic resource value. The highway maintenance station; gravel pits, turnouts and rest area are the only visible land developments. None of these uses significantly impacts upon the scanic values present.

PRIMARY MANAGEMENT RECOMMENDATIONS

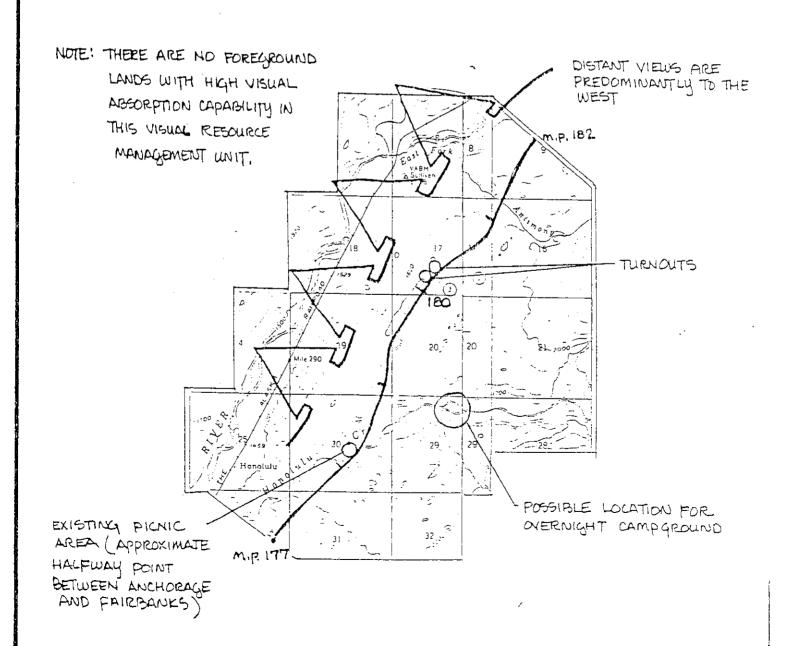
To officially designate this portion of the George Parks highway as a scenic highway and develop guidelines to manage the particularly sensitive foreground lands in a manner which conserves these especially high scenic resource values. Due to the low to moderate visital absorption capability it is recommended that commercial, residential and other development not be permitted in the area 1/2 mile on the west side of the road and I mile on the east side of the road way. Additional field work is recommended to evaluate the potential visual impact of proposed developments which would be visible from this portion of the Parks highway— especially surface mining and power line routes.

Roadside commercial and residential land developments should be located in the adjoining visual resource management units (numbers 14 or 16) rather than along this particularly valuable and sensitive stretch of highway.

There presently exists a well developed highway rest area just northeast of the bridge over the East Fork of the Chillima River. This site could serve as a prototype

- O Development gites adjacent to the highway right of way should have a minimum 200 ft. set back. Liand clearing-modification within this 200 ft. wide area should not exceed 50% of this area.
- O Residential development should be organized around intersecting service roads to the main highway rather than each residential site having direct access to the highway.

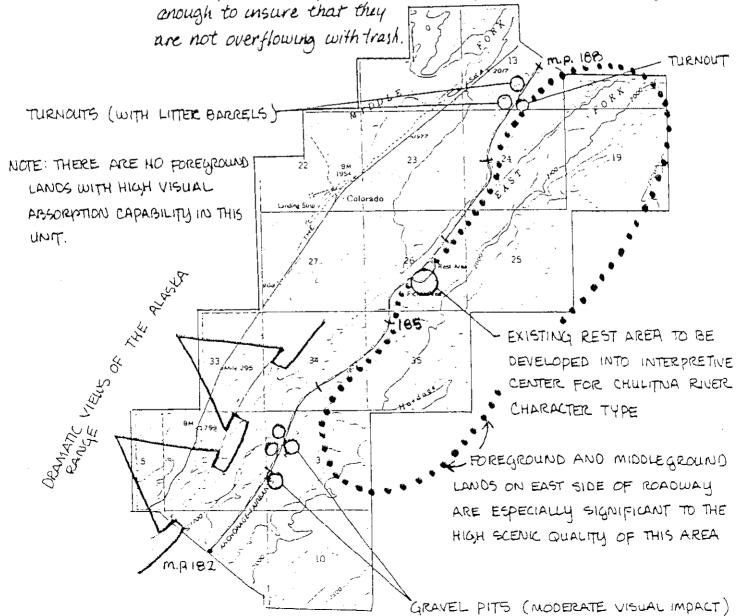
A public overnight camping facility should be developed along Honolulu Creek. This would compliment the day-use restarea—interpretive center recommended for Hurricane Gukh to the south. Such a campground should be located a minimum of 1/2 mile from the road.



for the recommended rest area-interpretative centers for each of the landscape character types through which the highway passes. Additional work should be done to develop interpretative materials concerning this landscape and the development of a short trail system. A master development plan for this site should be prepared by a professional landscape architect. Because this site already has good rest were facilities, it should be the first place actually convented to the rest area - interpretive center facility.

Primary litter pick-up facilities should be developed at the rest area-interpretative center sites. Litter barrels should be located at some of the other numerous turnouts, however their visual impact needs to be reduced. Some considerations are

To alert the public to litter barrels through signs rather than having them painted bright colors and in visually prominant locations. Litter barrels should blend in with the surrounding landscape, and only located where they can be emptied frequent



CELETITICAGATICAS

Visual Resource Management Unit Nº 16
Broad Pass Character Tupe

Assessment Units 97-99

Approximate length 6 miles

GENERAL

Visual resource management unit number 160 consists of six miles of the George Parks highway as it traverses the southern portion of Broad Pass. The only notable visual features within this unit are the small railroad community of Broad Pass and the new Iafoo motel and adjacent tesoro service Station. Scenic resource values are low. Visual absorption capability is also low.

PRIMARY MANAGEMENT RECOMMENDATIONS

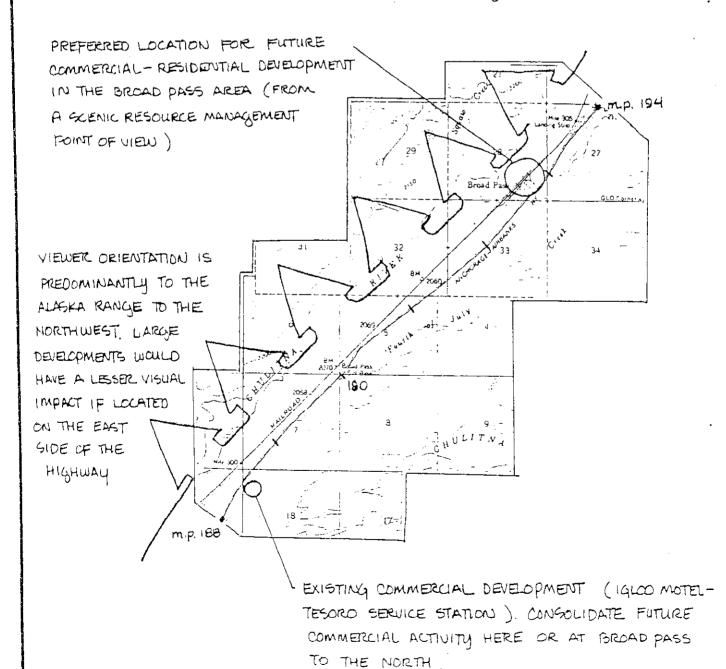
This area would be the best location to meet any demand for commercial, residential and institutional land development in the southern Broad Pass area. This is primarily because adjoining visual resource management units (numbers 15 and 17) both are recommended for scenic highway status and readside commercial divelopment would not be desireable in these areas. Development should concentrate around one of the two existing developed areas - the old railroad Town of Broad Pass, or the new indo-Tesoro Station. Of these two choices, the town of Broad Pass is the more desireable from a scenic resource management perspective because it could be more removed from the road and is much more picturesque.

Any roadside foreground or middleground development should attempt to retain as many of the scattered spruce trees as possible in an effort to reduce its visual impact.

The loso motel is a good example of a number of points related to scanic resource management. Already in its short history it has become somewhat of a landmark. One reason for this is that most people tend to identify with and remember man-made objects more readily than natural landscape features. Today the 10/00 is somewhat controversial-some people like it, some people do not. During the winter, when snow covers much of this landscape, the 10/00 actually blends in quite nicely with its surroundings. During the summer it is such

a visually strong feature as to make it difficult to focus on other landscape features during the short time that it is in the viewers line of sight. In any case, the Igloo is here to stay, at least for awhile. What should be learned from the Igloo is that seme type of foreground control would be desireable along those stretches of the highway with significant scence value. Fortunately the igloo is located in an area of moderate to low scence quality and that there is enough really spectacular scenery nearby to allow for the viewer to quality forget it. Hopefully there will remain only one igloo along the George Parks highway.

NOTE: FOREGROUND AND MIDDLE GROUND VISUAL ABSORPTION CAPABILITY IS LOW THROUGHOUT THIS MANAGEMENT UNIT.



: VECOMMONDATIONS

Visual Resource Management Unit No 17
Broad Pass - Alaska Range Character Types

Assessment Units 100-113
Approximate length 23.5 miles

GENERAL

Visital resource management unit number 17 includes the most scanic portions of the Broad Pass and Alaska Range character types. This 23/2 mile stretch of highway includes Summit lake and the pass marking the divide between waters draining into Cook Inlet and the Yukon River; the junction with the Danali highway, and the upper reaches of the Nenana River. Cantwell is the only year-round community within this character type and is located 2 miles wast of the Parks highway.

Roadside visual absorption capability is low through Broad Pass and moderate to high north of the Cantroll cutoff. Visible commercial and residential land use is concentrated around the Denali highway - Cantroll junction with the Parks Highway. Through Broad Pass some residential development is visible around Summit lake. Roadside gravel extraction sites, power lines, and railroad related facilities are the other types of land developments common to this management unit:

PRIMARY MANAGEMENT RECOMMENDATIONS

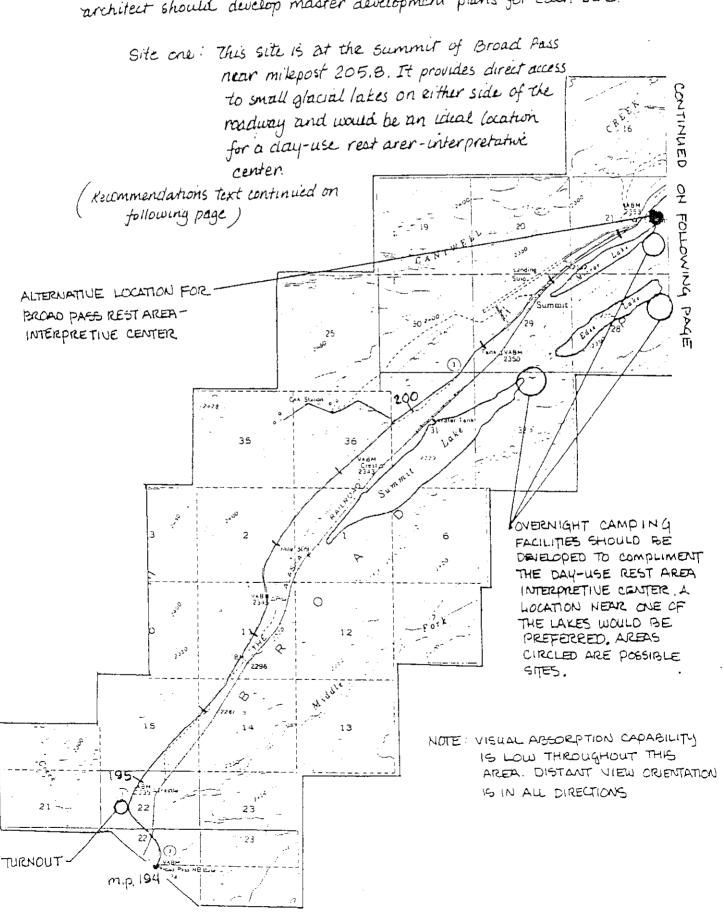
Officially designate this portion of the George Parks highway as a scenic highway and develop guidelines to manage the particularly sensitive foreground lands in a manner conducive to conserving scanic resource values. Within the Broad Pass Character type a greenbeth would be inappropriate due to the generally high visibility of almost all foreground and middleground lands. The guiding principle here should be that the visual impact of potentially objectionable structures and land uses (e.g. surface mining, power lines) is reduced as a function of its distance from the viewer. Consequently, objectionable used should be located as far from the road as possible. Furthermore, special design techniques would need to be employed (landscaping, berms, painting of surfaces) to further reduce visual impact.

Within the Alaska Range Character type (north of milepost 211) a 200 ft wide greenbelt beyond the highway right of way should be maintained along those portions with a high

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Assessment units 100-113	Visual Resource Management Unit Nº 17
H55255 MENT UNITS 100 113	
<u></u>	(continued on following pages)
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visual absorption capability rating. Those foreground lands with moderate to low visual absorption capability natings require additional field observations to determine an appropriate greenbelt width.

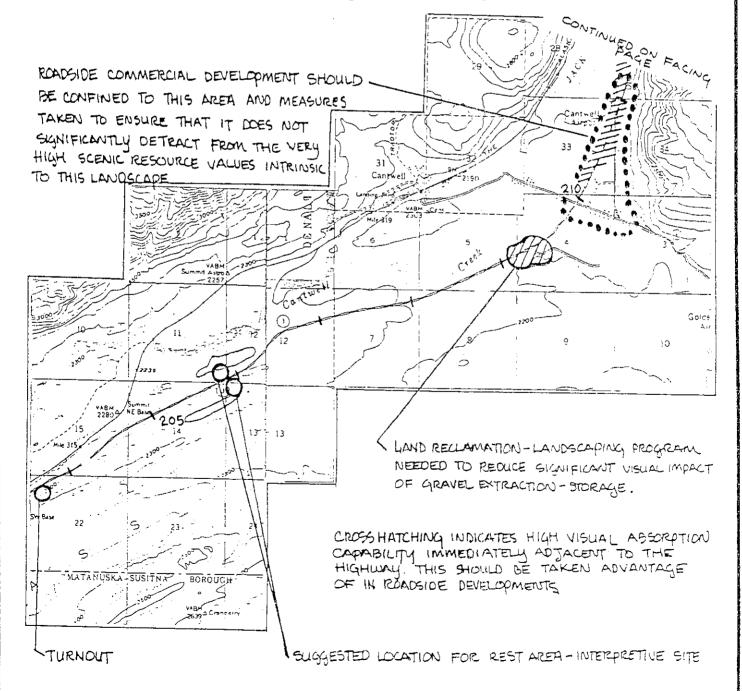
Develop roadside rest area-interpretive centers at the two sites suggested on the accompanying maps. A professional landscape architect should develop master development plans for each site.

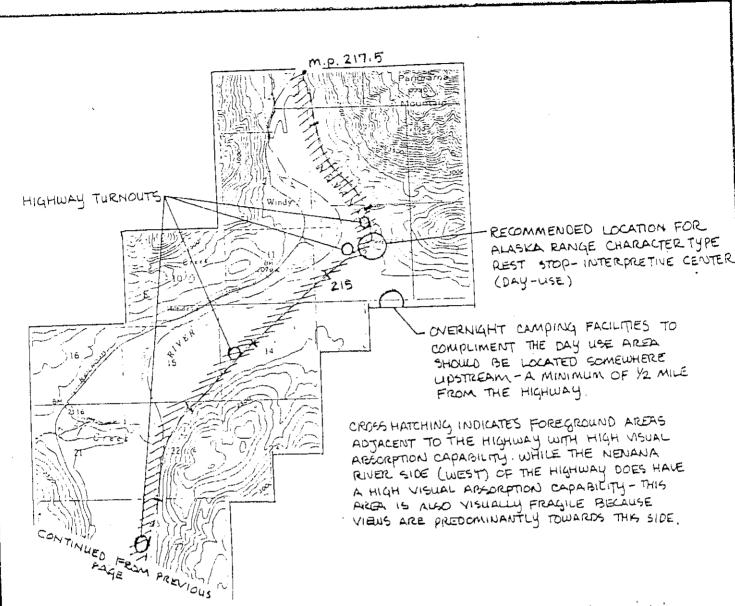


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Site two: This site is near the highway crossing of the Nenana River (milepost 215,5). This interpretativa site would focus on the natural history of the Alaska Range and the Nenana River which is an important landscape feature for nearly 100 miles of the Parks highway. The rest area near the highway should be a day use area. A overnight facility should be located up the Menana Ruch valley at least 1/2 mile from the highway.

Scattered recreational cabins and residential developments in the Broad pass area would not significantly impact upon scenic resource values provided they are located beyond the foreground distance zone (14 to 1/2 mile from the highway) and that they are near (continued on facing page)





thees to provide scale and a sense of a natural setting. Existing developments around summit take are a good example of this type of acceptable residential-recreational development. Within the Alaska Range character type of this visual resource management unit, recreational cabins should only be permitted beyond the astablished green best and only if a system of access roads are developed to reduce the number of intersections with the Farks Highway.

Roadside commercial development should remain concentrated around the Cenali highway-Cantwell junctions (mileposts 210-211). Commercial roadside development cutside of this area should not be permitted trans development quidelines and performance standards should be adopted for future commercial roadside development in the permitted area. These should include:

- Retention of a minimum of 25% of the existing natural landcover within the 100 ft strip of land immediately adjacent to the highway right of way.
- · Tunked vehicles and other litter should not be visible from roadway
- L'andscaping and/or revegetution programs should be implemented around those places where more than 25% of the nutural landcover has been removed.

: CECCITIMONIDATIONS

Visual Resource Management Unit Nº 18 Alaska Range Character Tupe

Assessment Units 114-122 Approximate length: 13.7 miles

GENERAL

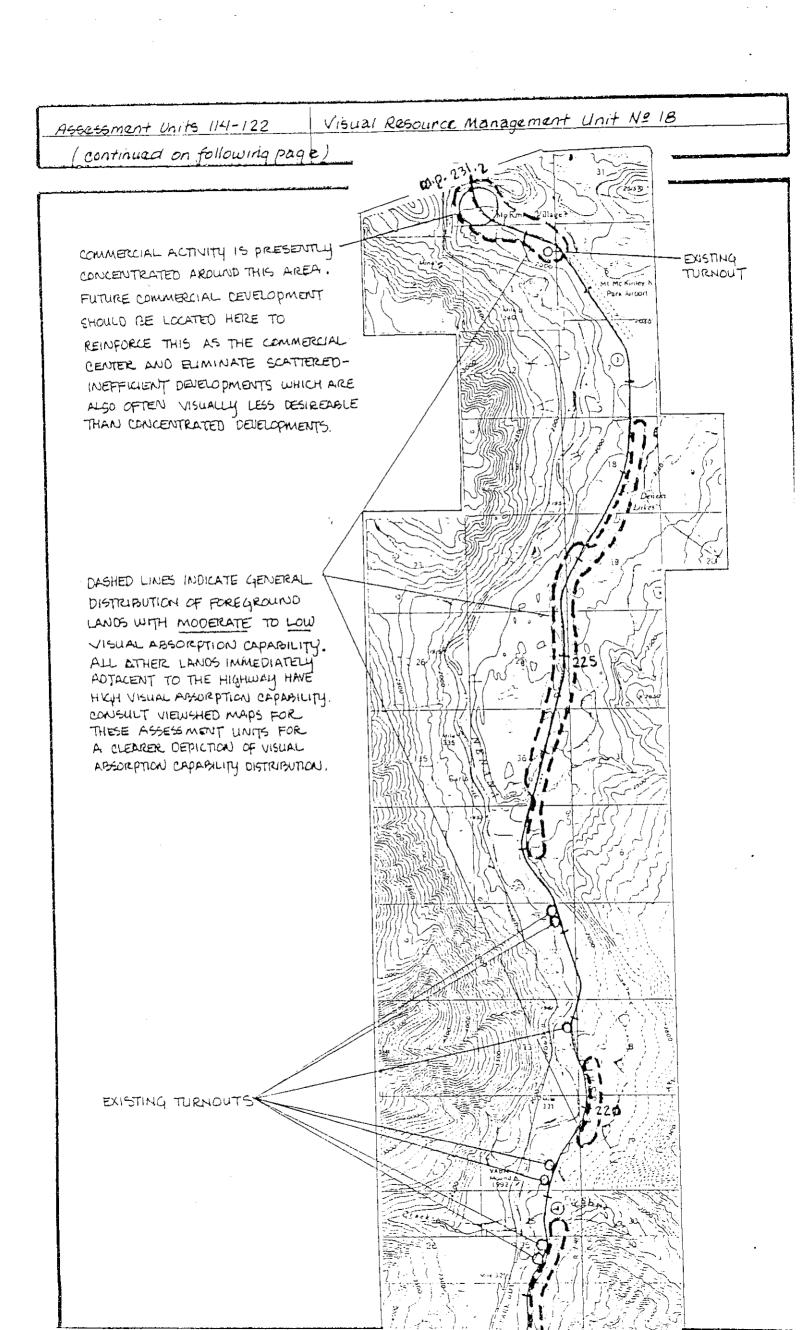
Visual resource management unit number 18 begins at milepost 217.5 and follows the east side of the Nenana River for approximately 14 miles to the point where the George Parks highway enters mt. Mckinley National Park. This stretch of highway is on lower river terraces and floodplains within a very narrow, high-walled valley. The steep valley walls direct capability is variable, with some of the low river terraces covered with dense stands of spruce while steep hillsides have open tundra. Scattered commercial tourist facilities. However, except for the large commercial development at Mt. Mckinley Village just south of the Park entrance these developments have moderate to low visual impact. Numerous undeveloped roadside turnouts are present—all of which are located on the Nenana Ruier (west) side of the highway.

Scenic resource values are moderate. Scenic resource management recommendations focus on ways to allow for roadside divelopment while taking advantage of visual absorption capability and other techniques to minimize its visual impact. Development would be preferable here instead of within the more scenic stretches of highway immediately to the north and south of this management unit.

PRIMARY MANAGEMENT RECOMMENDATIONS

Meet the demand for roadside (accessible) commercial and residential developments within this area rather than in the more scenic areas immediately to the north and south. Commercial development should concentrate itself around the one established commercial node (Mt. McKinley Village) or within areas with high visual absorption capability on the east side of the Peirks Highway. All commercial developments should retain a minimum of 25% of the natural landcover immediately adjacent to the highway. Use of professional design services (architects and landscape architects) should be encouraged in an effort to introduce biuldings which fit in better with the surrounding landscape.

This portion of the Parks highway could be a good location for meeting the growing demand for recreational homesites. Presently numerous homes and cabins are to be found here, but all have moderate to low visual impact. Using either large lots (5 acres or more) or cluster development



concepts, and standards for the removal of the natural landcover, roudside residential-recreational development should have a minimal impact on the scenic quality.

Design standards need to be implemented for further commercial development around Mt. Mckinley Village. Already extensive land clearing and landform alteration has occurred. Presently the visual impact is moderate. However, if additional commercial development or expansion of existing facilities were to occur it could result into a serious visual problem. This is accentuated because of its proximity to Mt. Mckinley Natural Park and the high number of people who either enter or leave the park past this development. By simply controlling the amount of the natural landcover which can be removed within each development, its visual impact could be significantly reduced.

Roadside land development should not occur on the west side of the highway from milepost 217.5 to 223.5 because viewer orientation is predominantly in this direction.

Because of moderately high intrinsic and composite visual quality ratings, this area is not a priority area for scenic highway designation. However, due to its proximity to Mt. McKieley National park and the intensive recreational use it receives it would be added to the Scenic highway system of the George Parks highway. In either case, it should be remembered that from a scenic recourse management perspective roadside development is preferable here to areas immediately to the north or south.

Use of the numerous existing turnouts should be encouraged and maintenance continued. However, development efforts should focus on the roadside restarea-interpretative center system which is part of this set of recommendations. (See visual resource management unit number 15 for a discussion of litter barrels)

Visual Resource Manzgement Unit Nº 19 Nenana Gorge Character Type Assessment Units 123-126

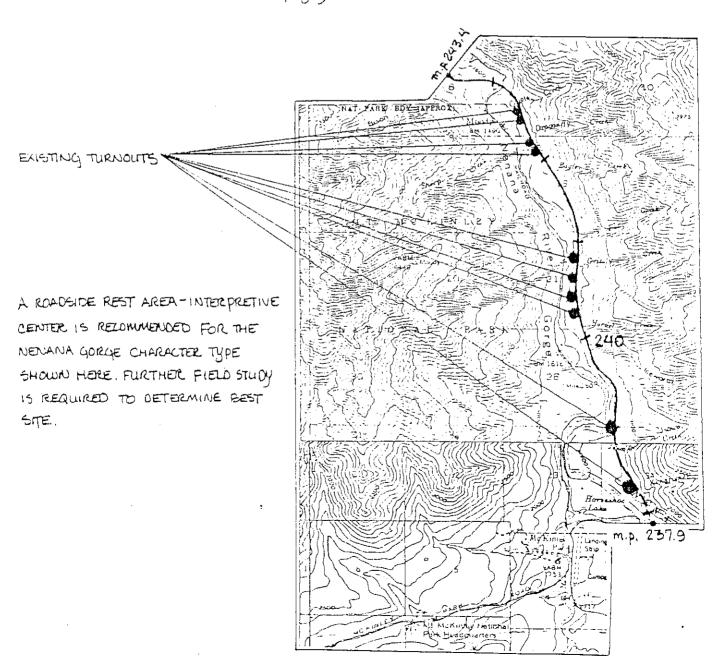
Approximate length : 5.5 miles

GENERAL

Usual resource management unit number 19 is 51/2 miles of some of the most exanic portions of the entire George Farks highway. Within this unit the highway follows the Nenana River through a very narrow, steep walled gorge. Landform diversity is extremely high and there are numerous views of the roarry Nenana River and numerous small creeks feeding into it. Dall sheep are commonly sighted on the slopes above the canyon-particularly towards Sugar loof mountain to the northeast. This is one of the few areas along the entire highway where wildlife such as the sheep might be commonly viewed. In many ways this is one of the George Parks highway's most visually sensitive areas because of its high scenic quality, high use by visitors to mt. Mckinley National Park and generally very low visual absorption capability. Due to the very steep, unstable topography it appears that a highway and a railroad are the only land uses which this gorge could support. The addition of another strong development, such as a powerline or homes would undoubtedly have a significant visual impact.

continued on

page)



PRIMARY MANAGEMENT RECOMMENDATIONS

To officially designed this portion of the George Parks highway as a scenic highway and develop quidelines to preserve the particularly high and sensitive ocenic resource values intrinsic to this landscape. Due to the steep, unstable slopes and the very low visual absorption capability it is recommended that not additional man-made developments be lanted within this canyon (other than a carefully designed and sited rest area-interpretative center). A narrow roadside greenbelt would be inappropriate and inefficience due to the high visibility factor of most of the land within the garge. Additionally the visual quality is important to both travelers by train and river runners. This data does not measure the viewsheds from these other two means of traveling through the canyon. Consequently, it is recommended that the entire canyon be considered a greenbelt area.

At present numerous paved turnouts exist within the Nenana gorge_most of them on large cut and fill pads developed during road contruction. Further field work needs to be conducted in order to determine the most appropriate site for a day-use roadside rest and interpretative center. A landscape architect should do a site search and master development plan for such a facility. The other turnouts should continue to be maintained, however future development should fexus on the rest-interpretative center facilities. The landscape architect should also study and develop recommendations for highway related details (signing, quardrail design, litter barrel design) within this and other scanic highway areas.

At present many of the paved highway turnouts function as overflow camping sites during times when N.S. McKinley park is filled to capacity. This often results in large concentrations of motor homes and other vehicles, litter problems and a general visual blight on the landscape. Needed overnight overflow facilities should be developed outside of this canyon. One of the most logical locations would be up the Yanert fork Rurin, or north of the Moody Creek bridge. This landscape cannot support the visual unipart of numerous large recreation vehicles, trash barrels, out houses and other facilities associated with overnight camping.

Visual Resource Management Unit Nº 20
Nenana Uplands Character Type

Assessment Units 127-135 Approximate length: 12.3 miles

GENERAL

Visual resource management unit number 20 begins just south of the Bison guich bridge and trends south for twelve miles to 1.7 miles north of the bridge over hittle Panguinque Creek. The most notable landscape feature 15 the nearby mining-railroad community of Healy which is approximently two miles east of the highway. This portion of the George Parks highway follows the upland river terraces on the west side of the Nenana River and crosses numerous variable flow creeks coming from the foothills of the Alaska Range to the north and west.

Scenic resource values are extremely variable. Two short stretches of highway (assessment units 128 and 130) have very high intrinsic and composite visual quality ratings while the remaining portions are of moderate to low ratings. Viaus are predominately to the north and east - southeast. The foothills to the west of the highway zire so close as to effectively block and direct viaus in these other directions.

PRIMARY MANAGEMENT RECOMMENDATIONS

To officially designate assessment units 128 and 130 as scenic highways. The option also exists to further designate assessment units 127 and 129 as scenic highways, which would result in a continuous, more easily managed unit. Units 127 and 129 had moderately high ratings. Foreground lands within all four of these assessment units have moderate to low visual absorption capability ratings. This suggests that additional field work is needed to determine the type of graenbett guidelines and width would be appropriate to managing these scenic resources.

Establish a nest area-unterpretive center at the top of the hill just beyond milepost 247. This nest area would focus on mining activities as well as the history of Healy which is visible from this site. A master development plan should be prepared by a professional landscape architect.

Commercial roadside development should be encouraged only near the turnoff to Healy and between mileposts 248-249 where it presently is located. Commercial and residential roadside development should not be permitted in those areas identified for scenic highway designations within the recommended greenbelt area.

(continued on following page)

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Necessary roadside land developments should be located first in those areas with high foreground visual absorption capability. Additionally performance standards guiding the clearing of land immediately adjacent to the road need to be adopted and enforced. As a general rule, a minimum of 25% of the natural landcover immediately adjacent to the highway should remain undisturbed in any development.

Because view's are predominantly to the south and east, across the Nenana River Valley, the foreground and near middleground lands on the east side of the road are more sensitive than those on the west side.

Mining activity within the muldleground and background generally has a low visual impact. Mining activity in the foreground, particularly if immediately adjacent to the hiphway would have a high visual impact and should be avoided within this distance zone.

Existing roadside turnouts should be maintained. However the focus of future development should be towards the realization of a rest area-interpretative center system recommended here.

ACCOMMENDE iluns

Visual Resource Management Unit Nº 21 Nenana uplands Character Type

Assessment Units 136-140
Approximate length: 8 miles

GENERAL

Notice resource management unit number 21 consists of 8 miles of noadway situated at the base of the Alaska Range frothills on an upper Nenana Ruer terrace. This unit includes the hisparay crossings of State and Rock Creeks, this portion of the George Parks highway is characterized by high intrinsic and composite visual quality natings. Numerous expansive views across the upper Nenana Ruer valley to the flat-topped ridges marking its earlern edge as well as considerable sequential diversity contribute to this high scenic quality nating. Roadside commercial and residential land developments are absent. The strongest visual impact comes from utility lines gravel pito and soil memoral sitis located immediately adjacent to the highway. Foreground visual absorption capability varies from low to high.

PRIMARY MANAGEMENT RECOMMENDATIONS

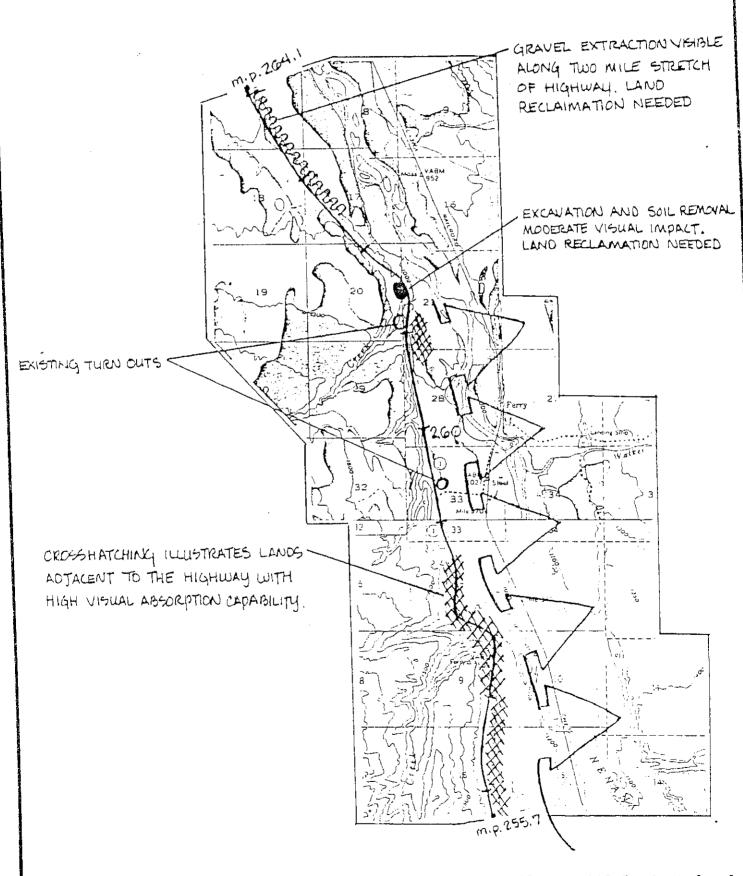
To officially designed this porture of the George parks history as a scenic history and develop quidelines to manage the particularly sensitive foreground lands in a manner. which conserves the high scenic resource values. A 200 ft wide greenbelt beyond the highway might of way should be established along those portions of the road with high visual absorption capability. Additional field work is required to determine an appropriate greenbelt width along those foreground areas with moderate to low visual absorption capability.

To discoverage roadside commercial and residential development along this portion of the George Parks highway. Such land developments are more appropriately located to the south in visual resource managerment unit no. 20.

Foreground and middleground lands on the east side of the highway are more sensitive because views are oriented to this side. Roadeide developments such as gravel extraction, recreation sites and finisher cutting would have less visual impact if located on the west side of the highway.

To continue to maintain existing turnouts and poadside parking facilities—especially near Rock and State Creeks. However, future development of a rest area facility should focus on those areas identified in this study to be part of the Points highway restairea, interpretative center system. Such a site has been proposed for visual resource management unit number 20, approximately

B miles to the south. Either Rock or State Creeks might be good locations for overnite camping facilities quice the roadside rest areas are for day use only.



VIEW ORIENTATION PREDOMINANTLY TO THE EAST. LAND AND RESOURCE DEVELOPMENTS WILL HAVE A LESSER VISUAL IMPACT IF SITUATED ON THE LEFT (WEST) SIDE OF THE HIGHWAY.

Visual Resource management Unit No 22

Assessment Units 141-144

Nenana Uplands character Type

Approximate length: 7.6 miles

GENERAL

Rarks highway parallels the Nenana Ruer on an upper terrace to the west, the most notable natural features within this management unit are the highway evossings of June and Bear Creeks, Visual quality ratings were moderate. Land development adjacent to the road are negligable. Adverse visual impacts rasult from views of power lines, gravel pits and roadside turnouts, Management recommendations four on utilizing the existing visual absorption capability to absorb and screen future roadside developments.

PRIMARY MANAGEMENT RECOMMENDATIONS

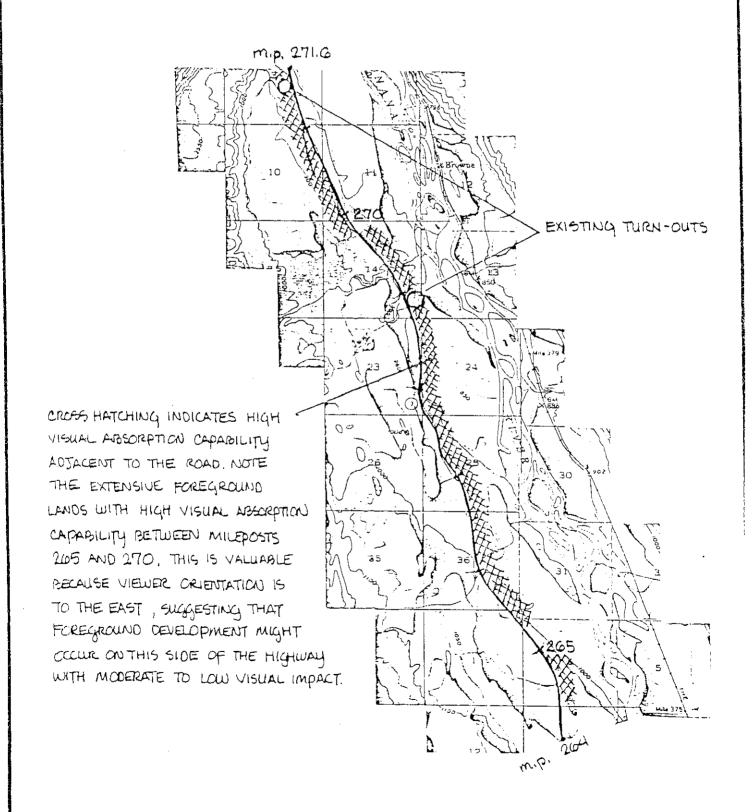
Scenic quality ratings for this area were not quite high enough to make it a priority area with respect to scenic highway designations. However, the intrinsic visual quality and composite ratings were high enough to warrent its possible inclusion in a scenic highway system. The designation of this as a scenic highway would result in a continuous 20 mile section of high scenic resource value. At would be considerably easier to manage a single 20 mile stretch of roadway rather than three shorter sections each with different management strategies. In any case, roadside related land developments would generally be better located here than in the higher scenic quality visual resource management units 21 and 23 to the south and north respectively.

Retain and maintain existing roadsule turnouts and rest areas within this visual resource management unit, However, efforts towards future rest area, roadsule related facilities should focus on those rest area-interpretative centers identified for other portions of the highway. For example, the Nenana Uplands Interpretative center is proposed for milepost 247.5.

Adopt performance standards for land clearing on sites adjacent to the highway right-of-way. One such standard would be a retention of a minimum of 25% of the existing landcover per acre of land bordering the right-of-way.

The lands to the east of the roadway are visually more sonsitive than those to the west because views are oriented across

the wenana valley to the exist. Read side developments would be best situated within areas of high visual absorption capability and on the west side of the roadway.



lisual Resource management Unit No 23

Assessment Units 145-147

Nenana Uplands - Nenana River Lowlands Character Types Approximate length: 4.4 mile

GENERAL:

Visual resource management unit number 23 consists of four and one half miles of highway near the Nenana Rwir crossing at milepost 275,7. This relatively short stretch of roadway scored very high intrinsic und composite visual quality ratings. Aresently roadside land development is visibly absent. The few gravel pits and land clearings are, for the most part well screened by the moderate to high visual absorption capability ancountered in this landscape.

PRIMARY MANAGEMENT RECOMMENDATIONS

To officially designate this portion of the George Parks highway as a scenic highway and develop necessary guidelines to manage the particularly sensitive foreground lands in a manner which respects these especially high scenic resource values. A 200 st wide greenbelt beyond the highway right of way along those portions with high visual absorption capability is recommended. Additional field work is needed to determine an appropriate greenbett width along those portions of the highway foreground with moderate to low visual absorption capability.

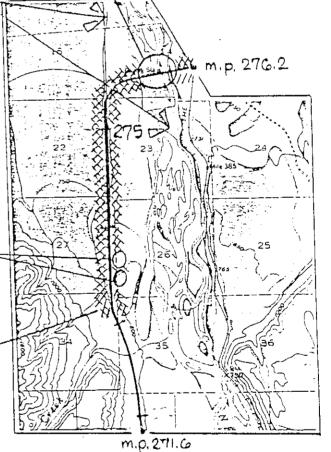
To develop a roadside rest area-interpretative center radjacent to the Nenana River near the highway bridge (milepost 275.5). Even though the highway parallels this mixer for a considerable distance, this is one of the few places in its lower reaches where it is immediately accessible from the highway. A professional landscape architect should he employed to develop a master plan for this facility. As with the other rest area - criter pretative centers, it should be a day-use facility only. A public overnight camping site should be developed nearby to meet the demand for overnight use. This camping area should be situated a minimum of 1/2 mile from the highway. Sites up or down river from the bridge should be evaluated for possible campground development.

Roadside commercial and concentrated residential development should not be permitted without this area. Natural resource developments such as gravel pits, tember cutting, mining should

only be permitted beyond the established greenbett. Roadside commercial and residential development would be most appropriately situated in the recommended areas in visual resource management unit number 24 immediately to the northeast.

DEVELOP OVERNIGHT CAMPING FACILITIES TO COMPLIMENT DAY USE REST AREA-INTERPRETIVE CENTER, SITES UP OR DOWN THE NEWANA RIVER SHOULD BE EXPLORED.

RELOMMENDED LOCATION (GENERAL)
FOR REST AREA - INTERPRETIVE CENTER,
INFORMATION WOULD DEAL WITH
NENANA LOWLANDS CHARACTERISTICS



GRAVEL PITS (WELL SCREENED)

CROSSHATCHING REPRESENTS THOSE

FOREGROUND LANDS ADJACENT

TO THE HIGHWAY WHICH HAVE

HIGH VISUAL ARSORPTION CAPABILITY.

A 200 FT WIDE GREENBELT BEYOND

THE HIGHWAY RIGHT OF WAY IS

RECOMMENDED FOR THESE AREAS

Visual Resource Management Unit Nº 24 Nenana Lowlands Character Type

Assessment Units 148-167 Approximate length: 38.5 miles

GENERAL

Visual resource management unit number 24 begins at the highway bridge over the Nenana River (milepost 275,5) and extends north for 381/2 miles to approximately ten miles past the community of Nenana. This visual resource management unit encompasses virtually the entire Nenana lowlands churacter type. Scenic resource values along this portion of the George Parks highway are consistently low to moderate. This is because there is little visual diversity within this flat, densely vegetated landscape. The often long, straight stretches of roadway provide few distant or lateral viaios resulting in a generally monotonous driving experience. Only a single one mile stretch of highway (assessment unit 163) at the bridge over the Tanana Ruer j'ust north of the community of Nenana scored with a high uitrinxi and composite visual quality rating. 15 of the remaining 18 assessment units within this visual resource management unit scored low.

In addition to low senic resource values, there are numerous instances of roadside band developments which are visually objectionable. These uses include powertines and substations thandoned cars and other roadside litter, gravel pas, and certensive land clearing around commercial and residential developments. This is unfortunate because the actual visual absorption capability adjacent to the road is generally very high-offering a good opportunity to realize roadside land use with minimal visual impact.

Scenic resource management recommendations focus on ways to add visual diversity to this landscope, soften the impact of existing poadside developments and guide the location of future commercial and residential land uses disposent to the highway.

PRIMARY MANAGEMENT RECOMMENDATIONS

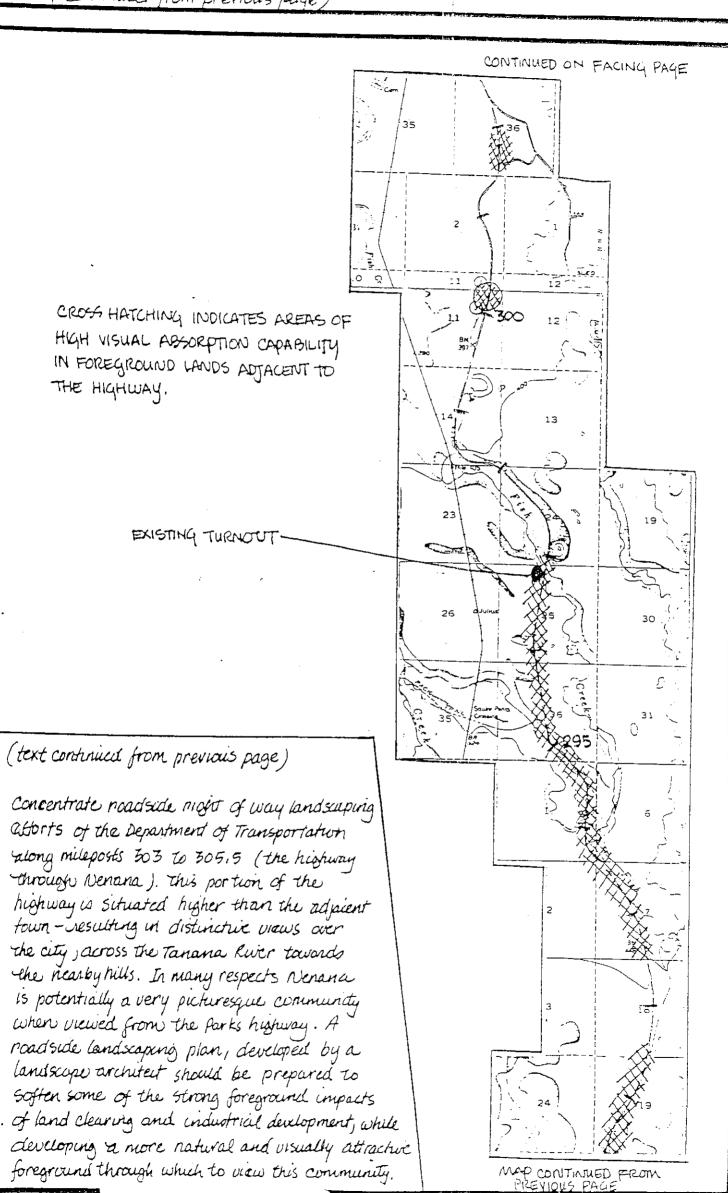
To encourage future commercial and residential poadside development to take advantage of areas of high visual absorption capability and retain a minimum of 25% of the natural landcover within the first 200 ft, of land limitedly adjacent to the readway projet of way.

To encourage commercial poadside development in a concentrated

(continued on following pages) (map continues (text continued from facing pure) on following page fashion around existing commercial nodes. Commercial activity is presently concentrated around mileposts HIGH VISUAL 277-280, 289 and 305 (Nenana). Particular IMPACT FROM attention should be given to the emerging strip ROADSIDE COMMERCIAL AND RESIDENTIAL development around miliposts 277 to 280. DEVELOPMENT. CLEAN-UP, LAND-SCAPING NEEDED To add visual diversity to this landscape by encouraging poadside agricultural development EXISTING TURNOUT on those sites capable of supporting this activity Readside residential development may increase The scenic quality through adding visual duerently provided that it does not result in extensive areas of cleared land and broad vistas of uninteresting tract housing. Large individual lets (5 acres) would be most comparible with scenic rescurce management objectives as this type of development most likely would add visual interest with a minimum of natural landcover diskubance; Aroperly designed larger developments would also be desireable MEWS (continued on following page) NOTE: ALL LANDS IMMEDIATELY ADJACENT TO THE HIGHWAY SHOWN ON THIS MAD HAVE HIGH VISUAL ABSCRPTION CAPABILITY. PARKS HIGHWAY IS WITHIN MILITARY LANDS FROM MILEPOST 280 TO 288 (APPROXIMATE) RCADGIDE COMMERCIAL AND RESIDENTIAL STRIP DEVELOPMENT LIKELY IF GUIDELINES - PERFORMANCE STANDARDS OR OTHER TECHNIQUES ARE NOT ADOPTED,

Visual Resource Management Unit Nº 24

Assessment Units 148-167



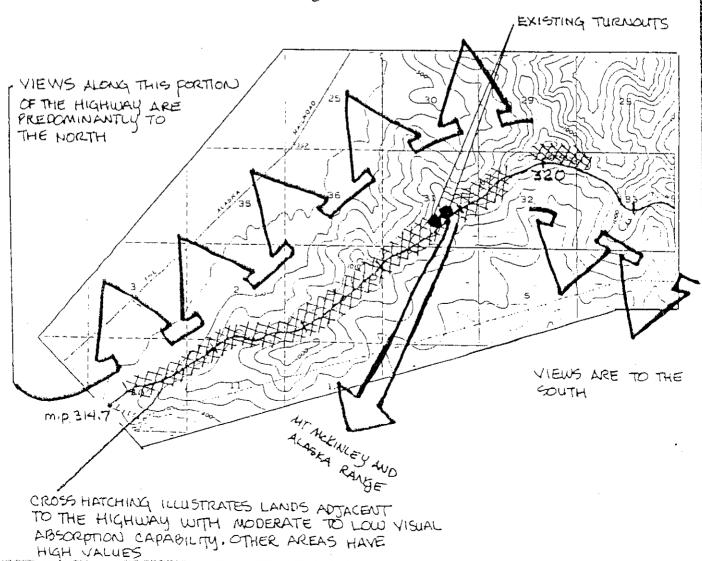
Vibual Resource Management Unit No. 25
Tanana Ridge Character Type

Assessment Units 168-174

Approximate length: 13 miles

GENERAL

Visual resource management unit number 25 begins approximately ten miles northwest of the community of Nenana and trends northnortheast for 13 miles towards Fairbanks, This portion of the George parks highway ascends at a moderate grade from an elevation of under 400 ft, at Goldstream creek bridge to 1100 And 1200 ft, alevations as it traverses a ridgeline. This ridgetop location ruffords numerous expansive views across the broad Tanana River valley. Since the Tanana River makes a broad, horse show type bend around these hills, expansive views of this piver are possible both to the south and north. This portion of the George Parks highway follows closely the alignment of the old Nenana-Fairbanks highway, however significant recent alignment has transformed it into a wide road with the absence of sharp curves and steep grades. As a result of this recent work, road cuts and fills are visibly the predominant factor impacting the very high scenic resource values intrinsic to this Stretch of roadway. With time The visual unpact of these road cuts and other evidences of construction should be greatly reduced as natural revegetation of these bare, soilless land's progresses, within this predominantly burch-aspen-spruce forest the visual absorption capability of the foreground various from moderate to high.



(text continued from facing page)

Develop a highway rest area-interpretive center near milepost 505.8. This site, near the highway bridge over the Tanana River and overlooking its confluence with the Nenana River provides a locycal location for information regarding these two great Alaskan pivers. A site development master plan prepased by a landscape architect should be developed to guide future development of these facilities.

Powerlines presently have an impact on the scenic resource values in this landscape. I hong, monotonicus vistas up or down straight powerline clearings, as well Bere 12 to powerlines visually paralleling the highway for considerable distances.

should be avoided.

10

CROSS HATCHING INDICATES HIGH VISUAL ABSORPTION CAPABILITY FOR LAND ADJACENT TO THE HIGHWAY

4000 VIEW OVER

TANANA LOWLANDS

m.p.314.75

RECOMMENDED SITE FOR REST AREA INTERPRETIVE CENTER (DAY USE)

-EXISTING TURNOUTS

ROADSIDE LANDSCAPING NEEDED AS HIGHWAY PASSES THROUGH THE TOWN OF NENANA.

Visual Resource Management Unit Nº 26

Assessment Units 175-179

Tanana Ridge Character Tupe

Approximate length: 10 miles

GENERAL

Intrinsic and composite scenic resource values within that area designated as visual resource management unit number 26 are moderate to low. This is primarily because the ridge that the road traverses is relatively broad, allowing few views to the middle ground and background and resulting in a generally less stimulating visual and experiential driving experience. Additionally there are visually distracting commercial and residential developments, land clearing, large bare roadcuts, and frequent views of powerlines. The primary management strategy for visual resource management unit number 26 should be to encourage needed roadside land developments here rather than in adjacent management units which have considerably higher exenic resource values. At the same time an effort should be made to control the type of roadside visual blight which is just beginning along one portion of the highway within this management unit.

PRIMARY MANAGEMENT RECOMMENDATIONS

Concentrate future commercial roadside development within this area rather than in the more scenic and sensitive visual resource management units to the east (number 25) and west (number 27). Commercial development should focus around existing developments between indeposts 328 and 329 to keep its visual impact to a minimum.

Open up occassional violes from the road to the north by selective cleaning and thinning of foreignound vegetation in appropriate locations.

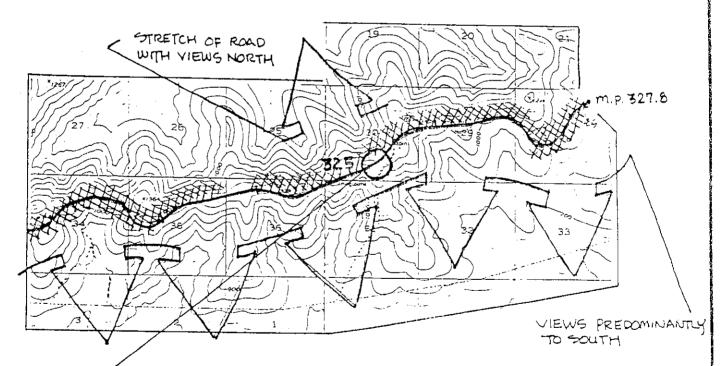
Concentrate efforts at roadside right of very planting-reveretation programs within that stretch of roadway presently subject to significant adverse impact from roadside land development, (see map). Native trees and shrubs should be allowed to reveretate portions of the highway right-of-way to screen-reduce the visual impact of extensive land clearing immediately adjacent to the right-of-way.

PRIMARY MANAGEMENT RECOMMENDATIONS

To officially designate this portion of the George Parks highway as a scenic highway and clevelop guidelines to manage the foreground lands in a manner which respects these aspecially high scenic resource values. A 200 ft wide greenbelt beyond the highway right of way is recommended for those portions of the road with high foreground visual absorption capability. Additional field work is recommended to determine an appropriate greenbelt width along those portions of the highway with moderate to low visual absorption capability.

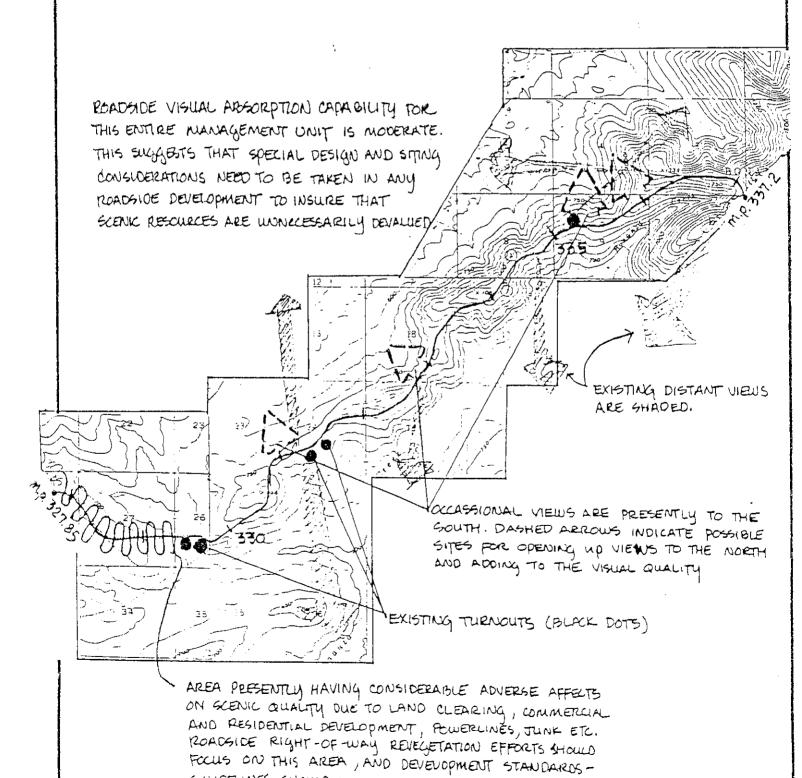
Roadside commercial, residential or industrial duclopment should not be permitted within this usual resource management unit. Such developments would be more appropriately located to the east in visual resource management unit number 26 or in unit 24. Residential development may be compatible with scenic resource management provided it were sitewated outside of the designated greenbelt area, and at least 35% of the natural landcover is left undisturbed.

Clearcut timber harvesturg should not be permitted within the designated greenbelt area. (see visual resource management unit Number 27 for additional information).



A rest area-interpretative center should be developed in the location shown on this map (milepost 324.5 approximately). This site offers expansive views both to the north and the south and could be an ideal location for trails and information regarding the natural history of this landscape. A landscape aschitect should develop a master plan for this facility.

Take advantage of existing high roadside visual absorption capability in the future siting of gravel extraction sites, timber harvests and other proposed land developments within the foreground and middleground distance zones.



QUIDELINES SHOULD BE ADOPTED SUCH THAT THIS DOES NOT EMERGE INTO AN OBJECTIONAINE STRIP DEVELOPMENT.

<u>ilecommenuations</u>

Visual Resource Management Unit No. 27

Tanana Ridge Character Type

1955235ment Units 180-185

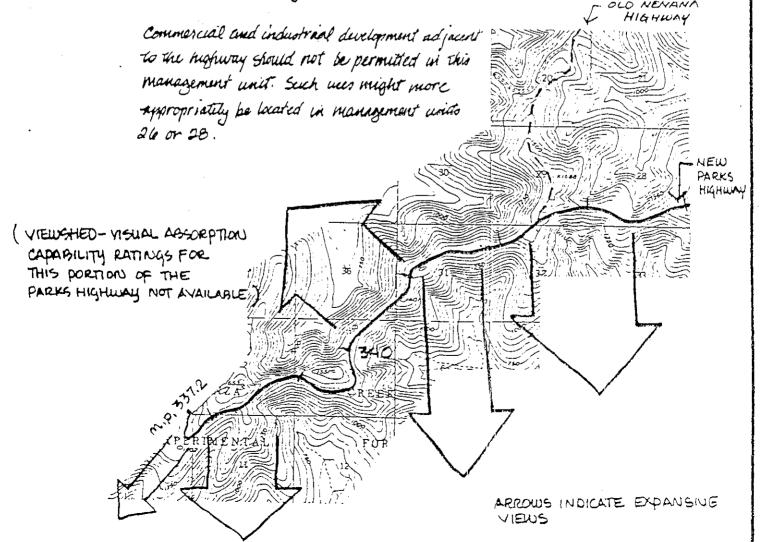
Approximate length: 11.4 miles

GENERAL

Usual resource management unit number 27 includes eleven miles of hisply ocenic roadway. The west half of this management unit belows the old Alenana highway, while the eastern half is a completely new road which traverses the ridge dividing Alder and Cryptle Creeks. The highway cuts and fills associated with the straightening and upgrading of the old Nenana highway portion and the construction of the new section are the only land developments impacting the very high scenic resource values intrinsis: to this stretch of highway. Given time, these cuts and fills should develop a vegetation cover and should aventually make this one of the most scenic portrons of the George Parks highway.

PRIMARY MANAGEMENT RECOMMENDATIONS

to officially designate this portion of the ijeotige fasts highway as a scenic highway and develop quidelines to manage the particularly sometime foreground lands in a mounter which respects these particularly valuable scenic resources. A 200 ft wide greenbelt beyond the highway right of way is recommended along those portions of the highway with a high visual absorption capability. Additional field work is needed to determine our appropriate greenbelt wight nimg those portions of the highway with moderate to low foreground visual absorption capability.



Some residential development could be compatible with a scenic highway management strategy provided that residences are located beyond the designated greenbelt area, at least 50% of the natural landcover on the site is left undishubed and individual access roads with the highway are not developed.

Clearcut timber harvesting should not be permitted within the designated greenbest area. Hillslopes immediately below the road are less sonsitive than those across the valley which are in the direct line of sight of the viewer. Due to the location of the road and the general clensity of the forest cover, timber harvesting should have minimal visual impact provided it is done outside of the greenbett area and appropriate design and silvicultural techniques are employed (sizing and shaping of cut areas, siting of roads, minimal soil disturbance, rapid regeneration).

Along those very steep roadcuts where evosion is occurring and natural revegetation is not proceeding, astificial planting techniques should

be employed to encourage the development of grasses to cover the bare radicuts, OLO NENANA HIGHWAY · M.p. 349.7 NEW PARKS HIGHWAY ADDITIONAL FIELD WORK REQUIRED TO DETERMINE VIEWSHED - VISUAL ABSORPTION CAPABILITY RATINGS FOR THIS PORTION OF THE PARKS HIGHWAY

A rest area - interpretive center should be developed at the site indicated on the map (milepost 344. 4 approximately). This location Offers the potential for expansive views both to the north and south. The George Parks Highway monument presently is located at the recommended Ste. A professional landscape architect should be employed to develop a master plan for the design und development of this facility.

Visual Resource Management Unit Nº 28 | Assessment Units 186-193

Chena Ridge - Chena Liowlands Character Types | Approximate length: 7.4 miles

GENERAL

Visual resource management unit number 28 includes the last 7/2 miles of the George Parks highway as it enters Fairbanks. Intrinsic visual quality ratings within this area were moderately high, however foreoground land dividopments have significantly reduced the visual quality, Consequently the primary management objective for this management unit is restoration along those portions hit by visual blight, taking advantage of areas with high visual absorption capability in future developments, and to endopt and use dissign considerations, quidelines and performance standards in the divilopment of roadside lands. These measures can lead to the creation of a visually pleasing entrance and lexit to alaska's second largest city.

PRIMARY MANAGEMENT RECOMMENDATIONS

Liccole scenic rest areas-interpretative centers in the two locations illustrated on the map. The Ester Creek turnout could focus on gold placer mining in the Fairbanks area. This facility would be situated with radequate views of mining tailings and other visital evidence of prat and present mining activities.

The chena kiver turnout would be a visitor information center for travelers entering the cuty. The educational—interpretion material could focus on Fairbanks as a city built on an active floodylain, and natural history information about the Chena—Tanana River lowland areas. Such facilities would be for day use only and need not be extensive. They could be very significant in helping people develop a better understanding of the landscape they are traveling through.

Fiture roadside land developments should be required to retain at least 25% of the natural forested landcover within the 100 ft immediately adjacent to the highway right of-way.

Liand clearing on those highly visible and sensitive portions of Chena Ridge should not be allowed. No structures higher than the existing treecover should be permitted along the ridgetop.

A land reclamation-beautification affort should concentrate on the two mile stretch of readway east of the Parks highway- old Nenana highway junction. This is the area most severely impacted by roadside development and landscape alteration. This is an area where the State Department of Transportation and Public Facilities through a right of way planting program, could have a significant impact on scenic resource values, (see map).

